



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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Colonel Michael J. Farrell
U.S. Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, CA 95814

OCT 28 2013

Subject: Public Notice (PN) SPK-2010-01058, SouthEast Connector, NV

Dear Colonel Farrell:

Thank you for the opportunity to comment on the subject PN dated August 23, 2013, and the complete permit application posted on the SouthEastConnector.com website. Previously we have provided formal comments to the PN dated June 14, 2011 for a modified version of the same project. The current PN proposes a 4.5 mile 6 lane road that with permanent fill of 11.23 acres of jurisdictional wetlands and other waters of the US (waters), 13.51 acres of indirect impacts to waters, and over two miles of modification to Steamboat Creek. Based on the available information, it appears the applicant has not demonstrated compliance with the restrictions on discharges per the Federal Guidelines (Guidelines) promulgated under section 404(b)(1) of the Clean Water Act (CWA) at 40 CFR Part 230. Specifically, the applicant has not: (1) demonstrated that the proposed project is the least environmentally damaging practicable alternative (LEDPA); or (2) provided adequate details regarding avoidance measures and the proposed compensatory mitigation. EPA objects to the project as proposed and recommends denial of the permit unless these issues are resolved.

Because the project purpose, linear transportation, is non-water dependent, the regulations presume there are practicable alternatives that will avoid fill in special aquatic sites such as wetlands. An updated AA dated Sept. 18, 2013 was received by EPA on Sept. 23 and reviewed. We also reviewed the previous AA for the project submitted in December 2011, along with a 2009 alternative alignment analysis in the Final Plan Line Study. We recommend that the applicant provide additional information that demonstrates all practicable avoidance and minimization of direct and indirect impacts and gives full justification for why the chosen alternative is the LEDPA. To help guide those revisions, we offer the following comments and recommendations.

The 2013 AA contains a broad analysis of off-site alternatives and concludes that aside from the current proposed alternative, the Foothill Route Alternative is practicable in cost and meets the project purpose. This alternative would not affect waters of the US and would have other environmental impacts comparable to the current proposal. However this alternative is eliminated because it would require the taking of 26 existing residential properties, and would result in noise and aesthetic impacts. The taking of properties does not necessarily render this alternative impracticable, and the applicant must further demonstrate why the chosen alternative is the LEDPA. A mass transit alternative also needs to be included in the AA, with consideration of future growth and projected development, which is stated to increase in Washoe County from about 420,000 residents to 550,000 by the year 2035.

The alternative alignment analysis in the 2009 Final Plan Line Study evaluates several alignments within the same corridor encompassing Steamboat Creek. The preferred alignment was a composite of alignments generated by software designed to minimize impacts to waters. The current proposed alignment differs from the alignment chosen in this 2009 Study, and results in an impact to over 5 additional acres of wetlands as compared to the original alignment. The 2013 AA explains that the change was made in order to avoid direct impacts to Steamboat Creek, which would now be left in place. An additional alignment farther west of the creek was also examined but was not considered due to its impacts to a proposed development (Butler Ranch Planned Unit Development.) Full justification for why this alignment is the LEDPA is needed. We suggest additional exploration of avoidance and minimization measures for this portion of the alignment, including further studying the far western alignment, and options such as building a causeway above the impacted wetlands or a bridge over the creek.

Further details are needed to demonstrate avoidance and impact minimization along the entire corridor, such as:

- Details and diagrams of the proposed spans, culverts and wildlife migration paths, and an ecological analysis of the most suitable locations and sizes of wildlife migration paths.
- Detailed information on both the nature, location, and the impacts of the proposed Steamboat Creek bank stabilization.
- Analysis of any impacts to existing wetlands caused by the proposed volumetric mitigation wetland creation.

Indirect impacts are not equivalent to temporary impacts, as currently stated on p. 9, Section 4.1 of the AA. An analysis and measure of indirect impacts is needed, with details on how they were measured, and with corresponding avoidance, minimization, and mitigation of these impacts. A significant and reasonably foreseeable indirect impact that must be considered is an increase in methyl mercury in the mitigation wetlands as well as in downstream waters such as the Truckee River and Pyramid Lake. Although the applicant asserts that this is not expected to occur, measurable criteria for ensuring that it does not occur are needed. This will be further explored below in the context of the Mitigation and Monitoring Plan.

EPA has several concerns regarding the Mitigation and Monitoring Plan (Plan). The Plan proposes to construct 19.13 acres of new mitigation wetlands and 2.38 acres of open water to compensate for the permanent loss of 11.23 acres of jurisdictional wetlands and WOUS from the system. There are several impacts that are not mitigated and need to be compensated for appropriately:

- The Plan shows that there will also be 13.51 acres of indirect impacts, which are currently not mitigated. These impacts are shown in Table 5-2, but further explanation of how these impacts were calculated, including maps showing the areas of indirect effects, is needed. As stated above, it appears that the indirect impacts calculated are equivalent to the temporary impacts.
- There will be 13.52 acres of temporary impacts, and although those areas will be restored, the temporal loss of wetland function and habitat should also be included in the calculation of compensatory mitigation.
- The impacts of 6,830 linear feet of bank stabilization to Steamboat Creek are also not included in the compensatory mitigation. This stabilization is categorized as a water quality improvement, however an analysis of all direct and indirect impacts resulting from this work, and how they will be avoided, minimized, and mitigated, is needed.

