State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
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February 14, 2023

Mr. Jerry Busch
Santa Cruz County Planning Department
701 Ocean Street, 4th Floor
Santa Cruz, CA 95060
jerry.busch@santacruzcounty.us

Subject: Monterey Glen Subdivision, Initial Study/Mitigated Negative Declaration, SCH No. 2023010486, Santa Cruz County

Dear Mr. Busch:

The California Department of Fish and Wildlife (CDFW) received an Initial Study/ Mitigated Negative Declaration (IS/MND) prepared by Santa Cruz County (County) for the Monterey Glen Subdivision (Project), located in Santa Cruz County, pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

CDFW is submitting comments on the IS/MND to inform the County, as the Lead Agency, of potentially significant impacts to biological resources associated with the Project.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's Lake and Streambed

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Alteration (LSA) regulatory authority. (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

REGULATORY REQUIREMENTS

California Endangered Species Act and Native Plant Protection Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA or the Native Plant Protection Act (NPPA), either during construction or over the life of the Project. Under CESA, take is defined as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill." If the Project will impact CESA or NPPA listed species, early consultation with CDFW is encouraged, as significant modification to the Project and mitigation measures may be required to obtain an ITP. Issuance of an ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program.

CEQA requires a Mandatory Finding of Significance if a Project is likely to substantially impact threatened or endangered species (Pub. Resources Code, §§ 21001(c), 21083, and CEQA Guidelines §§ 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code, § 2080 et. seq.

Lake and Streambed Alteration

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et seq., for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank (including associated riparian or wetland resources); or deposit or dispose of material where it may pass into a river, lake, or stream. Work within ephemeral streams, drainage ditches, washes, watercourses with a subsurface flow, and floodplains are generally subject to notification requirements. In addition, infrastructure installed beneath such aquatic features, such as through hydraulic directional drilling, is also generally subject to notification requirements. **The Project has the potential to impact resources including mainstems, tributaries and floodplains associated with an unnamed tributary to Nobel Gulch.** Any impacts to the mainstems, tributaries and floodplains or associated riparian habitat would likely require an LSA Notification. CDFW, as a

responsible agency under CEQA, will consider the IS/MND for the Project. CDFW may not execute a final LSA Agreement until it has complied with CEQA as the responsible agency.

Raptors and Other Nesting Birds

CDFW has authority over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include] §§ 3503 (regarding unlawful take, possession or needless destruction of the nests or eggs of any bird), 3503.5 (regarding the take, possession, or destruction of any birds of prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

PROJECT DESCRIPTION SUMMARY

Proponent: Charlie Eadie

Objective: The Project consists of the subdivision of an existing undeveloped 41,019-square-foot parcel into six residential lots. The Project would require waivers to several development standards including reduced site width and frontage requirements for lot 6, increased lot coverage on lots 1 and 6, allowing two single-family dwellings to be semi-detached, and allowing a lot smaller than 3,500 square feet. The Project would also conserve a 4,137-square-foot area of riparian corridor on the eastern side of the existing parcel, with a 20-foot riparian buffer and a 10-foot construction setback. A riparian enhancement plan has been provided for the Project as well.

Timeframe: No timeframe listed in the IS/MND.

ENVIRONMENTAL SETTING AND LOCATION

The Project is located on the north side of Loraine Lane within the Community of Soquel in unincorporated Santa Cruz County, APN (037-211-01). The undeveloped parcel is located within an existing residential neighborhood. The parcel borders an unnamed tributary to Nobel Gulch on the east. There is riparian vegetation on site consisting of Coast live oak (*Quercus agrifolia*), western sycamore (*Platinus racemose*), box elder (*Acer negundo*) and common elderberry (*Sambucus nigra*). The proposed riparian enhancement plan would remove invasive vegetation and require the site to be maintained free of invasive species in perpetuity, along with the installation of native plant species.

COMMENTS AND RECOMMENDATIONS

CDFW commends the County for providing a riparian enhancement plan which includes removal of invasive plants and revegetation of native tree and shrub species.

CDFW offers the following comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on biological resources.

COMMENT 1: Riparian Encroachment

Issue: Although the Project incorporates a riparian buffer, it is unclear how far Project development will be from the edge of the top of the streambank. Insufficient buffers between the Project development and the riparian zone can result in substantial adverse effects to riparian habitat. The IS/MND states that the Project would provide a 20-foot riparian buffer with a 10-foot construction setback. CDFW generally recommends a minimum 50-foot buffer as measured from the top of streambank. Appropriately sized riparian buffers between development and the stream channel are necessary to avoid impacts to the stream ecosystem and sensitive fish and wildlife species.

