



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

October 18, 2010

Howell Chan
California Department of Transportation
District 4
P.O. Box 23660
Oakland, California 94623-0660

Subject: Draft Environmental Impact Statement for the Interstate 80/Interstate
680/State Route 12 Interchange Project, Solano County, California (CEQ
#20100342)

Dear Mr. Chan:

The Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. EPA has previously provided feedback on this project through the *National Environmental Policy Act and Clean Water Action Section 404 Integration Process for Surface Transportation Projects Memorandum of Understanding* (NEPA/404 MOU). EPA appreciates the efforts made by the project development team to coordinate through the NEPA/404 MOU process. Our detailed comments are enclosed.

EPA has rated this document EC-2, *Environmental Concerns, Insufficient Information*. Please see the enclosed *Summary of EPA Rating Definitions* for a description of our rating system. Our rating is based on concerns about impacts to wetlands and waters of the United States, air quality, environmental justice communities, and the transportation benefits of the project. We also have recommendations regarding historic resource consultation and agricultural land preservation.

We appreciate the opportunity to review this Draft Environmental Impact Statement and look forward to future coordination on the project. The next steps in the NEPA/404 MOU process are agreement on the 1) Least Environmentally Damaging Practicable Alternative (LEDPA), the only alternative that is permissible pursuant to the Clean Water Act Section 404(b)(1) Guidelines, and 2) the conceptual mitigation plan. We look forward to receiving future information from Caltrans regarding the LEDPA and conceptual mitigation plan. When the Final Environmental Impact Statement is released

for public review, please send two hard copies to the address above (mail code: CED-2) at the same time the document is filed with our EPA Headquarters office.

If you have any questions, please contact me (415-947-4161; dunning.connell@epa.gov) or Carolyn Mulvihill, the lead reviewer for this project, at 415-947-3554 or mulvihill.carolyn@epa.gov.

Sincerely,

/s/

Connell Dunning, Transportation Team Supervisor
Environmental Review Office

Enclosures:

Summary of EPA Rating Definitions

EPA's Detailed Comments

cc: Janet Adams, Solano Transportation Authority
John Cleckler, U.S. Fish and Wildlife Service
Jacqueline Pearson-Meyer, National Marine Fisheries Service
Andrea Meier, U.S. Army Corps of Engineers
Brendan Thompson, Regional Water Quality Control Board
Melissa Escaron, California Department of Fish and Game

Wetlands and Other Waters of the United States

EPA has participated in this project as outlined in the *National Environmental Policy Act and Clean Water Action Section 404 Integration Process for Surface Transportation Projects Memorandum of Understanding* (NEPA/404 MOU). The next steps in the NEPA/404 MOU process are agreement on the Least Environmentally Damaging Practicable Alternative (LEDPA) and the conceptual mitigation plan (Checkpoint 3).

The following additional information is needed to support the NEPA/404 MOU process and justify selection of the LEDPA and conceptual mitigation plan. This information should be provided in the Final Environmental Impact Statement (FEIS) and in the future request for agreement on the LEDPA and the conceptual mitigation plan.

Recommendations:

- Engage EPA, the Army Corps of Engineers, and other resource agencies in the identification of the LEDPA before publication of the FEIS, as outlined in the NEPA/404 MOU.
- Identify in the FEIS and in the LEDPA agreement request the length of time temporary fill in waters of the U.S. will be left in place. Temporal losses should be minimized to the maximum extent practicable (e.g. by placing and removing fill as construction progresses). Discuss in the FEIS how this will be achieved. Caltrans may be required to provide compensatory mitigation for “temporary” impacts if fill is left in place for an extended period of time.
- In the FEIS, consider indirect impacts to wetlands, including impacts from alteration of hydrology. Section 3.3.2.3 and 3.3.2.5 state that the project may result in indirect impacts caused by sedimentation or modification of hydrology of adjacent wetlands. However, the DEIS does not address the extent of these impacts or whether mitigation is necessary to offset indirect impacts. The FEIS should discuss whether any wetlands outside the roadway footprint will be permanently affected by indirect impacts from the proposed project. Avoidance, minimization, and mitigation of these impacts should also be discussed.
- Confirm that all compensatory mitigation for waters of the U.S. will comply with the EPA/U.S. Army Corps of Engineers 2008 Compensatory Mitigation Rule (40 CFR Part 230, Subpart J).
- Include in-kind compensation as a mitigation option in the FEIS and conceptual mitigation plan. Sections 3.3.2.1 and 3.3.2.2 of the DEIS present two options for compensatory mitigation of federally jurisdictional drainages: (1) purchase credits from an approved mitigation bank, or (2) compensate out of kind. Caltrans must also

