

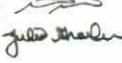
VINCENT N. SCHEIDT

Biological Consultant

3158 Occidental Street • San Diego, CA • 92122-3205 • 858-457-3873 • 858-457-1650 fax • email: vince@san.rr.com

Memorandum

To: Mr. J. Mark Sanchez

From: Vince Scheidt, Consulting Biologist
Julia Groebner, Associate Biologist 

Date: ~~September 1, 2010~~ Revised 10 November 2010

RE: Updated and Corrected Biological Resources Map and Additional Information -
Pacifica Estates, TM 5510, ER 06-02-023

Per your request, we have completed an updated biological resources study of the Pacifica Estates (TM 5510) project site (APNs 106-251-01, -03, -18, -24; 106-151-12, -13; and 106-500-29), located at 2270 South Mission Road in the Fallbrook area of unincorporated San Diego County. As you know, a previous biological resources study of the property was completed by Robin Church, RC Biological Consulting, Inc. The results of this study are contained in "Biological Letter Report for Pacifica Estates major Subdivision, TM 5510, AD 06-045" (Robin Church, 2010). However, you have asked us to provide updated vegetation mapping, an updated RPO wetland survey, and a habitat evaluation for Stephen's Kangaroo Rat. We conducted the field work associated with this study on May 25, 2010. The results of our study, including an updated assessment of project impacts, are discussed below.

Updated Vegetation Mapping

In order to reevaluate and correctly map the current onsite vegetation, we inventoried the floristic components of each of the plant communities, examined slope, aspect, soil types, percentage of native vs. non-native elements, and percent cover. Each generally discrete area was categorized, to the extent feasible, in compliance with the Holland Code system. The onsite plant communities consist of the following (Figure 1):

1. General Agriculture (Holland Code 18000) - 12.46 acres
The majority of the project site supports General Agriculture. This habitat-type is indicated by active and fallow row crops, as well as an Avocado (*Persea americana*) grove and a European Olive (*Olea europaea*) grove. The biological value of this habitat-type is low. General Agriculture is normally considered a non-sensitive habitat-type in San Diego County, as defined by the Resource Protection Ordinance (RPO) and the Guidelines for Determining Significance.
2. Disturbed Habitat (Holland Code 11300) - 0.66 acre
Disturbed Habitat occurs on the western end of the site in several small patches. These areas are indicated by bare dirt or by dense thickets of non-native forbs, such as Perennial Mustard (*Brassica geniculata*), Italian Thistle (*Carduus tenuiflorus*), Tocalote (*Centaurea melitensis*), Sweet Clover (*Melilotus* sp.), and others. The biological value of this habitat-type is low. Disturbed Habitat is normally considered a non-sensitive habitat-type in San Diego County, as defined by the RPO and the Guidelines for Determining Significance.
3. Urban/Developed (Holland Code 12000) - 0.46 acre
Urban/Developed habitat is present at the eastern end of the site in the form of several existing homes and structures, and at the western end of the site in the form of a bus stop. This habitat-type also completely surrounds the property, in the form of roads, home, landscaping, and associated

SDC PDS RCVD 12-17-14

TM5510

development. The areas mapped as Urban/Developed have no biological value. Urban/Developed habitat is normally considered a non-sensitive habitat-type in San Diego County, as defined by the RPO and the Guidelines for Determining Significance.

4. Non-native Vegetation (Holland Code 11000) - 1.17 acres

Several large patches of Non-native Vegetation are found at the western end of the site. These areas are dominated by non-native trees and horticultural species, including Murray Red Gum (*Eucalyptus camaldulensis*), Blue Gum (*E. globulus*), various pines (*Pinus* spp.), Asian Elm (*Ulmus* sp.), Mexican Fan Palm (*Washingtonia robusta*), Peruvian Peppertree (*Schinus molle*), Periwinkle (*Vinca major*), and others. Although occasional native species may be found in the Non-native Vegetation, the predominance of the plants in these areas is non-native. This habitat-type is present offsite to the north in the form of a landscaped slope associated with adjoining development. The biological value of this habitat-type is low. Non-native Vegetation is normally considered a non-sensitive habitat-type in San Diego County, as defined by the RPO and the Guidelines for Determining Significance.

