O-5 CALIFORNIA NATIVE PLANT SOCIETY SAN DIEGO

Comment Letter O-5

California Native Plant Society

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RE: Otay Ranch Village 14 and Planning Areas 16 & 19, LOG NO. PDS2016-ER-16-19-006; SCH NO. 2016121042. PROJECT NUMBERS: PDS2016-GPA-16-008, PDS2016-SP-16-002, PDS2016-REZ-16-006, PDS2016-STP-16-027, and PDS2015-TM-5616

Dear Mr. Mattson,

Thank you for the opportunity to comment on this draft of the Otay Ranch Village 14 ("Project") draft environmental impact report ("DEIR"). CNPS promotes sound plant science as the backbone of effective natural areas protection. We work closely with decision-makers, scientists, and local planners to advocate for well informed and environmentally friendly policies, regulations, and land management practices. Our focus is on California's native plants, the vegetation they form, on keeping both plants and people safe from damaging fires, and on climate change as it affects both. O-5-1

We have a number of comments, as shown below. Questions are highlighted in **bold**, not because we believe these are more important, but to make them easier to find and answer. "We" in this context, is the opinion of CNPS on this project. "I" represents the experience of the author of this letter, Frank Landis.

Unfortunately the Project portrayed in this DEIR is, to put it bluntly, inadequate, problematic, and scary. O-5-2 As described, we have serious questions about the damage it causes (both disclosed and non-disclosed) to native plants, O-5-3 the fire risks it will pose to residents, the greenhouse gas it will emit, and the legal challenges it poses to the MSCP. Some of these issues could be fixed by further research and issuance of a revised EIR. DUnfortunately, the most serious cannot be dealt with without redesigning the Project or avoiding it altogether. O-5-4 Since some of these issues are fundamental design flaws, we recommend against approving the Project presented and support the no project alternative. O-5-5 Our issues are detailed below.

Dedicated to the preservation of California native flora

Plant issues

First, the treatment of the sensitive plants found is problematic. **Why were impacts to only some sensitive plant species mitigated? Why was the take of some species not mitigated to the full extent of take, as demonstrated below? Why were impacts to many species ignored?** The details are below. O-5-6

Why was Otay tarplant (*Deinandra conjugens*, CE/FT) surveyed for only between April 23 and May 1 in 2014? A quick scan of the Consortium of California Herbaria shows flowering specimens were collected more in late May, June, and July, not in April. **Why weren't focused surveys conducted in season? Why weren't focused surveys for Otay tarplant conducted across the entire area from 2015-2017, especially in the 2017 rare plant surveys, when workers were actually in the field at the correct time to find blooming plants? How many Otay tarplants would be impacted by Proctor Valley Road improvements?** The way the DEIR is phrased, it is not only impossible to tell what damage has been mitigated, but it appears that the Project proponents are actively hiding take of an endangered species. **What are the details that underlie the decision to not decision not to analyze impacts or mitigation further (p. 74)? Why is an agreement signed in 2001 for a separate project still considered valid? Was that impact done, and if so, why does that not make the current Project not a subsequent project requiring separate analysis and mitigation? Was the previous mitigation? If so why isn't that simply considered a restoration? Won't this impact, almost 20 years late, be new, separate and require separate mitigation?** It's not like these annual plants are the same plants surveyed for the 2001 project. These are the descendants of the plants that were analyzed then. **Where is the evidence that the current Project is sufficiently similar to the old project that the old agreement still applies, and is not a new impact to a previously impacted population? Where is the analysis of indirect impacts to the species from regulations and issues that have arisen since 2001, including issues around weed management, clearance for fire protection, herbicide application, road maintenance, and greenhouse gas issues?** O-5-7, O-5-8, O-5-9

Why is the take of only 17 individuals of San Diego goldenstar (*Bloomeria clevelandii*, CRPR List 1B.1) mitigated for, not 1,363? According to Appendix 2.4-1, Table 5-4, the surveys found 4,592 plants, of which 1,363 were to be destroyed by the Project. **Why is the official number so far off the survey results? Where will these bulbs be translocated? How will they be treated while out of the soil? What will happen if more bulbs are found during salvage attempts? Will these simply be destroyed, or will they be salvaged too?** It's not as if bulbs even put up a leaf every year, especially during droughts. **Is this concentration of bulbs unusually high from this species? Is this population critical for the species?** O-5-10

Why is no avoidance or mitigation proposed for the 100% take of Orcutt's brodiaea (*Brodiaea orcuttii*, CRPR List 1B.1) found on the Project site? This species can easily be flagged and later removed to provide a nursery seed source or planted in a suitable habitat outside of the Project footprint. As with the goldenstar above, this bulb could easily be much more abundant in the soil? Will any effort be made to salvage bulbs from the soil in this population? Where can they be relocated? O-5-11

Why is there no avoidance or mitigation proposed for the 80% take of Delicate clarkia (*Clarkia delicata*, CRPR List 1B.2)? The small number of flowers found of this annual during drought year surveys indicate that the true population is likely much higher. O-5-12

Why is there no avoidance or mitigation proposed for the 52% take San Diego marsh elder (*Iva hayesiana*, CRPR List 2B.2) not covered by mitigation M-BI-11? According to the document, 3,937 plants will be impacted out 5,556 plants. However, salvage mitigation only affects 1,057 individuals. O-5-13