consider in-kind compensation for all waters of the U.S., including drainages. Only if in-kind compensation is found to be impracticable can out-of-kind compensation be considered. Therefore, the FEIS, and conceptual mitigation plan, should add in-kind restoration or enhancement to the compensatory mitigation options for drainages.

- Section 3.3.2.3 identifies impacts to a previous compensatory mitigation area adjacent to Green Valley Creek. Since this area was intended to compensate for impacts of the Green Valley Corporate Park Project, Caltrans will need to mitigate for impacts to the Green Valley Creek mitigation area at a minimum 2:1 ratio. The actual ratios for all compensatory mitigation will be determined in consultation with the appropriate regulatory agencies. However, the FEIS should specifically identify the impacts to previous mitigation areas and the need to compensate for these impacts at a higher ratio.
- Section 3.3.2.3 identifies onsite restoration as an option for compensation of permanent impacts to perennial, alkali, and seasonal wetlands. The plans and performance standards presented in this section for onsite restoration may be inadequate. Mitigation plans, including ratios, type, monitoring, and performance standards, will need to be coordinated with and approved by the resource and regulatory agencies.

Suisun Marsh

Given the special designation of Suisun Marsh by the Suisun Marsh Protection Act and the status of the Suisun Marsh wetlands as impaired under the Clean Water Act Section 303(d), EPA is concerned about impacts to jurisdictional seasonal drainages and other areas in the Suisun Marsh Secondary Management Area. We encourage Caltrans to avoid and minimize impacts to this area to the maximum extent practicable and document those avoidance and minimization measures in the FEIS.

Recommendation:

- Avoid and minimize impacts to the Suisun Marsh Secondary Management Area to the maximum extent practicable and document those avoidance and minimization measures in the FEIS. Identify the specific measures that will be taken to ensure no further impairments to Suisun Marsh.

Air Quality

Affected Environment

The Affected Environment section of the DEIS includes some unclear information. The prevailing winds are described as “easterly,” though they come from the west. It is also unclear from this section whether the air pollutant movement described is occurring from the Central

Valley to the Bay Area, or vice versa, and what the significance of this information is. The description of elevated pollutant levels should also be expanded to explain whether it refers to the project area or a regional area, and what is the directional source (e.g. from the west) of the pollutants.

Recommendation:

- Clarify the Affected Environment information in the FEIS, including prevailing winds, and air pollutant sources and movement. Provide additional context for how this information affects pollutant levels and receptors.

Project Conformity

The DEIS states that only Alternative C, Phase 1 is included in the 2035 Regional Transportation Plan and Transportation Improvement Program. If Alternative B is chosen as the preferred alternative in the FEIS, the alternative must be included in the Regional Transportation Plan and Transportation Improvement Program to meet conformity requirements.

The DEIS also states that the build alternatives are not considered Projects of Air Quality Concern (POAQC), which determines whether a PM_{2.5} hot spot analysis is required. The DEIS states that confirmation of this determination will be made during interagency consultation with the appropriate local, state, and federal agencies and the final analysis will be identified in the final environmental document.

EPA participated in the October 4, 2010 Air Quality Conformity Task Force meeting where this project was discussed. It is our understanding that the group did not reach a decision as to whether the project is a POAQC and that Caltrans/Solano Transportation Authority will be providing additional information to the group. This consultation process should be completed prior to publication of the FEIS. If the group determines that the project is a POAQC, then a PM_{2.5} hot spot analysis must be performed and the results included in the FEIS.