5. Southern Riparian Forest (Holland Code 61300) - 1.87 acres

A drainage crosses the western end of the site, running from north to south. The majority of the drainage floodplain supports Southern Riparian Forest. This habitat-type is indicated by willows (*Salix* spp.), California Sycamores (*Platanus racemosa*), Western Cottonwoods (*Populus fremontii*), Desert Grape (*Vitis girdiana*), and other hydrophytes. This habitat-type also supports significant numbers of non-native species, such as Mexican Fan Palm, Asian Elm, Peruvian Peppertree, and others. Where they are not growing directly in the floodway of the drainage, these non-native species have been mapped as Non-native Vegetation. The biological value of this habitat-type is moderate, due to its disturbed nature. Southern Riparian Forest is normally considered a sensitive habitat-type in San Diego County, as defined by the RPO and the Guidelines for Determining Significance.

6. Southern Coast Live Oak Riparian Forest (Holland Code 61310) - 0.42 acre

A small area of Southern Coast Live Oak Riparian Forest occurs at the northwestern property corner in the floodplain of the onsite drainage. This community is indicated by mature Coast Live Oaks (*Quercus agrifolia*), willows, and California Sycamores over an understory consisting of cattails (*Typha* sp.), Mule Fat (*Baccharis glutinosa*), sapling oaks, and non-native species such as Periwinkle and Giant Wild Reed (*Arundo donax*). This habitat-type continues offsite to the north. The biological value of this habitat-type is moderate, due to its small size and disturbed nature. Southern Coast Live Oak Riparian Forest is normally considered a sensitive habitat-type in San Diego County, as defined by the RPO and the Guidelines for Determining Significance.

7. Coast Live Oak Woodland (Holland Code 71160) - 0.26 acre

Two small patches of Coast Live Oak Woodland are present on the northwestern corner of the property. These patches are located outside of the floodplain of the onsite drainage and are separated from the drainage by Non-native Vegetation and Disturbed Habitat. The Coast Live Oak Woodland onsite consists of mature Coast Live Oak trees over a varying understory. These oak trees are growing in a straight configuration and appear to have been planted. This habitat-type continues offsite to the north for a short distance. The biological value of this habitat-type is low, due to its small size and isolation from other areas of native habitat. Coast Live Oak Woodland is normally considered a sensitive habitat-type in San Diego County, as defined by the RPO and the Guidelines for Determining Significance.

Updated RPO Wetland Mapping

A segment of Ostrich Farms Creek, a U.S.G.S. "blue-line" stream, crosses the western end of the project site, running from north to south. As part of our study, we completed an updated wetland survey of the creek, pursuant to the County's current Resource Protection Ordinance (RPO). During the survey, the creek was examined for the presence of RPO wetland indicators, and transects were established at 50' intervals along the length of the creek (where feasible) in order to map wetland limits. The results of that mapping are illustrated on Figure 2.

The County's 2007 RPO defines "Wetlands" as follows:

- (1) *Lands having one or more of the following attributes are "wetlands":*
 - (aa) *At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);*
 - (bb) *The substratum is predominantly undrained hydric soil; or*
 - (cc) *An ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.*

- (2) *Notwithstanding paragraph (1) above, the following shall not be considered "Wetlands":*
 - (aa) *Lands which have attribute(s) specified in paragraph (1) solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Land Use determines that they:*
 - (i) *Have negligible biological function or value as wetlands;*
 - (ii) *Are small and geographically isolated from other wetland systems;*
 - (iii) *Are not Vernal Pools; and,*
 - (iv) *Do not have substantial or locally important populations of wetland dependent sensitive species.*
 - (bb) *Lands that have been degraded by past legal land disturbance activities, to the point that they meet the following criteria as determined by the Director of Planning and Land Use:*
 - (i) *Have negligible biological function or value as wetlands even if restored to the extent feasible; and,*
 - (ii) *Do not have substantial or locally important populations of wetland dependent sensitive species.*