Why is there no avoidance or mitigation proposed for the 11,713 plant take of Munz's Sage (*Salvia munzii*, CRPR 2B.2)? Are populations estimates even correct? The DEIR admits that more could potentially be found in the Projects and that survey timings did not allow for positive identification of all specimens. **Why were they not surveyed for following CDFW protocols as noted in the next section?** O-5-14 O-5-15

Why is there no avoidance or mitigation proposed for the 100% take of Palmer's grapplinghook (*Harpagonella palmeri*, CRPR List4.2)? Are populations estimates even correct? The report states that there could easily be many more of this species within the development footprint. **Why were they not surveyed for following CDFW protocols as noted in the next section?** O-5-16 O-5-17

Why is there no avoidance or mitigation proposed for the 56 Robinson's pepper grass (*Lepidium virginicum* var *robinsoni*, List 4.3) not covered by mitigation M-BI-11? Furthermore, why was no survey conducted for this species in 2017? Populations of this annual are known to vary by two orders of magnitude between wet and dry years, and the survey data are based on a dry year. **Why is mitigation not based on the wet-year population?** O-5-18 O-5-19 O-5-20

Why is there no avoidance or mitigation proposed for the 39% take of San Diego County needle grass (*Stipa diegoensis*, List 4.2)? The DEIR reports 343 plants, 175 of which are found within the impact area, O-5-21

Why is there no avoidance or mitigation proposed for the 25% take of San Diego sagewort (*Artemisia palmeri* CRPR List 4.2) As a riparian species, it would be expected that this species should be protected within the RMP Area. O-5-22

Why is there no avoidance or mitigation proposed for the 36% take of San Diego County viguiera (*Bahiopsis laciniata*, CRPR List 4.3)? The project proposed to take 6,731 individuals out of 18,599 individuals. O-5-23

Why is there no avoidance or mitigation proposed for the 100% take of Western Dichondra (*Dichondra occidentalis*, CRPR list 4.2)? The Project proposes to take 0.23 acres found in 9 populations. O-5-24

Why is there no avoidance or mitigation proposed for the 100% take of Graceful tarplant (*Holocarpha virgata* ssp *elongata*, CRPR list 4.2)? Is the count of 20 of these annual plants even accurate, considering that it was done in a drought year? Or are thousands potentially impacted without mitigation? O-5-25 O-5-26

Why is there no avoidance or mitigation proposed for the 50% take of Golden rayed pentachaeta (*Pentachaeta aurea* ssp *aurea*, CRPR List 4.2)? The count is suspiciously accurate, given that the survey rate is described as an acre per hour, these are tiny annuals, and acreages are given for other small plants, like western dichondra above or ashy spikemoss below. **Is the number accurate for when the survey was performed? Worse, is the population estimate low, because the survey was performed in a drought year?** O-5-27 O-5-28 O-5-29

Why is there no avoidance or mitigation proposed for the 55% take of Ashy spike moss (*Selaginella cinerescens*, CRPR list 4.1)? Of the 6.57 acres; 3.63 acres will be impacted directly. That entire acres are to be impacted is a major blow to the habitat and this species in particular, considering this tiny plant is usually found by the square foot or square yard. Worse, O-5-30 O-5-31

it is often an indicator for cryptogamic crust, which, as noted below, can contain other sensitive species. **Were these species surveyed for?** O-5-31 Cont.

Second, why were CDFW survey protocols not followed? Specifically, the CDFW protocol instructs trained, informed biologists to "[c]onduct botanical field surveys in the field at the times of year when plants will be both evident and identifiable. Usually this is during flowering or fruiting. Space botanical field survey visits throughout the growing season to accurately determine what plants exist in the project area."[1] **This is particularly problematic for Spreading Navarretia (*Navarretia fossalis*, FT, CRPR List 1B.1). Why were no surveys for this federally listed, vernal pool species conducted during 2017, when the wet year allowed vernal pool plants to grow?** O-5-32 O-5-33

Third, there are missing rare plants from the surveys. Was any winter survey conducted for California adders'-tongue (*Ophioglossum californicum*, CRPR list 4). In my experience on Del Mar Mesa, it has only been visible from December to March, before any of the rare plant surveys were performed. Per the San Diego Plant Atlas, it has been collected within the Project site.[2] While it is listed as "low probability" in the Appendix, it is obvious from the survey schedule that it could not have been found, because no survey was performed when it is above ground. O-5-34

Similarly, was any survey conducted for little mousetail (*Myosurus minimus*, CRPR list 3). In 2017, it was present at Del Mar Mesa in April, and that was the only year it was visible. This is a vernal pool species that should have been surveyed for during vernal pool work. O-5-35

Were proper surveys carried out for Campbell's liverwort (*Geothallus tuberosus*, CRPR List 1B.1) bottle liverwort (*Sphaerocarpos drewei* CRPR List 1B.1), and woven-spored lichn (*Texosporium sancti-jacobi*, CRPR list 3)? Does proper habitat for any of these species occur on the Project site? As Dudek and AECOM personnel now know, the picture and habitat information for Campbell's liverwort was seriously incorrect, something that CNPS is trying to remedy countywide. All three species occur in undisturbed cryptogamic crust, and the widespread presence of ashy spikemoss suggests that such a crust is there. Campbell's liverwort requires old, open chaparral, and perched water tables, often near vernal pools. Woven-spored lichen occurs on rabbit droppings that have sat undisturbed for at least a year. Bottle liverwort appears to prefer a similar environment to Campbell's liverwort, although it is harder to find. This question is directed at the rare plant biologists who did the surveys: Were good soil crusts seen on site near old chaparral? Were there areas where soil crust lichens were plentiful? If that is the case, these species may be present, and focused surveys are warranted. O-5-36 O-5-37 O-5-38 O-5-39

