



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240



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Reference: ER 11/364

Alexander Yuan
Keystone XL EIS Project,
U.S. Department of State
P.O. Box 96503-98500,
Washington, DC 20090-6503

Subject: Review of Draft Environmental Impact Statement for Keystone XL Oil Pipeline Project and Application for a Presidential Permit for the Proposed Construction, Connection, Operation, and Maintenance of a Pipeline and Associated Facilities at United States Border for Importation of Crude Oil from Canada

Dear Mr. Yuan,

The U.S. Department of the Interior (the Department) has reviewed the subject document prepared by the Department of State (DOS) for construction and operation of a proposed oil pipeline from Hardisty, Alberta, Canada, to the Port Arthur and east Houston areas of Texas within the United States, the proposal consists of approximately 1,380 miles of new 36-inch pipeline in the States of Montana, South Dakota, Nebraska, Oklahoma, and Texas and facilities to interconnect with an existing pipeline in Kansas.

While the Bureau of Reclamation (BOR) has not included comments in this submission, the Bureau is keeping closely involved with the engineering firm (TROW) conducting the crossing work. The Bureau of Land Management (BLM) is the point-of-contact for the right-of-way grant across BOR facilities. These comments are those consolidated from US Fish and Wildlife Service (USFWS) and are intended to assist the DOS in avoiding and assessing impacts to migratory birds, federally-listed threatened and endangered species, wetlands, and other priority fish and wildlife resources. The following comments are submitted pursuant to authorities under the Fish and Wildlife Coordination Act (16 U.S.C. §661 et seq. (FWCA)), Endangered Species Act of 1973, as amended (16 U.S.C. §§1531 to 1543 et seq. (ESA)), National Environmental Policy Act (42 U.S.C. §4321 et seq.), Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §703 et seq. (MBTA)), the Bald and Golden Eagle Protection Act (BGEPA), as amended (16 U.S.C. §668 et seq.).

GENERAL COMMENT

The Draft Supplemental Environmental Impact Statement (DSEIS) does not incorporate or address the comments that the Oklahoma Ecological Services Field Office in the Southwest Region provided on the Draft Environmental Impact Statement, which were included in the USFWS' Region 2 and 6 consolidated comments dated June 3, 2010 (ER 10/356). We recommend that these previous comments be incorporated or addressed. They are provided as Enclosure 1.

SPECIFIC COMMENT DSEIS

Section 1.0 Introduction, page 1-2, paragraph 2: The DSEIS discusses the relocation of the tank farm from Steele City, Nebraska, to Cushing, Oklahoma.

Comment: If this is not accurately reflected in the biological assessment, we recommend updating the biological assessment to reflect this change.

The Department appreciates the opportunity to comment on the Keystone XL Oil Pipeline Project and Application for a Presidential Permit. If you have any questions regarding USFWS comments, please contact Dave Carlson, Coordinator for Conservation Planning Assistance, at [Dave E. Carlson@fws.gov](mailto:Dave_E_Carlson@fws.gov) or telephone (303) 236-4254. Any general questions may be addressed to Lisa Treichel in the Department's Office of Environmental Policy and Compliance at (202) 208-7116/ Lisa_Treichel@ios.doi.gov.

Sincerely,



Willie R. Taylor
Director, Office of Environmental Policy
and Compliance

Enclosures

Enclosure 1

SPECIFIC COMMENTS ON DEIS from June 3, 2010 Submission (ER 10/356) Not Addressed in SEIS

Pages 2-2 to 2-26, Section 2.1.1: Steel City Segment, Above Ground Facilities and Construction Procedures.

Comment: The total area either temporarily or permanently disturbed by the Project, and that is located in potential ABB habitat, should be documented. This area should include all areas affected by construction activities, borrow sites, temporary and permanent above-ground facilities, pipe storage sites, contractor yards, railroad siding, pump stations, utility distribution line ROWs, and access roads. This information will be needed for formal consultation regarding the ABB. Similarly, information on the total project-disturbed area located in potential WPFO habitats will be needed for formal consultation on that species.

