



October 7, 2010

Valerie Heusinkveld, Environmental Branch Chief
Attention: Oliver Iberien
Department of Transportation
Office of Environmental Analysis MS 8B
111 Grand Avenue
Oakland, CA 94612

Re: Niles Canyon Safety Improvement Project Draft EIR/EA [04-ALA-84 PM 13.6/18.0]

Dear Ms. Heusinkveld:

California Oaks appreciates the opportunity to submit Niles Canyon EIR/EA public comments. California Oaks finds that due to informational deficiencies, the EIR/EA fails to analyze or feasibly mitigate project biogenic (vegetation and land) greenhouse gas (GHG) emissions. Specifically, the EIR/EA fails to analyze the biogenic greenhouse gas emissions effect of terrestrial conversion, including forest land, to another land-use. Consequently, the EIR/EA fails to provide the GHG emission effects information necessary for informed public participation and informed decision-making regarding project environmental effects or proportional mitigation measures.

The EIR/EA Fails to Analyze the Biogenic Greenhouse Gas Emissions Effect of Terrestrial Conversion

The California Air Resources Board's AB 32 Scoping Plan recognizes the significant contribution that terrestrial greenhouse gas (GHG) storage will make in meeting the state's GHG emissions reduction goals: *"This plan also acknowledges the important role of terrestrial sequestration in our forests, rangelands, wetlands, and other land resources."*¹ Further, the California Environmental Quality Act (CEQA) Guidelines specifically address biogenic (vegetation and land) greenhouse gas emissions due to the conversion of forest land to non-forest land use (Attachment). The AB 32 Scoping Plan has also set a "no net loss" goal for forest land carbon sequestration and "stretch targets" of increasing forest land carbon dioxide storage by 2 million metric tons by 2020 and 5 MMT by 2050.²

The California Environmental Quality Act Guidelines require that terrestrial GHG emissions be calculated in determining project emission effects. Terrestrial GHG emissions result from vegetation and land impacts. Biogenic GHG emissions associated with land-use change are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Cumulative terrestrial biogenic emissions include land emissions due to earth-moving activities, the quantity of GHG emissions associated with vegetation disposal and the loss of future vegetation/land carbon sequestration.

The amount of project biogenic GHG emissions depends on the vegetation types-land types impacted. Vegetation and land impacts result in both direct/indirect GHG emissions. An example of these distinct direct and indirect biogenic emissions is provided by the Natural Resources Agency's CEQA discussion of "forest land" conversion:

"As explained in the Initial Statement of Reasons, forest conversions may result in direct greenhouse gas emissions. Further, such conversions remove existing forest stock and the potential for further carbon sequestration."

Determination of the significance of greenhouse gas emissions must be based to the extent possible on scientific and factual data (CEQA Guidelines, § 15064(b)). The international scientific standard for measuring GHG emission effects is 100 years and this standard has been adopted by the California Forest Project Protocol for measuring forest land sequestration. The California Air Resources Board approved the Protocol in October 2007 and it is cited in the CEQA Guidelines, Appendix G.

Based on internationally accepted scientific GHG measurement standards, AB 32 Scoping Plan, Executive Order S-3-05 GHG reduction goal and CEQA GHG criterion, there are four biogenic emission questions the project has failed to answer:

1. How much potential vegetative and land CO₂ sequestration over the next 100 years will be lost as a result of project impacts?
2. How much CO₂, CH₄ and N₂O will be released if the impacted vegetation is burned or otherwise dispersed? For example, if the impacted biomass is burned, CO₂, CH₄ and N₂O emissions will occur. How much of each gas depends on biomass moisture content and the method of combustion. If not burned, the quantity of CO₂, CH₄ and N₂O emissions is a result of how the biomass is dispersed (e.g., composting, mulching, burial). Scientific and factual evidence demonstrates that any feasible biomass disposal scheme will result in substantial GHG emissions.
3. How much CO₂, CH₄ and N₂O will be released due to land emissions associated with earth-moving activities?

4. How will project biogenic GHG emissions be feasibly mitigated in the context of effectively meeting California's 2020/2050 GHG reduction goals, AB 32 forestry sector targets and over a 100-year measurement period?

Summary

It is specious for Caltrans to assert *"that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change"* (EIR/EA at p. A-6). Substantial evidence has been presented that project terrestrial impacts, including to hundreds of trees, will result in potentially significant biogenic greenhouse gas emissions that have not been analyzed or feasibly mitigated. The EIR/EA has not made *"a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project"* (CEQA Guidelines, § 15064.4 (a)). Therefore the EIR/EA is deficient as an informational document, in that it fails to apprise decision-makers/public of the full range and intensity of the adverse greenhouse gas emission effects on the environment that may reasonably be expected if the project is approved.

Respectfully,



Janet Cobb, Executive Officer
CWF/California Oaks

Attachment

References

¹ California Air Resources Board (2009). *Climate Change Scoping Plan: a framework for change*
www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm

² Board of Forestry and Fire Protection (2008). *The 2008 Strategic Plan and Report to the California Air Resources Board on Meeting AB32 Forestry Sector Targets*.
www.climatechange.ca.gov/forestry/documents/AB32_BOF_Report_1.5.pdf

Niles Canyon Attachment

CEQA Guidelines Appendix G, Environmental Checklist Form EVALUATION OF ENVIRONMENTAL IMPACTS

II. AGRICULTURE AND FOREST RESOURCES ... In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

Natural Resources Agency, Final Statement of Reasons

Appendix G. Initial Study Checklist - Forest Resources

The amendments would add several questions addressing forest resources in the section on Agricultural Resources. Forestry questions are appropriately addressed in the Appendix G checklist for several reasons. First, forests and forest resources are directly linked to both GHG emissions and efforts to reduce those emissions. For example, conversion of forests to non-forest uses may result in direct emissions of GHG emissions. (See, e.g., California Energy Commission Baseline GHG Emissions for Forest, Range, and Agricultural Lands in California (March, 2004) at p. 19.) Such conversion would also remove existing carbon stock (i.e., carbon stored in vegetation), as well as a significant carbon sink (i.e., rather than emitting GHGs, forests remove GHGs from the atmosphere). (Scoping Plan, Appendix C, at p. C-168.) Thus, such conversions are an indication of potential GHG emissions. Changes in forest land or timberland zoning may also ultimately lead to conversions, which could result in GHG emissions, aesthetic impacts, impacts to biological resources and water quality impacts, among others. Thus, these additions are reasonably necessary to ensure that lead agencies consider

the full range of potential impacts in their initial studies. In the same way that an EIR must address conversion of prime agricultural land or wetlands as part of a project (addressing the whole of the action requires analyzing land clearance in advance of project development), so should it analyze forest removal. (at p.74)

Consistent with section 15126.4(a), a lead agency must support its choice of, and its determination of the effectiveness of, any reduction measures with substantial evidence. Substantial evidence in the record must demonstrate that any mitigation program or measure is will result in actual emissions reductions. As a practical matter, where a mitigation program or measure is consistent with protocols adopted or approved by an agency with regulatory authority to develop such a program, a lead agency will more easily be able to demonstrate that off-site mitigation will actually result in emissions reductions. Examples of such protocols include the forestry protocols described above. Where a mitigation proposal cannot be verified with an existing protocol, a greater evidentiary showing may be required. (at p.49)