Fourth, were survey efforts sufficient? There are two problems here. One is that the majority of surveys were conducted in the drought years of 2014 and 2015. As a comparison, I did not conduct any floristic surveys of Del Mar Mesa during that time, as species I knew to be O-5-40

[1] Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. https://nrm.dfg.ca.gov/File Handlerashx?DocumentID=18959. Accessed 4/13/2018.

[2] http://berkeleymapper.berkeley.edu/index.html?ViewResults=tab&tabfile=http://ucjeps.berkeley.edu/BerkeleyMapper/CHC_367329466.txt&configfile=http%3A%2F%2Fucjeps.berkeley.edu%2Fucjeps_nolayers.xml&sourcename=Consortium+of+California+Herbaria+result&pointDisplay=pointMarkersBlack, accessed 4/12/2018

present from previous work did not appear or flower during the drought. **Why were there not more rare plant surveys in 2017?** Second (p. 2.4-8) " The entire Project Area was surveyed at a rate of 100 acres per person per day" for rare plants, and survey logs (Appendix 2.4-1, p. 47-48) demonstrate that they were surveying more than ten acres per hour (dividing the claim of 100 acres per day by the less than ten hours in the field per day logged) **How can a crew moving this fast, especially through chaparral, find tiny plants, especiallywhen they are dwarfed by drought? Can anyone even accurately count shrubs, such as Otay manzanita, at that pace?** Because of the fast pace, were small plants, such as Dunn's mariposa lily (*Calochortus dunnii*, CRPR List 1B.2), San Miguel savory (*Clinopodium chandleri*, CRPR, List 1B.2), Palmer's grapplinghook (*Harpagonella palmeri,* CRPR List4.2), obinson's pepper grass (*Lepidium virginicum* var *robinsoni,* List 4.3), San Diego County needle grass (*Stipa diegoensis*, List 4.2),

Were survey efforts sufficient to find all variegated dudleya (*Dudleya variegata*, CRPR List 1B2), especially since all known plants will be impacted? This extremely rare stonecrop can be easily missed as it blends in with rocks or below shrubs, and it would be hard to get an accurate count at a survey rate of over one acre per hour of chaparral.

Were survey efforts sufficient to find all San Diego Barrel cactus (*Ferocactus viridescens*, CRPR List 2B.1), especially given that over half the number found will be impacted?

Fifth, where are the vernal pool indicator species in the list of plants found? In Appendix 2.4-1, subappendix G (the list of plants seen during surveys) there are no vernal pool species noted, including the little mousetail, toothed downingia (*Downingia cuspidata*). According to a map-based search of the area in the San Diego Plant Atlas, these are known to be present in the survey area. **Were they? If so, why were they not noted? What about American pillwort (*Pilularia americana*), Howell's quillwort (*Isoetes howellii*), annual hairgrass (*Deschampsia danthanoides*), and dwarf woolly-marbles (*Psilocarphus brevissimus*)?** All of these vernal pool indicator plants were listed as occurring in Proctor Valley vernal pools in the City of San Diego's vernal pool inventory. **Why are there no vernal pool indicator plants noted, when vernal pools were found and surveyed for fairy shrimp? Why was there no vernal pool survey in 2017, when the wet year caused all the pools in the area to fill?**

Sixth, is planned vegetation restoration sufficient to support both the plants and animals that will require it, or will it fail? CNPS has found huge problems with *Phytophthora* (water molds) being propagated through native plant nurseries, and from there to the wild. **Will the Project Proponents follow CNPS protocols to use clean nursery stock in Project outplantings? Will species lists be diverse enough to support the animals that will depend on the restorations? What weed control will be implemented? How will annuals be salvaged, banked, and restored? Will the required soil communities be moved as well?**

Seventh, will wildlife corridors be protected for plant pollination and dispersal throughout the construction phase of the Project and thereafter? As scientists know, plants depend on wildlife corridors too.[3] **What will be the effect of construction activities on existing wildlife corridors through the site? What about the effects of traffic after the**

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[3] J J Tewksbury et al. 2002, Corridors affect plants, animals, and their interactions in fragmented landscapes Proceedings of the National Academy of Sciences Oct 2002, 99 (20) 12923-12926.

