
Chapter 5 California Environmental Quality Act (CEQA) Evaluation

This chapter provides the basis for describing any environmental effects identified in Chapters 3 and 4 that would be considered significant under the California Environmental Quality Act (CEQA).

5.1 Relationship Between the National Environmental Policy Act (NEPA) and CEQA

This combined environmental document complies with National Environmental Policy Act (NEPA) requirements for the preparation of an Environmental Assessment (EA), and with CEQA requirements for an Environmental Impact Report (EIR). Use of the term “significant” differs under these two laws. CEQA requires that an EIR include a determination of significant impacts, while under NEPA, an EA is prepared to determine whether a project will have a significant impact on the environment and, if no unmitigable significant impact would occur—the situation that has been found to prevail for the Highway 101 HOV Lane Widening Project—then a Finding of No Significant Impact (FONSI) is made. Given these differences, the CEQA significance criteria and the determination of significant impacts have not been specifically addressed in other sections of this combined NEPA/CEQA EA/FEIR. These criteria and determinations are grouped for discussion in this chapter.

It should be noted that although the presence of mitigation creates a presumption of significant impacts under CEQA, NEPA encourages mitigation for all of the impacts of a project. For this reason, some mitigation measures described in this document are wholly appropriate under NEPA, although the impacts they address may not be considered significant under CEQA.

5.2 Significance of the Proposed Project’s Impacts Under CEQA

This section identifies impacts of the Highway 101 HOV Lane Widening Project that would be considered potentially significant under CEQA before proposed mitigation measures are applied.

5.2.1 CEQA Criteria of Significance

CEQA requires that an EIR identify the significant environmental effects of the project (CEQA Guidelines Section 15126), but does not promulgate specific thresholds for significance. Instead, CEQA Guidelines Section 15064(b) states that “the determination...calls for careful judgment on the part of the public agency involved...” and that “an ironclad definition of significant effect is not possible because the significance of an activity may vary with the setting.” CEQA encourages lead agencies to develop and publish their own thresholds of significance for the purpose of determining the significant effects of their projects. The fundamental definition of significant effect under CEQA is “a substantial adverse change in physical conditions.” This criterion underlies the evaluation of environmental impacts for most of the impact issues identified in the CEQA Environmental Checklist Form (Appendix G).

Some impact categories lend themselves to scientific or mathematical analysis, and therefore to quantification. Some categories have significance thresholds established by regulatory agencies, such as

the California Department of Conservation or the regional air quality management district. For other impact categories that are more qualitative or are entirely dependent on the immediate setting, a hard-and-fast threshold is not generally feasible, and the “substantial adverse change in physical conditions” is applied as the significance criterion. In the current analysis, Caltrans and the Sonoma County Transportation Authority have given careful consideration to the issue of significance and have applied the significance criteria established in Appendix G in the State CEQA Guidelines to evaluate the significance of the effects of the Highway 101 HOV Lane Widening Project under CEQA.

CEQA does not require a discussion of socioeconomic effects except where they would result in physical changes, and states that social or economic effects shall not be treated as significant effects (see CEQA Guidelines Sections 15064(f) and 15131). The Highway 101 HOV Lane Widening Project will not have socioeconomic effects that either cause or result from physical changes.

5.2.2 Significant Environmental Effects of the Proposed Project

Table 5.3-1 identifies each potentially significant impact of the proposed project and the mitigation measures proposed to reduce the impact to a level below significance under CEQA. Only the loss of trees and impacts to biological resources potentially rise to the level of significance before mitigation is added. Both impact categories can be mitigated to a level below significance under CEQA.

5.2.3 Unavoidable Significant Adverse Effects Under CEQA

The Highway 101 HOV Lane Widening Project would not result in unavoidable (unmitigable) significant adverse impacts. The measures proposed to mitigate the potentially significant impacts of the project are summarized in Section 5.3, Mitigation Measures for Potentially Significant Impacts under CEQA. Note that each respective impact category section in Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures, presents these and other mitigation measures without regard to CEQA significance.