Recommendations:

- As stated in the DEIS, if Alternative B is chosen as the preferred alternative in the FEIS, the alternative will need to be included in the Regional Transportation Plan and Transportation Improvement Program to meet conformity requirements.
- Complete consultation with the Air Quality Conformity Task Force to determine whether the project is a POAQC. If so, perform a PM_{2.5} hot spot analysis and report the results of that analysis in the FEIS. Include proposed mitigation measures for any impacts determined in that analysis.

Mobile Source Air Toxics

EPA commends Caltrans for identifying the general locations of sensitive receptors in the project area and performing a quantitative mobile source air toxics (MSAT) emissions analysis

of the project alternatives. We note that the DEIS acknowledges that all project alternatives may result in increased exposure to MSAT emissions in certain locations, but since dispersion modeling was not performed, it is not possible to determine where and at what level that exposure would occur.

The DEIS states that “available technical tools do not enable us to predict the project-specific health impacts of the [MSAT] emission changes associated with the project alternatives.” EPA, FHWA, and Caltrans have an ongoing dialogue regarding the technical tools available for analysis of MSAT impacts. Tools for evaluating project-specific health impacts from MSATs do exist and EPA would like to work with Caltrans to identify appropriate and available methods for evaluating MSAT impacts to include in the FEIS.

Recommendations:

- Technical tools are available to analyze the MSAT impacts of the various alternatives at specific locations and EPA recommends their use to determine impacts on sensitive receptors near the proposed project.
- Commit to the mitigation measures listed in the DEIS to reduce MSAT impacts.

Transportation Impacts

The Traffic and Transportation chapter contains certain data that indicates that Alternative C, Phase 1 may not achieve the goal of accommodating current and future traffic volumes and other resulting benefits that are stated in the Purpose and Need of the project. Table 3.1.6-6 contains System Wide Measures of Effectiveness for Construction-Year 2015, A.M. Peak Hour Conditions, and indicates that Travel Times and Maximum Individual Delay would be higher for the Westbound I-80 to Southbound I-680 travel direction with Alternative C, Phase 1 than with the No-Build alternative. Table 3.1.6-9 contains System Wide Measures of Effectiveness for Design-Year 2035, P.M. Peak Hour Conditions, and indicates that Travel Times and Maximum Individual Delay would be higher for all listed travel directions with Alternative C, Phase 1 than with the No-Build alternative.

Considering the lack of identified funding for the complete Alternative C, EPA is concerned with Alternative C, Phase 1’s apparent degradation of travel times when compared to the No-Build alternative. If Alternative C, Phase 1 is chosen as the Preferred Alternative in the FEIS, Caltrans must provide evidence that this alternative would fulfill the project’s Purpose and Need if Phase 2 were not to be built.

Recommendations:

- If Alternative C, Phase 1 is chosen as the Preferred Alternative, the FEIS, as well as the request for agreement on the preliminary LEDPA, must justify that this alternative would fulfill the Purpose and Need, when compared to the No-Build Alternative. The justification should include a discussion of the modeling results and

the transportation costs and benefits of Alternative C, Phase 1 relative to the No-Build and Alternative B, Phase 1. This is important since the DEIS states that Alternative C, Phase 1 would increase travel times and delay relative to the No-Build Alternative. The discussion should also address how the modeled increases in travel times could be decreased through design measures or through Transportation Demand Management or Transportation System Management.

- If Alternative C, Phase 1 cannot be proven to fulfill the Purpose and Need of the project, Alternative B, Phase 1, or other alternatives, must be considered.

Project Alternatives

Chapter 2 of the DEIS states “Under both alternatives, I-80 and I-680 would be widened. I-80 would be widened to a minimum of ten lanes...and a maximum of 19 lanes east of the interchange with I-680...I-680 would be widened to a minimum of six lanes...and a maximum of eight lanes.” It is unclear from this project description whether the footprint of the project has been determined (e.g. that I-80 will be 10 lanes in certain areas and up to 19 lanes in other areas along the corridor) or whether the number of lanes is still being determined. The project description in the FEIS should be clarified to specify the number of lanes that will be constructed at locations within the project area, and to clarify that the subsequent impact analyses reflect the impacts of that footprint.