Project is finished? How will this impact plant movement through pollination and dispersal that depends on animals moving through the site? O-5-50 Cont. O-5-51

Eighth, what are the impacts from uses such as mountain biking? It appears that the Project designers want to close some of the unregulated trails in the area. Experience at Del Mar Mesa (a city of San Diego preserve, CDFW ecology reserve, and) and Carlsbad Highland Ecological Reserve (CHER) show that this is incredibly difficult. These areas have 30-50 miles of unregulated trails each in areas less than 500 acres. **Has there been any outreach to the mountain biking community? Have they participated in any trail design meetings? If so, what were the results? What land management practices will be used to minimize illegal trail building and reopening in the Project's conserved areas? How many people will be hired for this effort? What are expected outcomes?** O-5-52

Ninth, what about other indirect impacts to the Project's unbuilt areas? What will be done to control invasive species? This is not just a matter of specifying landscaping, it is a matter of controlling documented populations of known invasives like Italian thistle (*Carduus pycnocephalus*), tocalote (*Centaurea melitensis*), cardoon (*Cynara cardunculus*), stinkwort (*Dittrichia graveolens*), crown daisy (*Glebionis coronaria*), milk thistle (*Silybum marianum*), wattle (*Acacia cyclops*), blue gum (*Eucalyptus globulus*), tree of heaven (*Ailanthus altissima*), Canary Island date palm (*Phoenix canariensis*), Mexican fan palm (*Washingtonia robusta*), pampas grass (*Cortaderia selloana*), fountain grass (*Pennisetum setaceum*), and smilo grass (*Stipa miliacea*). State regulations require property owners to control noxious weeds on their property, and quite evidently this wasn't done here. Worse, trees like Brazilian peppertree, Ailanthus, and the palms will seriously interfere with efforts to conserve and restore riparian areas. **Why is there no good plan to get rid of them prior to construction and control them thereafter? What will be done to control the predictable and inevitable spread of exotics through fire management zones? Since some of these exotics (like annual grasses) increase the ignitability of vegetation, how will control efforts, or lack of the same, affect fire risk to adjacent properties?** O-5-53 O-5-54

Fire Issues

The fundamental problem with the Project's design is that it is in the footprint of the 2007 Harris Fire (p. 3.1.1-34), and there have been 17 fires in the area since 1910. The question is not if this area will burn, but when. **Why is the conclusion justified that (p. 3.1.-34): "Based on implementation of the FPP requirements, compliance with applicable fire codes, and inclusion of a fire station in the Project Area, the Proposed Project would not have significant impacts relating to wildfire hazards. The FPP and its requirements would be incorporated by reference into the Proposed Project's final Conditions of Approval to ensure compliance with County codes/regulations and significance standards. Additionally, the County's emergency response and multijurisdictional fire efforts will be able to provide adequate emergency response?" Was the County able to provide an adequate emergency response to the 2007 fires? If not, then why would it be able to with more people in harm's way?** O-5-55 O-5-56 O-5-57

Based on the 2003 and 2007 fires, researchers in 2011 found, to quote the title of their article, that " Housing Arrangement and Location Determine the Likelihood of Housing Loss Due to Wildfire."[4] They analyzed many factors, but the physical factors that best explained the which houses caught fire and were destroyed in San Diego County were:

- housing density (less dense was worse): 31% correlation.
- distance from the WUI edge (closer was worse):28.7% correlation.
- distance from coast (more inland was worse): 28% correlation.
- elevation (higher is worse): 20% correlation.
- Road length (longer is worse) 19.6% correlation.
- Area of housing cluster (bigger is worse): 16.4% correlation.

Note that vegetation was not a major variable, although several vegetation factors were analyzed.

To quote the researchers at some length (p. 6, emphasis added): "The effects of housing arrangement and location on the likelihood that a house will be destroyed or damaged by wildfire suggest that land use planning may be a critical tool for reducing fire hazard. Restricting development from hazardous locations has been effective for other hazards, such as flooding and the prevention of building on floodplains. In the case of fire, new structures should be located and arranged in ways that not only minimize their exposure to hazard, but may also limit the increase in fire occurrence that often accompanies urban development. *For example, our results suggest that in both study areas, new development would have a lower likelihood of burning if it were located away from fire-prone areas, such as wind corridors or steep slopes, and if new structures were arranged in intermediate-to high density neighborhoods designed to minimize the amount of interface between homes and wildland vegetation. New development within large, existing urban areas, which typically also have better firefighter access, would also lower the likelihood of burning, compared to new development in more isolated, remote settings.* Land use planning that considers minimizing future structure loss and prioritizing other fire prevention actions would be more informed with maps that reliably differentiate the most hazardous locations than with maps currently used for this purpose." **Why build the Project in almost the precisely opposite way: inland, at higher elevation, accessed by long, two-lane roads, with low-density housing, with a complex interface between the vegetation and the homes?**

Worse, why does the fire hazard analysis rely on some poorly stated model that apparently focuses exclusively on vegetation characteristics and fire history? Per Syphard et al. (p. 4, emphasis added): " In contrast, *statewide fire-hazard maps developed using fuel rank and fire rotation were unable to predict which structures were burned by fire (Fig. 7)*. This poor performance of the statewide maps was also evident through visual comparison with maps of actual property loss (Figs. 5 and 6). Similarly, property loss was not substantially higher in the highest hazard or communities-at-risk areas of the statewide maps. In most cases, property loss was evenly divided among hazard levels (Fig. 8A and 8B), and even where a substantial proportion of burned structures were located in areas mapped as high fire hazard, most of the unaffected structures were also distributed in these high-hazard areas, suggesting high commission error (Fig. 8C and 8D). The most worrisome finding was that the majority of property loss occurred in areas not designated as at-risk (Fig. 8E and 8F). " Note that this finding was made in 2011. The same finding was made by the Board of Forestry in response to

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[4] Syphard, Alexandra D., et al. "Housing arrangement and location determine the likelihood of housing loss due to wildfire." *PloS one* 7.3 (2012): e33954.

the Tubbs fire, where the majority of property loss occurred in areas not designated as at risk.[5] **Why repeat the problems that caused over $8 billion of fire damage in damage in 2017?** O-5-61 Cont.

Worse still, the DEIR appendices do not support the notion that rapid evacuation is possible, nor that shelter-in-place is possible, although the homes are designed to be "fire resistant." One problem with rapid evacuation is the ubiquitous deployment of "traffic-calming features" such as roundabouts and narrow roads to reduce vehicular speeds. While these features are totally appropriate in daily use, they may be deadly if, as in the 2007 wildfires, there is a windblown fire coming in at 5 miles an hour from 12 miles away, and people need more than three hours to leave. **Were traffic calming features analyzed in the evacuation plan?** From what I can tell, they were not, as the evacuation plan (Appendix 3.1.1-3 WFEP) specifies "12-foot-wide, unobstructed travel lanes, adequate parking, 28-foot inside radius, grade maximums, signals at intersections." **What is the effect of including features that slow traffic on evacuation time and firefighter ingress? Are the roundabouts big enough to handle both outgoing evacuees and incoming fire engines?** O-5-62

Second, why is having a single fire station considered sufficient to handle wildfire risk? Over 90% of wildfire losses occur during Santa Ana wind events, when firefighters can at best save some structures and not halt the spread of the fire. **Given that there is less than one house per acre in parts of the Project, can a single fire station reliably protect more than one home at a time?** O-5-63

Third, why incorporate into the DEIR a Fire Protection Plan that includes poison oak (*Toxicodendron diversilobum*) in its "suggested plant list for a defensible space" (Appendix 3.1.1.-3 FPP, Appendix H, p. H-6)? Did anyone notice that the suggested plant list for a defensible space (Appendix H) and the Prohibited Plant list (Appendix I) overlapped on species like palm trees and black sage (*Salvia mellifera*)? Why does Appendix H contain known, highly flammable invasive species like the Canary Island fan palm (*Phoenix canariensis*)? What else was missed due to carelessness? O-5-64

Fourth, if evacuation does not work, is it possible to use the homes for shelter-in-place or not? It is not mentioned in the DEIR, but the Evacuation Plan somewhat unhelpfully notes (Appendix 3.1.1-3 WFEP, p. 13): "Although not a shelter-in-place community, the structures in the Proposed Project would be ignition resistant, defensible, and designed to require minimal firefighting resources for protection, which enables these contingency options that may not be available to other area communities." **Given that an nearly-perfect evacuation would need be needed to get people out during an Santa Ana-blown wildfire, is a shelter-in-place option usable or not? Do the homes have all the shelter-in-place features needed, as at Rancho Santa Fe? How will the information be passed to residents, since, from research, most people in Rancho Santa Fe are unaware that their buildings were designed for this option, nor did they prepare for it?**[6] O-5-65

Fifth, is Proctor Valley Road an appropriate evacuation corridor? The road generall runs northeast to southwest, the direction that Santa Ana winds blow. This means that people O-5-66

[5] http://www.latimes.com/local/lanow/la-me-ln-coffey-park-explainer-20171011-story.html, accessed 4/13/2018.
[6] Paveglio, Travis B., Matthew S. Carroll, and Pamela J. Jakes. "Adoption and perceptions of shelter-in-place in California's Rancho Santa Fe Fire Protection District." International Journal of Wildland Fire 19.6 (2010): 677-688.

driving down the road will be keep pace with an advancing fire. **Is this a safe route to evacuate? What happens if cars jam on Proctor Valley Road? Where will the evacuees go if they are overtaken by fire?** O-5-66 Cont.

Sixth, what impacts would fire have on the finances of Chula Vista and San Diego County? In November 2017, Moody's Investor Services, Inc. issued a report analyzing risks from climate change, and in our region, these include wildfire risks.[7] These risks will be used in calculating interest rates on bonds issued by jurisdictions. **How will putting over 1,000 homes at risk in this Project affect the County and Chula Vista's ability to borrow money? What will happen to these when the area burns again?** This is an important risk, as it affects how infrastructure to the development will be built and maintained. **What are the financial impacts to the lead agencies from wildfires on this Project? How can they be mitigated or avoided?** O-5-67

CNPS, as part of its native plants and fire safety policy, supports The California Native Plant Society supports protecting human lives, property and California's native plants from poor fuel management practices." In this case, putting harming plants to put people in harm's way from wildfires looks like a terrible decision. **Why do it?** O-5-68

Greenhouse Gas (GHG) Issues

First, case law was omitted from the regulatory background of the Project, and it needs to be included. The regulatory environment actually analyzed by the GHG chapter in the DEIR is the County General Plan, and that is insufficient. The following questions are meant to insure that the analysis is correct and complies with all regulations and case law: O-5-69