5.3 Mitigation Measures for Potentially Significant Impacts Under CEQA

The Highway 101 HOV Lane Widening Project would result in several impacts that would be potentially significant under CEQA. These impacts, their level of significance before mitigation with respect to CEQA criteria of significance, the mitigation measures proposed to reduce the impacts to a level below significance, and their level of significance after mitigation is applied are presented in Table 5.3-1. There would be no unavoidable significant adverse impacts of the Highway 101 HOV Lane Widening Project with the proposed mitigation in place. Note that Table 5.3-1 addresses only those impacts that would be potentially significant before mitigation is applied.

**Table 5.3-1: Summary of Potentially Significant Impacts and Significance After Mitigation
- Highway 101 HOV Lane Widening Project**

Impact	Significance	Mitigation	Significance After Mitigation
3.6 Visual/Aesthetics			
<p>3.6.3.1 The HOV lane widening would remove <i>between 228 and 526</i> mature trees, including <i>between 171 and 390</i> redwoods.</p>	PS	<ul style="list-style-type: none"> • <i>To help reduce visual effects from the removal of mature trees and landscaping, replacement planting would occur where feasible within the project limits and right of way.</i> • <i>Mature trees would be replaced at a ratio of 1:1 where feasible within the project limits and right of way.</i> • <i>SCTA and Caltrans would coordinate with the City of Santa Rosa, the Town of Windsor, and the County of Sonoma to develop a planting plan, including the types of trees and other plants to be installed.</i> • <i>A three-year plant establishment period would be implemented.</i> • <i>Avoidance and minimization approaches as identified in Section 3.6.5 will be incorporated during final design to reduce tree loss below the upper end of the reported ranges.</i> • <i>Important groups of trees would be protected with metal-beam guardrails, where feasible, to help maintain the corridor's identification as the "Redwood Highway." Only large trees in good health would be preserved.</i> 	LS

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Impact	Significance	Mitigation	Significance After Mitigation
<p>3.6.3.2 Removal of mature vegetation would be inconsistent with Sonoma County, City of Santa Rosa, and Town of Windsor policies that promote preservation of roadside landscapes.</p> <p>Construction of sound walls would be inconsistent with Town of Windsor policy to avoid soundwalls, particularly along identified scenic corridors.</p>	<p>PS</p>	<ul style="list-style-type: none"> • A landscaping replacement plan would be implemented and replacement trees planted <i>at a 1:1 ratio where feasible within the project limits and right of way.</i> • Aesthetic design treatments of sound walls would be developed in coordination with Sonoma County, the City of Santa Rosa, and the Town of Windsor. • Where feasible, vines would be planted and allowed to grow over the walls to help visually integrate them with the overall landscape and soften the visual experience of traveling in a wholly paved, urban environment. 	<p>LS</p>

