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Planning Commission
San Luis Obispo County
Dept. of Planning & Building
976 Los Osos Street, Room 200
San Luis Obispo, CA 93408-2040

30 January 2016

Subject: Comments on Adequacy of Phillips 66 Santa Maria Refinery Rail Project Final EIR Concerning Presence of “Unmapped ESHA”, San Luis Obispo County, California.

Dear Commissioners,

I am a consulting wildlife biologist with over 30 years of field experience in central and southern California. I hold advanced degrees in evolutionary ecology, with an emphasis in herpetology. Much of the field work for my Ph.D. dissertation was conducted in the dune systems of the Santa Maria Basin in western Santa Barbara County and southwestern San Luis Obispo County. I am thoroughly familiar with the project area because several of my field study sites were located in dune habitats immediately adjacent to the SMR facility.

I have reviewed the findings of the Final EIR (FEIR, 2015) as well as comment letters prepared by the California Coastal Commission (CCC, 2014; 2015) on the conclusions contained in this document. The FEIR concludes that approximately 21 acres of dune scrub habitat in the project area “appears” to meet the County of SLO and CCC definitions for Unmapped ESHA. I wish to state the project area unequivocally supports at least 21 acres, and probably more, of Unmapped ESHA.

As noted in the FEIR, the California Coastal Commission provides guidance in evaluating whether or not habitats meet ESHA status: *“Environmentally Sensitive Area” means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*”

The FEIR concludes that approximately 20.88 acres of “environmentally sensitive vegetation” would be disturbed by the proposed project. This use of semantics obscures that fact that ‘vegetation’ should more appropriately be called ‘habitat’ and should be considered Unmapped ESHA because it is geologically unique, supports a number of special-status plants, wildlife, and specialized habitats, and is highly susceptible to anthropogenic disturbance and development.

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The FEIR states that, “*It is important to also consider that the Rail Spur Project area has been highly disturbed and degraded from agricultural, industrial, and human activities for several decades and does not appear to contain features that have an equivalent characteristic or natural function as other mapped ESHA. This conclusion is based on a qualitative comparison with ESHA habitat that is located to the west of the UPRR mainline, which contains a high habitat value and supports numerous special-status species.*” (FEIR, p. 4.4-31). I disagree with this highly subjective assessment. Although it is true that the project area has been subjected to various anthropogenic disturbances over the past decades, including a fire in the late 1980s after which veldt grass (*Ehrharta calycina*) significantly colonized dune habitats in the project area, it has not been uniformly subjected to such disturbance. More importantly, the subdued dune topography on which the project area lies is physically and functionally connected to dune habitats west of the UPRR tracks that the FEIR authors somehow consider to be more ‘valuable’.

The FEIR completely misses the fact that the project area, and the larger SMR facility, are situated on one of the last intact series of coastal dune features remaining in California (Cooper, 1967; Hunt, 1993). Extending from the beach to up to 20 miles inland, these recurring windblown dune features get progressively older to the southeast. The dunes in the project area are late Pleistocene/early Holocene in age; their characteristic parabolic shapes are clearly visible on Figure 4.4-5 in the FEIR and are largely unchanged from aerial photographs taken in 1930 (Plate 12, Fig. 1 in Cooper, 1967). These windblown features were deposited during times of rising and falling sea levels 2,000-6,000 years BP (Orme and Tchakerian, 1986). The ‘noses’ of these parabolic dunes stabilized, i.e., stopped moving southeastward, at least 3,000-4,200 yrs BP due to declining sand budgets and encroaching dune scrub vegetation (Orme, 1990). The dune mass in the project area mantles the southwestern flank of Nipomo Mesa, which itself is a much older sheet of subdued transverse paleodunes that are at least 10,000 years, and as much as 125,000 years, old (Johnson, 1983; Orme and Tchakerian, 1986). The ‘valuable’ habitats found in the dunes west of the UPRR tracks that the FEIR authors consider worthy of ESHA protection are physically and geomorphically connected to the dune scrub habitats in the project area. They differ only in age, i.e., dunes in the project area are older than those to the west. I consider the entire project area, including the SMR facility, to be part of an unmapped ESHA of statewide geological and biological importance. If mapped in its functional entirety, the ESHA should extend from the beach, through the project area, and onto Nipomo Mesa in order to capture the full spectrum of recurring dune emplacement and vegetative succession in this region.

It is highly likely that all of the special-status species found in dune habitats west of the UPRR tracks occurred in the project area, at least historically. This is certainly true for ground-dwelling wildlife, such as silvery legless lizards (*Anniella pulchra*), which are present in the project area habitats in high numbers. It should be noted that recent genetic analyses of this species have uncovered a high degree of genetic subdivision among populations. Indeed, the species inhabiting dunes in the project area have a much more restricted geographic distribution than previously thought. Finer-scale genetic and morphological studies may also reveal population-level differences in legless lizards in this area concordant with dune age. In addition to direct loss and fragmentation of habitat for these and other species, collateral impacts in the form of soil (sand) disturbance promotes veldt grass invasion that will degrade adjacent dune scrub vegetation for this and other special-status species.

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The 20.88 acres of ‘environmentally sensitive vegetation’ mapped in the FEIR exceeds the criteria used by the CCC and the County of San Luis Obispo to define Unmapped ESHA.

Sincerely,

Lawrence Hunt

Lawrence E. Hunt

References:

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