Recommendation:

- Clarify in the FEIS the number of lanes that will be constructed at locations within the project area and base the impact analysis on that footprint. Update the Affected Environment section of the FEIS, if necessary, to ensure that the impact analysis is representative of the widest footprint that may be built.

Environmental Justice

The Environmental Justice Section of the DEIS (3.1.4.3) identifies Census Tract Block Groups in the project area that would be considered environmental justice communities. However, the DEIS only considers the displacement impacts on those communities. The environmental justice analysis should consider all project impacts on affected communities. As stated in the DOT Order on Environmental Justice:

“Adverse effects means the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to: bodily impairment, infirmity, illness or death; air, noise, and water pollution and soil contamination; destruction or disruption of man-made or natural resources; destruction or diminution of aesthetic values; destruction or disruption of community cohesion or a community's economic vitality; destruction or disruption of the availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons,

businesses, farms, or nonprofit organizations; increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community; and the denial of, reduction in, or significant delay in the receipt of, benefits of DOT programs, policies, or activities.”¹

The FEIS should include an environmental justice analysis that considers all impacts on environmental justice communities. EPA notes in particular that the majority of the residences affected by noise impacts are located in an environmental justice community. A noise barrier to mitigate impacts at this location was considered feasible, but not cost-reasonable, according to the DEIS analysis.

Recommendations:

- Perform an environmental justice analysis that considers all potential project impacts on environmental justice communities.
- Document impacts and proposed mitigation in the FEIS.
- If mitigation of noise impacts to environmental justice communities is deemed not “cost-reasonable,” justify this determination in terms of the relation of mitigation cost to project cost. Provide information on how Caltrans determined the base cost-per-residence allowance of \$31,000. Also provide the context for this determination by providing examples of other Caltrans projects where sound barriers were incorporated. Discuss any variation that exists in the determination of the threshold for the cost-per-residence for multiple Caltrans projects (in District 4 and outside District 4) and what factors deem the mitigation for this project not cost-effective if mitigation at similar cost has been implemented in other projects.

Historic Resources and Parkland

The DEIS states that coordination efforts between Caltrans and the State Historic Preservation Officer (SHPO) are currently underway regarding the SHPO’s concurrence on the finding of no adverse effect on the identified historic resources. EPA recommends that consultation be completed and that a Programmatic Agreement (PA) be executed prior to publication of the FEIS and any mitigation commitments be documented in the Record of Decision (ROD). We also recommend that Caltrans receive concurrence from the City of Fairfield on the finding of de minimis impacts under Section 4(f) on the Fairfield Linear Park prior to publication of the FEIS.

Recommendations:

- Complete consultation with the SHPO and execute a PA prior to publication of the FEIS. Commit to any mitigation measures in the ROD.

¹ Department of Transportation (DOT) Order To Address Environmental Justice in Minority Populations and Low-Income Populations, 1997.

- Confirm concurrence on the de minimis finding for the Fairfield Linear Park with the City of Fairfield prior to publication of the FEIS

Agricultural Land

EPA commends Caltrans on its commitment to mitigate loss of land classified as “Prime Farmland” and land under agricultural conservation easements by obtaining conservation easements to preserve a corresponding acreage of Prime Farmland. As stated in the DEIS, the City of Fairfield General Plan Land Use Element includes the program, “Where land is identified as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland...and is proposed for conversion to urban uses, the city shall arrange for preservation of an equal amount of the same class of farmland within the area.” Given this program, the goals of other local plans, and the importance of agriculture to the economy and character of the area, EPA recommends that Caltrans work with the local jurisdictions and other groups such as the Solano County Land Trust, to mitigate for losses of all farmland classified as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.

Recommendation:

- In addition to compensation for Prime Farmland and land under agricultural conservation easement, compensate for impacts to Farmland of Statewide Importance and Unique Farmland through similar preservation efforts. Include in the FEIS and ROD the specific measures that will be taken to compensate for these impacts.

Climate Change

While the federal government has not yet released final guidance on greenhouse gas analysis, a discussion of potential climate change impacts of the project, and on the project, should be included in NEPA documents. The Council on Environmental Quality released draft *NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions*² in February 2010.

Recommendation:

- Include the climate change discussion in the main body of the FEIS.

² <http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf>