

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TEXAS 75202 – 2733

March 9, 2018

Mr. Darvin Messer Regulatory Division, CESWF-DE-R U.S. Army Corps of Engineers P.O. Box 17300 Fort Worth, Texas 76012-0300

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Dear Mr.' Messer:

The U.S. Environmental Protection Agency (EPA) Region 6 has reviewed Public Notice (PN) SWF-2011-00483, dated December 22, 2017. The applicant, Texas Central Railroad, LLC, proposes to construct the Dallas to Houston High Speed Rail Project which includes two parallel rail lines, terminal stations, and related maintenance and utility facilities for transportation. The entire project site will extend between the cities of Dallas and Houston. The project activities in the referenced PN are located in portions of Dallas, Ellis, Navarro, Freestone, Limestone, Leon, Madison and Grimes Counties, Texas.

The following comments are being provided for use in reaching a decision relative to compliance with the EPA's 404(b)(1) Guidelines for the Specification of Disposal Sites for Dredged or Fill Material (Guidelines) (40 CFR Part 230):

Avoidance and Minimization of Impacts to Waters of the United States (U.S.)

The PN includes a summary table of proposed unavoidable temporary and unavoidable permanent impacts to waters of the U.S. by the construction of the applicant's preferred alignment in Fort Worth District. Those impacts include permanent impacts to approximately 79,783 linear feet of streams and 68.31 acres of ponds and wetlands. Additional temporary project impacts include approximately 54,120 linear feet of streams and 23.33 acres of ponds and wetlands. As noted in the PN, the Federal Railroad Administration (FRA) is preparing an Environmental Impact Statement (EIS) for the proposed project which includes the applicant's evaluation of proposed alternatives and the selection of the applicant's preferred alternative. The draft EIS project design proposes to use viaduct on approximately 60% of the Build Alternatives to avoid and minimize impacts to waters of the U.S., and it identifies a compliance measure as limiting impacts to 0.50 acres or less for each single and discrete crossing.

The EPA continues to encourage the applicant to evaluate additional avoidance and minimization of direct effects throughout the project and incorporate more avoidance of impacts to surface water hydrology. Engineering design could further minimize these impacts by increasing the percent of track on viaduct or above-grade structures. Additionally, avoidance and minimization measures should be evaluated beyond limiting impacts to 0.50 acres or less. Simply limiting impacts from crossings or other facilities under this threshold does not necessarily equate to avoiding or minimizing impacts to the greatest extent practicable.

Mitigation Plan and Mitigation Measures

The PN states that compensatory mitigation for aquatic resources will be required for single and complete crossings of waters of the U.S. that exceed 0.10 acres of wetland and/or 300 linear feet of stream. It is unclear why mitigation is intended only for crossings and features that exceed these Corps of Engineers (COE) Nationwide Permit (NWP) thresholds given the action being considered is an individual permit. The EPA continues to encourage mitigation for all unavoidable impacts to wetlands and waters of the U.S., and if any temporary fill activities are expected to be in place for an extended period of time, the EPA suggests consideration of additional mitigation for these impacts as well.

To accomplish the mitigation, the applicant intends to purchase in-kind credits from an approved mitigation bank for the unavoidable adverse impacts within the Upper Trinity watershed (HUC 12030105) then fulfill all remaining necessary mitigation requirements through the development of a permittee-responsible mitigation (PRM) plan utilizing a watershed approach. The intent of this approach is unclear. The EPA supports mitigation sequencing as presented in the 2008 Final Rule on Compensatory Mitigation for Losses of Aquatic Resources. While watershed based permittee responsible mitigation is certainly acceptable, it should meet the Final Rule threshold of "likely to be successful and sustainable to maintain and improve the quality and quantity of aquatic resources within the watershed." Approved mitigation banks have gone through a rigorous process which, to some extent, demonstrates this likelihood of success. Historically, a low percentage of mitigation projects done by permittees were found to be successful and/or sustainable over the long term. This is one of the factors that led to the creation of the Mitigation Rule. In order for PRM to be approved for such a large project of project impacts, we recommend that the Corps require the implementation of the District's 2016 Mitigation Plan Template, specifically including Maintenance, Perpetual Site Protection, and Performance Standards. In addition, we request special consideration that any PRM be within the Upper Trinity watershed, close to the impact site, not include preservation, and provide clearly documented equal or greater ecological values than what is available from mitigation options higher on the priority list. All unavoidable impacts to streams should require mitigation, and this should be provided with mitigation of streams of similar ecological condition. For example, creation of ephemeral streams to offset impacts to intermittent streams may not be considered as equitable.

In terms of a compensatory mitigation plan, it is noted that the FRA EIS will adopt the final COE approved mitigation plan. The EPA recommends a more detailed mitigation plan be shared for review at the earliest stage possible to allow the public and commenting agencies to have a more complete understanding of the proposed mitigation for unavoidable adverse impacts. These details would include the quantity and type of credits needed for mitigation and the methodology utilized to determine the required credits needed to ensure that compensation is adequate from a functional perspective.

Culvert Design and Aquatic Life Movement

The EPA would like to ensure that, at a minimum, the proposed structures meet the requirements of Nationwide Permit (NWP) general condition (2) for Aquatic Life Movements. This condition states that "all permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species" (USACE, 2017, p. 40). The EPA recommends bottomless culverts where it is an appropriate design. The permit condition further states "[i]f a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements" (USACE, 2017, p. 40). If a bottomless culvert cannot meet the project design requirements, then the EPA recommends the use of an embedded culvert.

The 2012 FHWA (Federal Highway Administration) Hydraulic Design of Highway Culverts describes an embedded culvert: "An embedded culvert can be any shape, but is most often a circular, box or pipe arch that has been buried into the ground typically 20-40% of its height" (p. 1.10). These culverts are typically larger than requirements to meet hydraulic conveyance and flood capacity design standards in order to benefit aquatic life movements. The FHWA further states: "[w]hile the culvert will cost more initially, it has the potential for reducing maintenance costs over the life of the culvert installation. The FHWA procedure emphasizes the use of oversized, embedded culverts that provide a natural invert, but also allows some measure of grade control by the culvert invert" (2012, p. 1.12). The EPA recommends following the design guidelines presented by the FHWA for aquatic organism passage.

The EPA would like clear documentation as to what type of structure will be used and how it will be designed to provide for aquatic life movement. If policy restricts the use of a particular structure or design, the EPA would like clear documentation of the language in policy, and what additional measures can be taken to meet the required permit conditions

In summary, the EPA recommends the Corps of Engineers work with the applicant to augment the information provided in regard to an alternatives evaluation, the avoidance of impacts, and proposed mitigation. Thank you for the opportunity to review and comment on this PN, and for your consideration of these recommendations. If you have any questions on these comments, please contact Tom Nystrom of my staff, at <u>Nystrom.thomas@epa.gov</u> or 214-665-8331.

Sincerely,

María L.) Maria L. Martinez

Wetlands Section Chief

cc: U.S. Fish and Wildlife Service, Arlington, TX Texas Commission on Environmental Quality, Austin, TX Texas Parks and Wildlife Department, Austin, TX