- **How does the *Center for Biological Diversity v. California Department of Fish and Wildlife* (2015) decision affect the Project? Where is the analysis? Are there significant impacts? How are they mitigated or avoided? If they cannot be mitigated or avoided, what is their unmitigable impact?** O-5-70
- **How does Massachusetts v. Environmental Protection Agency (EPA) affect the Project? Where is the analysis? Are there significant impacts? How are they mitigated or avoided? If they cannot be mitigated or avoided, what is their unmitigable impact?** O-5-71
- **How does Energy Independence and Security Act affect the Project? Where is the analysis? Are there significant impacts? How are they mitigated or avoided? If they cannot be mitigated or avoided, what is their unmitigable impact?** O-5-72
- **How do the California Air Resource Board's "six key focus areas" affect the Project? Where is the analysis? Are there significant impacts? How are they mitigated or avoided? If they cannot be mitigated or avoided, what is their unmitigable impact?** O-5-73
- **How does CARB's *California's 2017 Climate Change Scoping Plan* (Second Update) affect the Project? Where is the analysis? Are there significant impacts? How are they mitigated or avoided? If they cannot be mitigated or avoided, what is their unmitigable impact?** O-5-74

[7] https://www.npr.org/2017/12/01/567843604/credit-rating-agency-issues-warning-on-climate-change-to-cities, accessed 4/13/2018

- **How does SANDAG's *San Diego Forward: The Regional Plan* affect the Project? Where is the analysis? Are there significant impacts? How are they mitigated or avoided? If they cannot be mitigated or avoided, what is their unmitigable impact?** O-5-75
- **How does the County's approved Climate Action Plan ("CAP") affect the Project? Where is the analysis? Are there significant impacts? How are they mitigated or avoided? If they cannot be mitigated or avoided, what is their unmitigable impact?** O-5-76
  The CAP is already the subject of a lawsuit by a coalition of environmental groups. **Can the DEIR be updated to include not only the last-minute provisions inserted in the CAP by Planning and Development Services, the County Planning Commission, and the County Supervisors, but also the fact that the plan is under litigation? How will this affect the revised analysis?** Furthermore, the CAP is under court supervision. **Can any relevant rulings or feedback from the judge be included in this DEIR? If the judge's actions on the CAP happen to affect the Project, can the DEIR be revised to account for this?** O-5-77 O-5-78

The point of this list is that there is little use inserting boilerplate discussion in a text if it is not used in the analysis or decision making. **Does the Project comply with applicable regulations and case law? Can that be demonstrated in sufficient and useful detail? If it was not done, what text needs to be included in the section to make it useful?** O-5-79

Second, we have concerns with consistency with the General Plan (p. 2.7-37): O-5-80

- (COS-4.1 and COS-4.2) Riparian trees like sycamores (*Platanus racemosa*) and coast live oaks (*Quercus agrifolia*) are not notably drought tolerant, especially compared with most San Diegan native plants. Indeed, outside the palo verde, all of the trees proposed in the Village Design Plan will need watering, especially in dry winters. **Why is the Project considered consistent with COS-4.1 and 4.2?** As noted below, tall trees will cause problems with solar panels. O-5-81
- (COS-4.2). **Why mention recycled water?** According to the Project Description (p. 1.17): "OWD's revised 2010 Urban Water Management Plan anticipated that the Proposed Project would use only potable water due to the historic constraints on recycled water use within watersheds tributary to the Lower Otay Reservoir." **Given problems with the plant palette above and use of recycled water, can the Project be consistent with COS-4.2?** O-5-82
- (COS-14.1): **Given the area's extensive fire record, does encouraging non automobile traffic within the Project hamper resident's ability to speedily evacuate during a fire?** Given the need to go 3-8 miles to get to a freeway, these two goals seem to conflict. **How is this problem resolved?** O-5-83
- (COS-14.3): **Doesn't the goal of conserving open space put the residents at greater risk of fire, as noted above? How is this problem resolved? Can the Project be consistent with COS-14.3?** O-5-84
- (COS-14.4): Since there are no local employers, what does "self-sufficiency" mean in this context? It's not clear that gardening is allowed, and most people will be commuters to a nearby city. **Also, why put electric vehicle chargers on only half the houses? Why not all of them? Where is the electricity for these chargers coming from? Is there enough photovoltaic area in the developments to support charging electric vehicles, which run at about 4 miles per kWh? Where are the numbers? Also, is there room to install storage batteries? Since most people will recharge their cars at night when they are home, if there is no provision for batteries, what will be the emissions from charging** O-5-85 O-5-86 O-5-87

electric cars at night? If people are forced to rely on chargers in the village core, what will they do while waiting for their cars to charge? This process can take many hours. O-5-87 Cont.

- (COS-14.9). Claiming solar will solve all our problems is nice, but it is trivial to calculate how much electricity will come off a photovoltaic panel. **Is there enough south and west-facing roof space in the development to meet its electrical demands via PV?** O-5-88

Third, We encountered numerous puzzling numbers in the text, as described below. O-5-89