The onsite segment of Ostrich Farms Creek consists of a shallowly-incised channel that flows under a closed canopy of Southern Riparian Forest over most of its length and Southern Coast Live Oak Riparian Forest at its northern end. The indicator species in both of these habitats are discussed above. At the time of our field survey, running water was present in the floodway of the creek. The floodway of the creek may also support hydric soils. It should be noted that the onsite portion of the creek exhibits a high degree of disturbance, as indicated by the presence of invasive, non-native species, trash, and debris within the habitat and the floodway.

According to our updated RPO wetland survey, the floodway of Ostrich Farms Creek (the area from bank to bank) qualifies as supporting RPO wetlands because this area supports an ephemeral or perennial stream whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system. Some hydrophytic species are also present in the floodway of the drainage, including Mule Fat and cattails. There is a large patch of cattails growing at the outfall of the two culverts that carry Ostrich Farms Creek under Sterling Bridge Road. This area qualifies as part of the RPO wetland, but it is located offsite to the northwest of the property. The majority of the Southern Riparian Forest associated with Ostrich Farms Creek also qualifies as RPO wetlands because this habitat-type is dominated by hydrophytes, including willows, sycamores, cottonwoods, and others.

Portions of the Southern Riparian Forest that do not qualify as RPO wetlands include areas that consist only of canopy overhang, as these areas are located outside of the floodway of the creek. In addition, the majority of the Southern Coast Live Oak Riparian Forest does not qualify as RPO wetlands because the majority of this habitat-type occurs beyond the banks of the creek and is separated from the creek by a topographical difference. Furthermore, the presence of non-hydrophytic vegetation in the Southern Coast Live Oak Riparian Forest, such as Coast Live Oaks and non-native trees, indicates that the soils are not hydric beyond the banks of the creek. However, the areas of Southern Riparian Forest and Southern Coast Live Oak Riparian Forest that do not qualify as RPO wetlands are still considered "RPO jurisdictional" because these habitats will be included within the required RPO wetland buffer.

The floodway of Ostrich Farms Creek qualifies as state (California Department of Fish and Game) wetlands and "waters" and federal (U.S. Army Corps of Engineers) "waters". The floodway may also qualify as federal wetlands if hydric soils are present. The areas of Southern Riparian Forest and Southern Coast Live Oak Riparian Forest located outside of the floodway of the creek qualify as state (only) wetlands and "waters".

Habitat Evaluation for Stephen's Kangaroo Rat

Stephen's Kangaroo Rat (*Dipodomys stephensi*) is a State and Federally-listed "Threatened Species" subject to protection under both the Federal and State Endangered Species Acts. This secretive, nocturnal mammal occurs in open habitats dominated by low forbs, such as Red-stem Filaree (*Erodium cicutarium*), with scattered, low perennial shrubs, including Flat-top Buckwheat (*Eriogonum fasciculatum*), California Sagebrush (*Artemisia californica*), and others. Ideal habitat is characterized by the presence of friable, loamy soils where the rats can construct underground burrows, and extensive open areas between shrubs for foraging, breeding, etc. Apparently not tolerated is the presence of dense brush or a heavy thatch of annual weedy grasses. Also not tolerated is the presence of nearby development, as this species suffers extirpation in the presence of feral pets and other "edge effects". Moore-Craig (1984), working at the San Jacinto Wildlife Area, reported that successful trapping sites for SKR had an average of 9.1% vegetative cover.

The subject site has an average cover of at least 85%, which is many times denser than is tolerated by Stephen's Kangaroo Rat (SKR). Furthermore, because the majority of the project site is in active agriculture, the site is subject to activities that disturb the soil and would prevent SKR from occurring onsite, including clearing, tilling, planting, etc. The project site is also completely surrounded by development, meaning that it is subject to edge effects that would also preclude this species from occurring onsite.

According to the U.S. Fish and Wildlife Service (USFWS), there are documented SKR sightings to the east of the Pacifica Estates project site on the Fallbrook Naval Weapons Station. However, this area is separated from the project site by South Mission Road and the Fallbrook Community Airport. Furthermore, the habitat in the area where SKR are found is significantly different from the habitat present on the subject site, in that it consists of large tracts of annual grassland, versus the agricultural, disturbed, and riparian habitats found on the Pacifica Estates property.

Given the current and surrounding land uses and the nature of the onsite habitats, the property is considered "unoccupied" by SKR.

Discussion and Recommendations

The project includes the dedication of a Biological Open Space Easement (BOSE) over the onsite segment of Ostrich Farms Creek and the associated riparian habitat. Per the requirements of the RPO, this BOSE includes an RPO wetland buffer that extends 50 feet outward from the limits of the RPO wetlands, where feasible (Figure 2). This buffer includes the patch of Coast Live Oak Woodland that is immediately adjacent to the RPO wetlands. It does not include the patch of Coast Live Oak Woodland that is further to the east of the RPO wetlands, as the majority of this patch is more than 200 feet away from the limits of the RPO wetlands. Furthermore, this patch of oaks does not exhibit connectivity with the RPO wetlands, as it is separated from the riparian habitat by ruderal and non-native vegetation. It should be noted that construction of the project's primary access road requires the crossing of Ostrich Farms Creek, which will be accomplished via a bridge. This crossing shall be an allowable use within the BOSE. The limits of the BOSE shall be delineated by a County-approved fence, except for at the project's access road. Signs shall be posted at 100-foot intervals along the length of the fence to discourage entry into the BOSE. The project also includes the dedication of a Limited Building Zone Easement (LBZ), to extend 100 feet outward from the limits of the BOSE. The purpose of the LBZ is to prohibit the construction of habitable structures that would require fire clearing in the BOSE.

Based on the changes to the vegetation mapping and RPO mapping, we have provided an updated calculation of impacts and required mitigation (Table 1). All areas of the site that will not be included in the BOSE are considered impacted, as are areas within the BOSE that will be directly impacted by the proposed access road and bridge. The Pacifica Estates project as designed would result in the following direct and indirect impacts to biological resources:

- 12.46 acres of General Agriculture
- 0.42 acre of Disturbed Habitat
- 0.46 acre of Urban/Developed
- 0.68 acre of Non-native Vegetation
- 0.18 acre of Southern Riparian Forest
- 0.19 acre of Coast Live Oak Woodland

Impacts to General Agriculture, Disturbed Habitat, Urban/Developed, and Non-native Vegetation are considered "less than significant", pursuant to the California Environmental Quality Act (CEQA) and the County's RPO, and do not require mitigation. Impacts to Southern Riparian Forest and Coast Live Oak Woodland are considered "significant", pursuant to CEQA and the RPO, and require mitigation.

Sec 86.604 of the RPO discusses permitted uses and development criteria where a project involves RPO wetlands. Subsection (a)(5) discusses crossings of wetlands for roads, driveways, trails/pathways as necessary to access adjacent lands. Crossings of RPO wetlands are permitted only under the following circumstances:

- (aa) There is no feasible alternative that avoids the wetland;
- (bb) The crossings are limited to the minimum number feasible;
- (cc) The crossings are located and designed in such a way as to cause the least impact to environmental resources, minimize impacts to sensitive species and prevent barriers to wildlife movement
- (dd) The least-damaging construction methods are utilized (e.g., staging areas shall be located outside of sensitive areas, work shall not be performed during the sensitive avian breeding season, noise attenuation measures shall be included and hours of operation shall be limited so as to comply with all applicable ordinances and to avoid impacts to sensitive resources);
- (ee) The applicant shall prepare an analysis of whether the crossing could feasibly serve adjoining properties and thereby result in minimizing the number of additional crossings required by adjacent development; and
- (ff) There must be no net loss of wetlands and any impacts to wetlands shall be mitigated at a minimum ratio of 3:1 (this shall include a minimum 1:1 creation component, while restoration/enhancement of existing wetlands may be used to make up the remaining requirements for a total 3:1 ratio).

In the case of Pacifica Estates, all of these criteria apply, as follows

- (aa) The only access to the site is off Mission Road. A gated, emergency-only access is available to Morro Road, but this cannot be used for primary or secondary access;
- (bb) A single crossings is proposed;
- (cc) The crossing is designed to span the RPO wetlands entirely, result in the least impact to environmental resources, minimizing impacts to sensitive species, and preventing barriers to wildlife movement
- (dd) The least-damaging construction methods shall be used, and all staging areas, etc. shall be located outside of sensitive areas. Also, work shall not be performed during the sensitive avian breeding season, and hours of operation shall be limited so as to comply with all applicable ordinances and to avoid impacts to sensitive resources);
- (ee) The crossing cannot feasibly serve adjoining properties as these are already developed with single-family homes with their own legal access. Thus, no additional crossings will be required by adjacent development; and
- (ff) There will be no net loss of RPO wetlands and any impacts to all other wetlands shall be mitigated at a minimum ratio of 3:1, including a minimum 1:1 creation component, while restoration/enhancement of existing wetlands will be used to make up the remaining requirements for a total 3:1 ratio.

Impacts to 0.18 acre of Southern Riparian Forest must be mitigated for at a 3-to-1 ratio, which means that no less than 0.54 acre of mitigation must be provided. At least a 1-to-1 ratio of this total (0.18 acre) must consist of wetlands creation; the balance (0.36 acre) may consist of wetlands restoration/enhancement. It is recommended that this mitigation be provided onsite, via wetlands creation/restoration/enhancement in the onsite portion of Ostrich Farms Creek. The restoration/enhancement component of the required wetlands mitigation may consist of the removal of all exotics from the onsite Southern Riparian Forest and Southern Coast Live Oak Riparian Forest. The wetland creation component of the required mitigation may be accomplished by removing all exotics from the areas of Non-native Vegetation and Disturbed Habitat to the west of the creek (Figure 2) and replanting these areas with native wetland species. Conducting wetlands mitigation activities onsite would require the preparation and approval of a formal Wetland Revegetation Plan. A conceptual Wetland Revegetation Plan (outline format), providing a framework for wetlands enhancement, is attached (Attachment A). Mitigation for impacts to Southern Riparian Forest may also serve as mitigation for impacts to state wetlands and "waters".

The Fallbrook Land Conservancy (FLC, P.O. BOX 2701, Fallbrook, California 92028-2701) a local non-profit NGO, has prepared a Land Management Plan for Open Space Lots "A" and "C" of Pacifica Estates. This organization shall accept fee title for these lots and assume all responsibilities to manage these lots in perpetuity, although the project applicant shall be responsible to implement all wetland revegetation measures identified in Attachment A prior to turning the perpetual management responsibilities over to the FLC.

Impacts to 0.19 acre of Coast Live Oak Woodland must be mitigated for at a 3-to-1 ratio, which means that no less than 0.57 acre of mitigation must be provided. It is recommended that this mitigation occur **offsite**, via the securement of 0.57 acre-credits of Coast Live Oak Woodland habitat in a County-approved mitigation bank. The Daley Ranch Mitigation Bank in Escondido is one such suitable bank offering oak woodland credits for County projects.