Riparian habitats are important to watershed integrity because they perform many ecological functions such as enhancing water quality, protecting biodiversity, maintaining habitat connectivity, and attenuating high stream flows. Because natural stream processes are complex and dynamic, development too close to stream channels can also result in threats to property from erosion due to lateral and/or vertical channel adjustments over time. Incorporation of a sufficient riparian buffer into the Project design is necessary to avoid the potential need for stream channel stabilization solutions in the long-term. CDFW discourages use of hardscape material such as cement retaining walls in streams as a result of insufficient riparian buffer setbacks.

Evidence the impact would be significant: Riparian vegetation improves stream water quality by removing sediment, organic and inorganic nutrients, and toxic materials (Belt and O'Laughlin 1994, Mitsch and Gosselink 2000, USDA 2000, Mayer et al. 2006). Riparian buffers help keep pollutants from entering adjacent waters through a combination of processes including dilution, sequestration by plants and microbes, biodegradation, chemical degradation, volatilization, and entrapment within soil particles. As buffer width increases, the effectiveness of removing pollutants from surface water runoff increases (Castelle et al. 1992). There is substantial evidence showing narrow buffers are considerably less effective in minimizing the effects of adjacent development than wider buffers (Castelle et al. 1992, Brosofske et al. 1997, Dong et al. 1998, Kiffney et al. 2003, Moore et al. 2005).

Riparian trees and vegetation, and associated floodplains provide many essential benefits to stream and river fish habitat (Moyle 2002, CDFG 2007). Riparian forests

provide thermal protection, shade, and large woody debris. Large woody debris stabilizes substrate, provides shelter and cover from predators, facilitates pool establishment and maintenance, maintains spawning bed integrity, and creates habitat for aquatic invertebrate prey. Riparian areas also provide critical fish habitat in the form of off-channel and back-water winter-rearing sites and floodwater refugia (CDFG 2007). Few fishes have been more significantly impacted by loss and alteration of habitat than Pacific salmon and anadromous trout (Moyle 2002).

Riparian habitats also contribute to bank stability and provide flood protection. Riparian habitat and adjacent wetlands and floodplains are important because they store and meter floodwaters, recharge groundwater aquifers, trap sediment, filter pollution, help minimize erosion, lessen peak flow velocities, and protect against storm surges (Mitsch and Gosselink 2000, Tockner et al. 2008). In doing so, they protect adjacent upland, down-stream, and coastal properties from loss and damage during flooding and help maintain surface and groundwater during summer months.

In addition to direct habitat loss, development adjacent to a riparian zone has three principal indirect effects: 1) fragmentation of habitat into smaller, non-contiguous areas of less-functional habitat by structures, roads, driveways, yards and associated facilities; 2) the introduction or increased prevalence of exotic species or species that are habitat generalists, termed “human adapted” or “urban exploiters,” and 3) decreases in native species abundance and biodiversity and the loss of “human-sensitive” species that require natural habitats (Davies et al. 2001, Hansen et al. 2005, CDFG 2007).

Recommendation: CDFW recommends that the Project establish and the IS/MND incorporate a larger riparian buffer zone and limit development to outside of the riparian buffer zone. CDFW is available to coordinate with the County to determine appropriate site-specific buffer riparian buffer to limit impacts to sensitive species. At a minimum, CDFW recommends a 50-foot riparian buffer as measure from the top of streambank to the nearest Project infrastructure.

COMMENT 2: Monarch Overwintering

Issue: The IS/MND does not discuss potential impacts to monarch butterfly overwintering colonies or suitable overwintering habitat. The IS/MND states five mature eucalyptus trees and seven young saplings would be removed from the property. Eucalyptus trees provide potential overwintering habitat for monarch butterfly. CDFW is concerned about the loss of trees and host plants needed for to support the monarch butterfly life cycle. The loss of suitable overwintering habitat for monarchs could contribute to extirpation of western monarch populations. If the Project would remove trees used by over-wintering monarchs, tree planting alone is unlikely to be sufficient to mitigate impacts to a less-than-significant level.

Occurrences: Known overwintering sites for monarch butterfly populations according to findings in monarch butterfly modeling from the California Natural Diversity Database (CNDDB) and the Western Monarch Count Organization show three overwintering sites occurring within approximately one mile of the Project. The sites are designated with the following Xerces Site ID's: Site 1 #2986 (36.97970, -121.93096), Site 2 #2985 (36.97633, -121.94386), and Site 3 #2984 (36.97846, -121.95750) (https://www.westernmonarchcount.org/find-an-overwintering-site-near-you/).