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Impact	Significance	Mitigation	Significance After Mitigation
3.15 Biological Environment			
<p>3.15.3.3 The project would permanently affect 0.0063 ha (0.016 ac) of aquatic habitat at Mark West, <i>Pruitt</i>, and <i>Pool</i> creeks that is suitable for coho salmon, steelhead, and chinook salmon. <i>Approximately 0.005 ha (0.012ac) of aquatic habitat for the Russian River tule perch at Mark West and Pool creeks would be permanently affected by the proposed project. Additionally, up to 0.0137 ha (0.034 ac) of aquatic habitat for the western pond turtle at Piner, Paulin, and Mark West creeks would be permanently affected by the proposed project. The proposed project would permanently affect 0.0032 ha (0.008 ac) of aquatic habitat at Mark West Creek for northern red-legged frog, foothill yellow-legged frog and northwestern pond turtle.</i> The roadway improvements could affect these species by direct take, destruction of habitat, increased run-off of sediments that could degrade bottom habitat and water quality, and construction of barriers to fish movement.</p>	<p>PS</p> <p>PS</p>	<ul style="list-style-type: none"> • Modifications at Mark West, <i>Paulin</i>, <i>Piner</i>, <i>Pruitt</i>, and <i>Pool</i> Creek crossings would be developed in consultation with NOAA Fisheries, and protective measures would be implemented to minimize incidental take and avoid jeopardizing the species. Riparian habitat would be restored at a ratio to be established in consultation with NOAA Fisheries, USFWS, and CDFG. <i>Measures will be incorporated in the project to ensure that threatened and endangered fishes, their habitat (including critical habitat) and designated Essential Fish Habitat (EFH) in project area streams are not likely to be adversely affected. Project design will be consistent with the California Salmonid Stream Habitat Restoration Manual (CDFG 2003), which provides measures to ensure fish passage and to enhance or restore riparian habitat; the Recovery Strategy for Coho Salmon (CDFG 2004); Guidelines for Salmonid Passage at Stream Crossings (NMFS 2001); and with the NMFS Southwest Region's Habitat Protection Policy (NMFS 1991).</i> • Mitigation measures for impacts to habitat for coho salmon, steelhead, and chinook salmon would be sufficient to provide for Russian River tule perch. • Preconstruction surveys for northern red-legged frog, foothill yellow-legged frog, western and northwestern pond turtle will be conducted at Mark West, <i>Piner</i>, and <i>Paulin</i> creeks. 	<p>LS</p> <p>LS</p>

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Impact	Significance	Mitigation	Significance After Mitigation
<p><i>Drift fence and pitfall trap surveys for CTS were conducted with negative findings during 2003. Subsequent to the publication of the Santa Rosa Plain conservation Strategy in 2005, impacts to CTS and minimization and compensation measures for those impacts were determined in accordance with the Strategy. According to the Strategy, the project will affect 6.36 ha (15.72 ac) of CTS habitat.</i></p>	<p><i>PS</i></p>	<p><i>Consultation with the USFWS to determine appropriate compensation measures for impacts to CTS areas was completed in October 2006. The following measures are in accordance with the USFWS No-jeopardy Biological Opinion issued on October 18, 2006:</i></p> <p><i>Caltrans/SCTA will compensate for the loss of 6.36 ha (15.72 ac) of California tiger salamander habitat with the acquisition and preservation of 1.27 ha (3.14 ac) of habitat for the California tiger salamander. Compensation will be achieved by the purchase of credits in a conservation bank approved by USFWS to sell CTS credits in Sonoma County.</i></p>	<p><i>LS</i></p>
<p>The project would permanently fill 0.086 ha (0.212 ac) of wetlands/other waters of the U.S.</p>	<p><i>PS</i></p>	<p><i>Purchase of credits in a USACE-approved mitigation bank would ensure no net loss of wetlands and compensate for impacts to other waters.</i></p>	<p><i>LS</i></p>
<p>Preliminary surveys resulted in negative findings for all special-status plants with potential to occur within the project area. Consultation with the USFWS determined that the project will affect 6.36 ha/15.72 ac of habitat suitable for vernal pond plants. Protocol-level presence/absence surveys for vernal pool and other special-status plant species pursuant to the USACE HQE process were conducted with negative findings during 2006 and 2007. Given the negative findings of these 2006/2007 surveys, the compensation may be reduced pending further consultation with USFWS.</p>	<p><i>PS</i></p>	<p><i>Caltrans/SCTA will compensate for the loss of habitat suitable to contain vernal pool plants with 4.38 ha (10.83 ac) through the purchase of mitigation credits.</i></p> <p><i>Plant surveys are recommended during the bloom period prior to construction to ensure no impacts to special-status plant species.</i></p>	<p><i>LS</i></p>
<p>B=Benefit, N=Neutral, LS=Less Than Significant, PS=Potentially Significant, S=Significant, SU=Significant Unmitigable Source: Parsons 2005.</p>			