A zone extending out 50 feet from the outer edge of all mature Coast Live Oaks is considered the Oak Root Protection Zone. This area is considered "impact neutral" (Table 1) because no trees or tree roots will be affected by the fire clearing that will take place in this area. The intent of the Oak Root Protection Zone is to ensure that no grading or compaction takes place within 50 feet of any oak protected in open space. It does not apply to oaks not conserved onsite.

The project includes the construction of a bridge to span the floodway of Ostrich Farms Creek and avoid impacts to RPO wetlands and federal wetlands and "waters" and minimize impacts to state wetlands and "waters". Impacts to state wetlands and "waters" will require the securement of a 1600-series Streambed Alteration Agreement from the California Department of Fish and Game or proof that such document is not needed.

A variety of native songbirds occur onsite - some of these could nest on the property. Therefore, site brushing, grading, and/or the removal of vegetation within 500 feet of any potential migratory songbird or raptor nesting location (including ground nesting locations) is generally not permitted during the winter/spring bird breeding season, defined as from 1 January to 31 August of each year. This is required in order to ensure compliance with the Sections 3503, 3503.5, 3511, and 3513 of the California Fish and Game Code and the Migratory Bird Treaty Act. In order to allow development activities to proceed during the bird breeding season, a pre-clearing survey for nesting activities would be required, with "sign-off" from the County, the CDFG, and the USFWS.

Thanks for the opportunity to provide this report. Please contact us if you have any questions.

Table 1. Impacts and Mitigation - Pacifica Estates

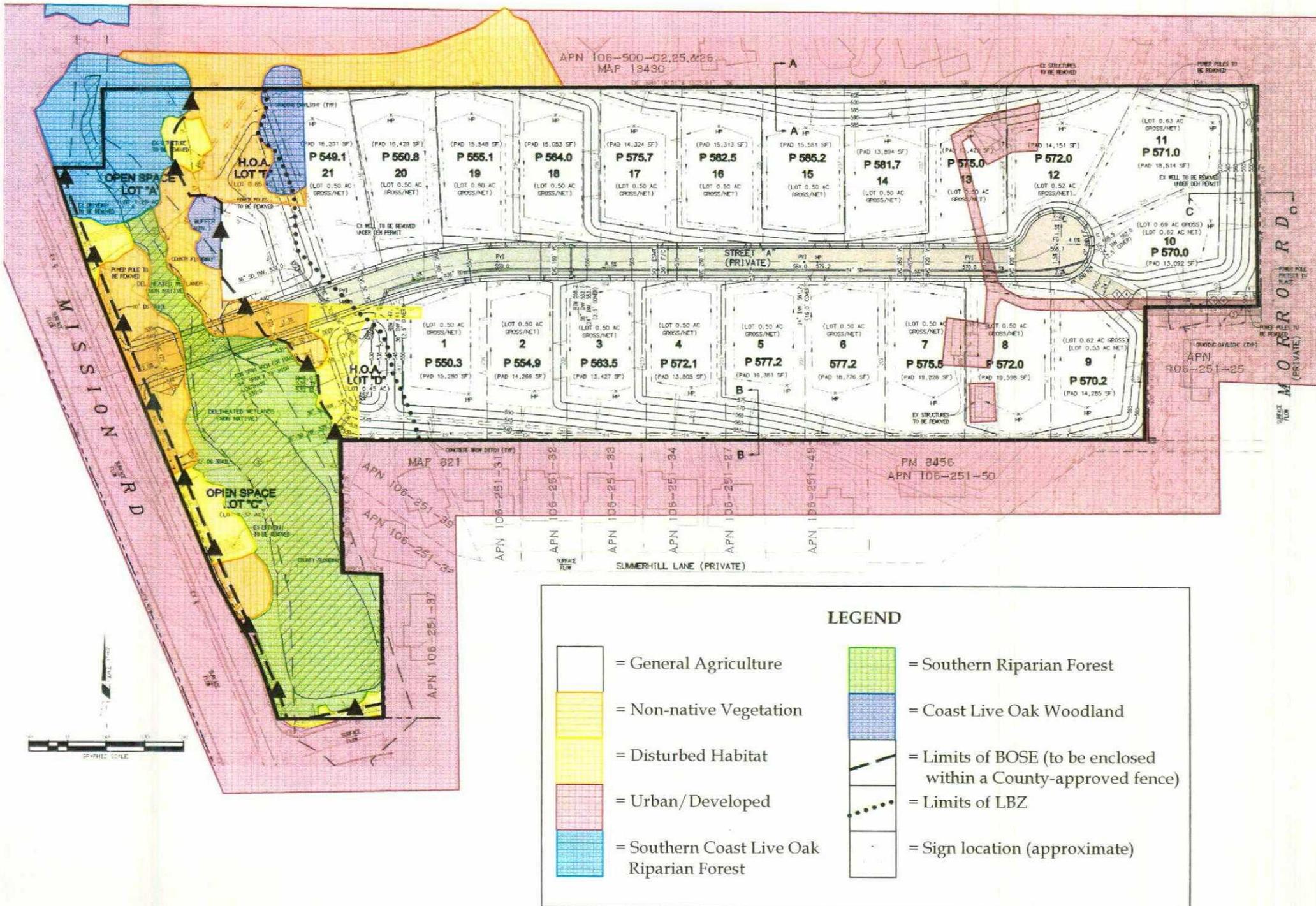
<u>Biological Resource</u>	<u>Total Onsite Acres</u>	<u>Acres Impacted</u>	<u>Acres Impact Neutral ¹</u>	<u>Mitigation Acres Required</u>	<u>Mitigation Acres Provided</u>
General Agriculture	12.46	12.46	none	none	n/a
Disturbed Habitat	0.66	0.42	0.24	none	n/a
Urban/Developed	0.46	0.46	none	none	n/a
Non-native Vegetation	1.17	0.68	0.49	none	n/a
Southern Riparian Forest	1.87	0.18	1.69	0.54 (0.18 @ 3:1)	0.54 onsite ²
Southern Coast Live Oak Riparian Forest	0.42	trace	0.42	avoidance	avoidance
Coast Live Oak Woodland	0.26	0.19	0.07	0.57 (0.19 @ 3:1)	0.57 offsite ³
Totals	17.3	14.39	2.91	1.11	1.11