The Plan states that in addition to the required 21.51 mitigated acres for jurisdictional waters, an *additional* 146.94 acres of wetlands will be created as a result of flood mitigation volumetric requirements. Table 5-3 of the Plan breaks up types and locations of the proposed mitigation for jurisdictional waters, but the location and types are not shown in the included figures. Only outlines of mitigation “grading” areas are shown on Figures 6-1a through d, with no labeling of acreage or type of mitigation. Because acreage is not shown, it is unclear whether all of the areas shown are mitigation for the jurisdictional water impacts, or whether some of the areas are the additional mitigation set aside for the volumetric mitigation. Figures 2A through D in the Biological Assessment of the application, for example, label the mitigation areas in the North and South Butler ranch only as volumetric mitigation areas. The legends in the Mitigation Plan Figures 6-1a through d are also lacking any explanation of the significance of the pink outlines and green, purple and orange fill. More details about the Butler Ranch mitigation areas and the wetland enhancement area from Pembroke to Mira Loma are especially needed, including clarification of the water source for these wetlands. It would be helpful to see the proposed mitigation areas for jurisdictional waters in conjunction with the volumetric mitigation areas in order to be able to fully evaluate the functional benefits and potential success of these restored or enhanced wetlands.

EPA appreciates the many efforts the applicant has taken to contain contaminants through the project design and best management practices. However, we continue to have concerns with regard to the mercury contamination and the risk of increasing mercury exposures. The sediment transport modeling in the Soil Management Plan shows that there will be the increased mobilization of sediment upstream of Mira Loma Road, most likely caused by the restricted creek flow that will result from the proposed roadway. Clarification on how this impact will be mitigated, and how increased mercury mobilization and methylation will be avoided in this area, is needed. It is unclear why the bank stabilization will be done in the downstream reaches of the creek, when the upstream reaches are more highly contaminated. We also recommend that water quality be monitored further downstream of the project where Steamboat Creek meets the Truckee River, both before, during, and after construction. A more robust monitoring plan with specific performance standards related to mercury is needed in order to ensure that water quality and fish are not affected downstream. Because of the complexity of the mercury methylation and demethylation process, seasonal sampling of both the water column and sediment cores is needed in order to evaluate the project’s impacts.

Similar to the Mitigation Plan’s adaptive management plan which focuses on noxious weeds, an adaptive management plan for mercury should be established. The project proposes to construct 86.94 acres of volumetric mitigation wetlands which will receive their water source from Steamboat Creek, which is highly contaminated with mercury. The Ecological Risk Assessment states that the volumetric mitigation areas accepting Steamboat Creek water will infiltrate quickly and will only be flooded in the winter when water temperatures are cold and high in oxygen, therefore limiting mercury methylation. These conditions can be easily influenced by variations in climate and drainage patterns over time; for example, factors such as climate change can lead to warmer water temperatures in the winter, extreme storm events, and increased flooding. The factors influencing mercury methylation are highly complex and still poorly understood, despite a growing body of research on the subject. An adaptive management plan, in conjunction with a monitoring plan for mercury, is needed in order to ensure that any future mercury problems caused by this project are tracked and addressed. The plan should include a requirement for follow up actions if mercury and/or methyl mercury levels rise.

EPA appreciates the effort of the applicant to remediate mercury where possible, especially when it is a challenging and emerging science. Because of the uncertainty and magnitude involved, a pilot project

assessing whether mercury methylation will be truly limited under these conditions is highly recommended, and close monitoring is needed to assess its effectiveness.

The 2008 Mitigation Rule requires the applicant's long term management plan to describe long term management and annual cost estimate needs, to identify the funding mechanism to meet these needs, and to identify the party responsible for the ownership and long term management of the site. It is important that long term mercury management be included in this plan. The existing Mitigation Plan recommends that a conservation easement be established for the long term management and conservation of the mitigation wetlands, however as of yet none has been established. The Plan states that if a conservation easement is not created, then the Regional Transportation Commission, City of Reno, Washoe County, would be responsible for the ongoing management of the constructed wetlands and noxious weeds on their properties. Because the Regional Transportation Commission lacks expertise in the long term management and success of constructed wetlands, as well as in monitoring and management of mercury contamination, a conservation easement and an endowment for long term stewardship by an experienced land steward, is highly preferred. Such an endowment and easement should exempt the steward from liability of the mercury contamination.

If an Environmental Assessment is used to support a Finding of No Significant Impact for NEPA compliance, the EA should clearly indicate what actions are included as a part of the proposed project in order to reduce all impacts to less than significant. This is particularly important in light of the possible mercury methylation issues and extensive direct and indirect impacts to wetlands as disclosed in the application. We encourage the Army Corps of Engineers to identify measures to further avoid and reduce impacts in the environmental review document to be completed for NEPA compliance.

Thank you for the opportunity to provide comments on this project. We look forward to working with the Corps and the applicant to resolve the important environmental issues concerning the proposed project. As additional information becomes available on the above concerns, please contact Leana Rosetti of my staff at (415) 972-3070, or rosetti.leana@epa.gov.

Sincerely,



Jason Brush
Supervisor
Wetlands Office

Cc:
Kristine Hansen, Corps of Engineers Reno Office
Applicant