- (p.2.7-33) construction emissions are listed as 1,436 MT CO2. **Shouldn't that be 11,463 MT CO2. What is the lifetime of the Project referred to in the last sentence? How does this lifetime calculation work in the context of the profound land use change engineered by this Project?** O-5-90
- (p.2.7-24): Proctor Valley North option, bike lanes if approved will be an additional 9.27 MT CO2. **Was this included in the total emission to be mitigated by carbon offsets, Table 2.7-8?** It doesn't appear to be. **How does that change the Table?** O-5-91
- (pp. 2.27-24 to 25) **Should gas and electricity GHG emissions be calculated with the assumption that SDGE will meet RPS standards of renewable energy procurements of 33% and 50% in 2020 and 2030** O-5-92
- (p. 2.7-25) The swimming pool analysis –"On-site energy demand would be reduced by installing solar heating at all recreational swimming pools"—is unclear. **Where are the solar panels and what energy needs will be met?** O-5-93
- (p. 2.7-26) **Is it fair practice to assume 75% reduction required by AB341 can be attributed to CO2 emissions reduction of solid waste disposal by the proposed project? If this 75% is not met, is it accounted for in this analysis?** O-5-94
- (p. 2.7-32) "FOURTH – Proctor Valley North Option if approved will increase to 21,854 MT CO2" This does not appear to accounted for in Table 2.7-8. **How does that change the numbers?** O-5-95
- (p. 2.7-47) Table 2.7-7, Second row, (trees), Net loss (Acres): **shouldn't that be 3.20, not 0.20. If this is correct, is Loss of Sequestered Carbon 355 MT CO2 and Total loss of Sequestered Carbon 10,715 MT CO2?** O-5-96
- (p.2.7-47) Table 2.7-8, **If the Proctor Valley North Option is approved, shouldn't this include 9.27 MT CO2 to be mitigated as mentioned above?** O-5-97
- (p.2.7-48) Table 2.7-12 mentions solar photovoltaic systems for residential units,. **Where is this discussed in the text of the DEIR and analyzed?** Without a discussion in the body of the EIR, any analysis in the appendices is irrelevant. O-5-98
- **(p.2.7-48) Table 2.7-13, Shouldn't Annual Operational Emissions be 16,195 not 16,159? Shouldn't Project Operational Emissions be 485,850 MT CO2 not 484,775 MT CO2?** O-5-99

Third, where are the emissions for the blasting to remove 7,132,859 cubic yards of rock in the first two phases of the Project (p. 2-8-19, 22)? While the EPA does not have a calculated emission level for ammonium nitrate and fuel oil (ANFO), anybody using Wikipedia can determine that ANFO is 94% ammonium nitrate, 6% number 2 fuel oil.[8] It is also possible to determine how much greenhouse gas is emitted from burning a gallon of number 2 with a google search and a bit of reading[9]. **Why is it so hard to provide reasonably accurate figures for** O-5-100

[8] https://en.wikipedia.org/wiki/ANFO, accessed 4/13/2018.
[9] e.g. https://www3.epa.gov/ttnchie1/conference/ei10/ghg/barbour.pdf, accessed 4/13/2018

blasting emissions, especially if (per p. 2.7-36), the greenhouse gas calculations are "conservative"? What are those emissions? O-5-100 Cont.

Fourth, why does the GHG emissions model assume that emissions will take place in an "urban" environment (e.g. Table 2.7-12)? Considering the low density of buildings (down to less than one per acre), lack of businesses, lack of industry, and long distances commuters will have to travel to jobs that are not available in the Project, this Project is undeniably a rural project. **What are the greenhouse gas emissions if it is recalculated correctly as a rural project? What will this do to calculations of vehicle miles traveled? What does "located near major urban and employment centers, including the City of Chula Vista" mean in terms of commute distance? What is the likelihood of future ridesharing and transit options actually coming to pass in the Project area?** Where I live, introduction of public transit is at least a decade away, and has been for years. O-5-101 O-5-102 O-5-103

Why argue that putting aside 426.7 acres of conserved land in the Multiple Species Conservation Program (MSCP, see below) is occurring in an urbanized space and therefore represents a gain in sequestration? The area is totally undeveloped, so building stuff on it adds greenhouse gas emissions that have to be mitigated, rather than reducing them. O-5-104

Fifth, how do measures designed to decrease emissions affect residents' risks during wildfires? Where is the analysis of cumulative and indirect effects of trying to get residents out of their cars, with regards to their safety? If the DEIR assumes that such measures are voluntary or transient, and that people will drive to safety, why use these numbers to talk about greenhouse gas reductions? Will people recharging their electric cars at night be able to drive to safety? How will the Project ensure that their cars are charged for emergencies, given their commute distance (hint, electric vehicles get about 4 miles per kWh, so this can be calculated from VMTs, and recharge rates can be readily determined for charging stations)? If people are required to charge at public charging stations rather than at home, can they make it to their vehicles in time to evacuate during a Santa Ana wind-driven fire? These are non-trivial problems. As the owner of an electric vehicle who lives in a high fire area on the WUI, I have put some time into thinking about how my family would evacuate, and it is not a trivial problem. O-5-105 O-5-106 O-5-107

Sixth, why install natural gas at the Project? Pipelines leak, and models assume that natural gas will go away as a fuel during the lifespan of the Project's homes, so any system installed will be dismantled in a haphazard way that will, near the end, leave a leaky piping system that supplies only a few homeowners and probably leaks more methane than it supplies as fuel to appliances. Moreover, electric alternatives to all natural gas appliances are readily available at the same or lower cost than their natural gas counterparts, and some (such as induction ranges) are regarded as superior to natural gas. **With these alternatives and problems, why install natural gas at all? Why not avoid it and get rid of those emissions?** O-5-108