¹ - Includes the Oak Root Protection Zone, which would be subject to fire clearing.

² - It is recommended that mitigation occur onsite, via wetlands creation/restoration/enhancement in Ostrich Farms Creek and adjoining disturbed areas

³ - It is recommended that mitigation occur offsite, via the securement of mitigation credits in an approved mitigation bank.

Figure 1. Biological Resources - Pacifica Estates



Attachment A
Conceptual Wetland Revegetation Plan

CONCEPTUAL REVEGETATION/HABITAT ENHANCEMENT MITIGATION PLAN

FOR

PACIFICA ESTATES, TM 5510, ER 06-02-023

(Outline Format)

OVERVIEW

The Resolution of Approval for Pacifica Estates will require that certain mitigation measures be implemented prior to recordation of a Final Map for this project. With respect to biological resources, one of these measures will be the preparation and implementation of a Revegetation Mitigation Plan in order to offset project-related impacts to Southern Riparian Forest and to increase the biological functions and values necessary to support the riparian species. This plan will also provide a mechanism to mitigate impacts to impacted wetlands and waters.

The California Department of Fish and Game (CDFG) will be a Responsible Agency for this project, pursuant to CEQA. Because of measurable impacts to state wetlands and "waters", the developer will be required to sign a Streambed Alteration Agreement with CDFG in compliance with CDFG Code Section 1600. This agency, in concert with the County, will require either onsite or offsite mitigation for impacts to 0.18 acre of Southern Riparian Forest vegetation. This loss must be mitigated for at a 3-to-1 ratio, which means that no less than 0.54 acre of mitigation shall be provided. At least a 1-to-1 ratio of this total (0.18 acre) shall consist of wetlands creation; the balance (0.36 acre) may consist of wetlands restoration/enhancement. It is assumed that this mitigation will be provided onsite, via wetlands creation/restoration/enhancement in the onsite portion of Ostrich Farms Creek. The restoration/enhancement component of the required wetlands mitigation may consist of the removal of all exotics from the onsite Southern Riparian Forest and Southern Coast Live Oak Riparian Forest. The wetland creation component of the required mitigation may be accomplished by removing all exotics from the areas of Non-native Vegetation and Disturbed Habitat to the west of Ostrich Farms Creek (both sides of the floodway) and replanting these areas with native wetland and wetland buffer species. The Resolution of Approval for Pacifica Estates will also require this mitigation.

To that end, we propose a comprehensive Conceptual Revegetation Mitigation Plan for the Pacifica Estates project. This plan would provide onsite mitigation for habitat impacts to 0.18 acres of Southern Riparian Forest. These activities would occur within biological open space on the western end of the property adjacent to Ostrich Farms Creek.

All measurable wetland/waters impacts will be mitigated for at a 3-to-1 ratio, with a minimum 1-to-1 being wetlands creation. In addition, all created and/or enhanced wetlands will require no less than five years of biological monitoring and reporting, as well as agency permitting, as discussed above. To that end, it is

recommended that the applicant prepare and implement to the satisfaction of the Director of Planning and Land Use and the agencies a **Final Revegetation/Habitat Enhancement Mitigation Plan** intended to compensate for the loss of vegetation associated with site development.

REVEGETATION PLAN CONCEPTS

The Final Revegetation/Habitat Enhancement Mitigation Plan prepared for Pacifica Estates shall address, at a minimum, the following:

- All specific, improvement-related impacts (precise amount of acreage impacted, based on final engineering)

As currently designed, the Pacifica Estates project impacts approximately 0.18 acre of Southern Riparian Forest. This acreage shall be mitigated for onsite pursuant to this Plan. An additional approximately 0.19 acre of Coast Live Oak Woodland (upland) will be impacted as a result of site development. This acreage shall be mitigated for offsite in a County-approved location.

- Engineered line-drawings, planting profiles, and irrigation system layout

Drawings shall be provided that show how the Grading and Improvement Plans reconcile with the revegetation areas, and how the project will be physically separated from sensitive areas. Open space areas shall be clearly shown on all exhibits.

- Types of materials to be used including container sizes, species ratios, total quantities, etc.

Native seed and plant stock sources are to be specified, plant palette to be compatible with indigenous native vegetation, etc. Plant materials shall be obtained from sources that provide local (San Diego County) stock or from onsite cuttings, etc. The plant palette shall include Coast Live Oaks, California Sycamores, and other native species compatible with Ostrich Farms Creek.

- Specify site preparation activities

The revegetation area will need to be cleared of dead vegetation, invasives, and surface debris. Soil preparation, including the export of contaminated substrates, use of pesticides, etc. shall be discussed.

- Define a specific area or areas to be used for replanting

The final design of the restoration area would be specified in the Final Revegetation Mitigation Plan. After approval of the Final Revegetation Mitigation Plan, Ostrich Farms Creek, which supports disturbed areas adjacent to the main drainage and extensive growth of invasives, shall be cleared and planted with native riparian vegetation.

- Specify planting program and habitat protection measures

Temporary construction fencing and silt fencing adjacent to the revegetation areas is required. Permanent fencing/signage of the biological open space is required.

- Specify biological monitoring periods and success criteria

Monitoring shall occur no less than quarterly the first year, semiannually for years 2 and 3, and annually for years 4 and 5. Monitoring reports shall be submitted on an annual basis, at a minimum to the County and the CDFG.

- Specify required maintenance activities

Maintenance shall consist of fencing maintenance, construction monitoring, trash removal, weeding, etc. on an ongoing basis.