Evidence the impact would be significant: Data gathered from the Western Monarch Thanksgiving Count since 1997 shows that western overwintering monarchs have an average decline rate of 5% per year (Crone 2023). The decrease in western monarch butterflies may be due to the loss of overwintering habitat and loss of its host plant (milkweed) (Pelton et al. 2019). According to the Xerces Society, "Western monarchs use the same sites each year, even the same trees, and need intact overwintering habitat, which provides a very specific microclimate and protection from winter storms," (Xerces Society, 2020). Xerces Society also states, "The decades-long decline is due in large part to threats such as habitat loss at the overwintering sites and breeding grounds, exposure to pesticides, and the compounding effects of climate change" (Howard and Pelton 2023).

Recommended Measure 1: Protect, Manage, Enhance and Restore Monarch Butterfly Overwintering Sites: A qualified biologist shall conduct a monarch feeding, breeding and/or over-wintering habitat assessment(s) and include the results of the assessment in the IS/MND. If monarch habitat occurs within the Project site, CDFW recommends some or a combination of the measures below for the Project.

Avoid the removal of trees or shrubs within a half mile of overwintering groves, except for specific grove management purposes, and/or for human health and safety concerns. The maintenance of trees and shrubs within a half mile of these sites provides a buffer to preserve the microclimate conditions of the winter habitat.

Conduct management activities such as tree trimming, mowing, burning and grazing in monarch overwintering habitat in coordination with a monarch biologist and outside of the estimated timeframe March 16-September 14 when monarchs are likely present.

Enhance native, insecticide-free nectar sources by planting fall/winter blooming forbs or shrubs within overwintering groves and within one mile of the groves (https://xerces.org/sites/default/files/publications/18-003_02_Monarch-NectarPlant-Lists-FS_web%20-%20Jessa%20Kay%20Cruz.pdf).

Avoid the use of pesticides within one mile of overwintering groves, particularly when monarchs may be present. If pesticides are used, then conduct applications from March 16-September 14, when possible. Avoid the use of neonicotinoids or other

systemic insecticides, including coated seeds, any time of the year in monarch habitat due to their ecosystem persistence, systemic nature, and toxicity. Avoid the use of soil fumigants.

Consider non-chemical weed control techniques, when possible (https://www.cal-ipc.org/resources/library/publications/non-chem/). Remove tropical milkweed that is detected, and replace it with native, insecticide-free nectar plants suitable for the location (https://xerces.org/sites/default/files/publications/18-003_02_Monarch-NectarPlant-Lists-FS_web%20-%20Jessa%20Kay%20Cruz.pdf).

To assist in maintaining normal migration behavior, do not plant any type of milkweed within five miles of the coast from Mendocino County south through Santa Barbara County, and within one mile of the coast south of Santa Barbara County, unless the species of milkweed is native to the local area. Conduct grove monitoring for butterflies during the Western Monarch Counts each fall and winter. When possible, report when monarchs arrive and depart the groves each year (https://www.westernmonarchcount.org/).

COMMENT 3: Tree Removal

Issue: The IS/MND states that one large diameter oak tree would be removed but does not include the diameter at breast height (dbh) of the tree planned for removal. This information is needed for CDFW to assess the impact of the activity to fish and wildlife resources and evaluate the proposed tree planting mitigation. Planted oak trees would take many years to get to a size that could provide the same ecological benefits that large mature trees provide. Removal of a large mature tree without adequate mitigation should be considered a substantial adverse change in the physical conditions within the area affected by the Project.

Evidence the impact would be significant: Oak woodlands provide food and habitat to a variety of wildlife including birds, insects, mammals, reptiles, amphibians, and native understory plants and support some of the richest species abundance in California (Zaveleta et al. 2007, CalPIF 2002). Large mature trees (e.g., native oak tree that is greater than 15 inches in diameter) are of particular importance due to increased biological values such as providing nesting bird habitat and bat roost habitat. Loss of large mature native oaks has the potential to result in signification impacts for these reasons.

Recommendation: CDFW recommends the updated IS/MND include the dbh size of the tree planned for removal. If the oak is a large mature tree, CDFW recommends the Project avoid its removal to the greatest extent feasible. Where large diameter tree removal is unavoidable, CDFW recommends Project mitigation include in-kind preservation of mature native trees.