Seventh, how will electricity from photovoltaic (PV) systems be stored? People will likely charge their cars at night, but without storage batteries, these cars will charge off natural gas supplied from elsewhere. **What are the emissions from using electrical appliances and charging cars at night? Are any spaces for storage batteries going to be included in home and building designs?** O-5-109

Eighth, it is essential that the street trees planted during or after the Project build phases should not overshadow the solar panels, per Public Resources Code Division 15, Chapter 12. Solar Shade Control [25980-25986], passed in 1974. Since the street tree palette includes large oaks (*Quercus* spp.) and sycamores (*Platanus* spp.), it appears likely that if they obtain enough water to grow to full size (50-60 feet), solar panel shading will be a serious future issue. **How can the landscaping design be changed to insure that there are both street trees and functioning solar panels?** O-5-110

Ninth and perhaps most importantly, can greenhouse gas emissions be offset successfully? Doesn't there need to be good evidence that mitigation measures will be feasible and effective for them to be used?[10] There are currently no credits available from carbon offset projects in San Diego County (indeed, there is only one such project, at Cuyamaca Rancho State Park, and it is not designed for public use). **Where will the offsets be purchased?** Per one international report: "our results suggest that 85% of the projects covered in this analysis and 73% of the potential 2013-2020 Certified Emissions Reduction (CER) supply have a low likelihood that emission reductions are additional and are not over-estimated. Only 2% of the projects and 7% of potential CER supply have a high likelihood of ensuring that emission reductions are additional and are not over-estimated."[11] **How much of the offset programs identified in M-GHG-1 fully compliant with California Air Resources Board requirements, and how many are unregulated and voluntary? If the California Cap and Trade Program only allows 8% of a Project's GHG emissions to be offset, why does the Project assume that all vehicular emissions (VMT) can be offset successfully? How else can those emissions be safely avoided or mitigated? Finally, why aren't Project offsets to be set up BEFORE a permit is granted? If they are only to be set up after a development permit is granted, won't they be irrelevant if they fail? What are the penalties for compliance failure?** O-5-111 O-5-112 O-5-113 O-5-114 O-5-115 O-5-116

Regulatory Issues

It is confusing that the Project plans to develop three areas within Proctor Valley (PV-1, PV-2, and PV-3) that were set aside for preservation under the County Multiple Species Subarea Plan, County of San Diego Subarea Plan ("MSCP"). **Since the MSCP is a combined NCP and HCCP under State and Federal Law, isn't developing areas PV-1, PV-2, and PV-3 illegal? Does it not violate the State and Federal laws that implement the NCP and HCCP?** O-5-117

What does development of these three areas do to the MSCP? Doesn't this violate both the spirit and the letter of the Baldwin agreement that underlies the MSCP? How can the Project be made consistent with the Baldwin agreement and the MSCP? Doesn't the Project violate the County Biological Mitigation Ordinance ("BMO", p. 2.4-110), which implements the MSCP? As we understand the BMO, it does not apply to areas PV-1, PV-2, and PV-3, as these are areas where no "Take" permits will be issued. O-5-118 O-5-119

If the Project does not develop PV-1, PV-2, and PV-3, thereby conforming to the MSCP, BMO, and Baldwin agreement, does this not render the Project DEIR illegal under O-5-120

[10] *Sacramento Old City Assn. v. City Council of Sacramento* (1991).

[11] Cames, Martin, et al. 2016. "How Additional Is the Clean Development Mechanism." Analysis of the application of current tool and proposed alternatives. Institute for applied ecology.

CEQA? Will it not have to be rewritten and recirculated, since the Project as amended will be about one-third smaller, and this was not considered as an alternative? O-5-120 Cont.

Issues with Project Alternatives

As should be evident from the above questions, CNPS supports the No Project Alternative, simply because it is the simplest solution to the problems presented. Moreover, since the Project appears to offer no low income or affordable housing (**is this correct?**), the failure of this Project will be irrelevant to the County's worsening crisis in affordable housing. That said, we found serious issues with the other Project alternatives presented. O-5-121 O-5-122 O-5-123

First, doesn't the Low Density Alternative increase the fire hazards? As noted above, low density housing is more hazardous to residents and requires more firefighters. Additionally, the lack of a fire station in the area means that there will be a substantially longer response time, potentially turning a small fire that can be controlled into a conflagration. **Where is the analysis of fire hazards and mitigation with this alternative?** O-5-124

Second, doesn't claim that the Alternative Site Location is infeasible conflict with the idea that land exchanges are possible? If the Project Proponent doesn't own or control any of the land in question, why is one possible while the other is not? O-5-125

Third, doesn't the Land Exchange Alternative cause new and serious impacts to Miguel and Otay Mountains, and to critical wildlife corridors that connect the area? Is the vegetation description in the alternative accurate, or is most of the vegetation coastal sage scrub? Doesn't it cluster development in areas where the most biological resources are clustered (vernal pools, riparian areas, wildlife corridors, sensitive species), while preserving lower quality areas? O-5-126 O-5-127 O-5-128

What alternatives to this Project satisfy the MSCP, BMO, NCCP, and HCP? O-5-129

Thank you for taking these comments. Please keep CNPSSD informed of all developments with this project and associated documents and meetings, at conservation@cnpssd.org and franklandis03@yahoo.com. O-5-130

Sincerely,

Frank Landis

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Conservation Chair
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