COMMENT 4: Nesting Bird Surveys

Issue: The IS/MND proposes to implement mitigation measure BIO-1, which incorrectly identifies the nesting bird period for raptor species, does not include baseline monitoring of the nest, and does not provide the qualified biologist with stop work authorization.

Recommendation: To evaluate and avoid potential impacts to nesting bird species, CDFW recommends incorporating the following measures into the Project's existing measure.

Recommended Measure 2, Nesting Bird Surveys: If Project-related work is scheduled during the nesting season (typically February 15 to August 30 for small bird species such as passerines; January 15 to September 15 for owls; and February 15 to September 15 for other raptors), a qualified biologist shall conduct two surveys for active nests of such birds within 14 days prior to the beginning of Project construction, with a final survey conducted within 48 hours prior to construction. Appropriate minimum survey radii surrounding the work area are typically the following: i) 250 feet for passerines; ii) 500 feet for small raptors such as accipiters; and iii) 1,000 feet for larger raptors such as buteos. Surveys shall be conducted at the appropriate times of day and during appropriate nesting times.

Recommended Measure 3, Active Nest Buffers: If the qualified biologist documents active nests within the Project area or in nearby surrounding areas, a species appropriate buffer between the nest and active construction shall be established. The buffer shall be clearly marked and maintained until the young have fledged and are foraging independently. Prior to construction, the qualified biologist shall conduct baseline monitoring of the nest to characterize "normal" bird behavior and establish a buffer distance which allows the birds to exhibit normal behavior. The qualified biologist shall monitor the nesting birds daily during construction activities and increase the buffer if the birds show signs of unusual or distressed behavior (e.g., defensive flights and vocalizations, standing up from a brooding position, and/or flying away from the nest). If buffer establishment is not possible, the qualified biologist shall have the authority to cease all construction work in the area until the young have fledged, and the nest is no longer active.

COMMENT 5: Storm Drain Outfall

Issue: Although the Project incorporates measures to control site run-off, it still has the potential to cause substantial alterations to a stream channel. Substantial stream channel erosion can occur from altering natural hydrology via concentrated storm run-off discharge from a new storm drain outfall. The Project states that a new storm drain outfall with energy dissipation would be installed to replace the existing 12-inch diameter corrugated metal pipe (CMP) culvert. As shown in Figure 2 in the IS/MND, the

existing culvert drains directly onto the bank of the unnamed tributary. Impervious surfaces, stormwater systems, and storm drain outfalls such as those directly out letting into tributaries have the potential to significantly affect fish and wildlife resources by altering the hydrograph of natural streamflow patterns via concentrated run-off. In addition, storm drains that outlet directly into creeks or streams have the potential to introduce pollutants that can negatively impact fish species.

Evidence the impact would be significant: Urbanization (e.g., impervious surfaces, stormwater systems, storm drain outfalls) can modify natural streamflow patterns by increasing the magnitude and frequency of high flow events and storm flows (Hollis 1975, Konrad and Booth 2005). Arsenic, cadmium, chromium, lead, mercury, nickel, and zinc have been detected in higher levels in urban streambed sediments as compared to forest sites (MacCoy and Black, 1998). Acute toxicity and mortality in Coho salmon (*Oncorhynchus kisutch*) have also been tied to immediate road runoff from a compound occurring in tires, 6PPD-Quinnone (Tian, 2021).

Recommendations to minimize significant impacts: CDFW recommends the Project incorporate additional measures to limit storm water discharge to a stream. Storm runoff should be dispersed rather than concentrated to a stormwater outfall or other receiving waters. CDFW recommends implementation of low impact development (LID) and the use of bioswales and bioretention features to intercept storm runoff. CDFW also recommends incorporating permeable surfaces throughout the Project to allow stormwater to percolate in the ground and prevent stream hydromodification (see https://www.usgs.gov/science/evaluating-potential-benefits-permeable-pavement-quantity-and-quality-stormwater-runoff?qt-science_center_objects=0#qt-science_center_objects.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNNDB online field survey form and other methods for submitting data can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Plantsand-Animals.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, § 711.4; Pub. Resources

Code, § 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

CONCLUSION

Thank you for the opportunity to comment on the Project's IS/MND. If you have any questions regarding this letter or for further coordination with CDFW, please contact Ms. Serena Stumpf, Environmental Scientist, at (707) 337-1364 or Serena.Stumpf@wildlife.ca.gov; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Stacy Sherman for
692D021D81CA4F7...
Erin Chappell
Regional Manager
Bay Delta Region

ec: State Clearinghouse # 2023010486

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