Pages 3.2-11 and 3.2-12, Section 3.2.2.2, Soil temperature Impacts: The DEIS language at the top of page 3.2-12 states:

“The study concluded that the pipeline does have some effect on the surrounding soil temperature, however, these effects occur primarily at the pipeline depth. Near-surface soil temperatures are influenced mainly by climate, with minimal effects from pipeline operations. Direct temperature effects on vegetation are expected to be minimal and vary seasonally.”

Comment: This language is not entirely consistent with language regarding soil temperature impacts to vegetation on page 3.5-31:

“Operation of the Project would cause increases in soil temperatures at the soil surface (from 4 to 8°F) primarily during winter, and at depths of 6 inches (from 10 to 15°F), with the most notable increases during spring in the northern portion of the pipeline (Keystone, 2009c) (see Appendix L). While many plants would not produce root systems that would penetrate much below 6 inches, the root systems of some plants, notably native prairie grasses, trees, and shrubs; often penetrate will below 6 inches. Soil temperatures closer to burial depth of 6 feet may be as much as 40° F warmer than the surrounding soil temperatures (Appendix L). In general, increased soil temperatures during early spring would cause early germination and emergence... in tall-grass prairie species (Appendix L). Increased soil temperature may lead to localized soil drying....”

This apparent discrepancy should be corrected or clarified, and an explanation of the methodology and results should be provided in more detail.

The effect of pipeline operation on soil temperature and moisture is also an issue that should be addressed for formal consultation on Project impacts on the ABB. We recommend that information from Appendix L that addresses the affect of soil temperature on crops and vegetation also be applied to potential impacts to various stages of the ABB's life cycle in Section 3.8.1.6.

Page 3.4-4, paragraph 1: The summary of disturbed acres does not appear to include the acres of disturbance associated with pipe storage yards, rail sidings, contractor's yards, access roads, or construction camps and similar project-impacted areas. We recommend these disturbed acres be included.

Page 3.4-12, paragraph 10 - Wetland Mitigation Plan: We recommend that a wetland mitigation plan be developed in consultation with state wildlife agencies and the USFWS, with a goal of "no net loss" of in-kind wetlands. (Please see our General Comments.)

Pages 3.5-27 to 3.5-44, Section 3.5.5: Potential Impacts and Mitigation.

Comment: In addition to the summary tables of acres of vegetation communities, we recommend that the acres be summarized according to the quality of vegetation community affected, and according to temporary and permanent impacts. This will enable USFWS to consider the quality of the various communities impacted, and in turn, appropriate mitigation measures (per USFWS's Mitigation Policy, 46 FR 7656).

Page 3.8-13, paragraph 2: We recommend the text be revised (in sentence 3) because least terns are considered waterbirds and not seabirds.

Page 3.8-14, paragraph 3: The DEIS states that no interior least terns were observed at the North Canadian or South Canadian rivers in Oklahoma, but foraging interior least terns were observed at the Red River on the Oklahoma and Texas border. The USFWS believes the survey efforts were insufficient to confirm the presence or absence of the tern within the Project area, as each area was only sampled for part of a day.

Page 3.8-16, paragraph 1: The DEIS states that limited vegetation clearing and limited human access would be required within the riparian areas: for the True Tracker Wire (3-foot wide, hand- cleared path) used during horizontal directional drilling (HDD), and for withdrawing water for hydrostatic testing.

The USFWS recommends a maximum 3-foot wide, hand-cleared path, and that no clearing be conducted during the interior least tern's breeding period (mid-April through mid-September). Installation and use of the True Tracker Wire and HDD should not be conducted during the interior least tern's nesting period.

Page 3.8-18, paragraph 2: The DEIS states, “The USFWS Tulsa Ecological Services field office recommended the identification of suitable migration stopover habitats for piping plovers that would potentially be crossed by the Project. Suitable migration stopover habitats include sandy shorelines of lakes and rivers (Campbell 2003). Review of the Gulf Coast Segment in Oklahoma identified suitable migration habitats at crossings of the North Canadian River and the South Canadian River in Oklahoma; and the Red River at the Oklahoma and Texas border.”

Comment: The DEIS should note that the USFWS further recommended, if suitable habitat was present and construction would occur during the spring and/or fall migration, surveys for the presence or absence of the plover in the river-crossing project be conducted immediately before (within 2 weeks) Project construction is initiated.

Page 3.8-27, paragraph 5, Arkansas River Shiner: The DEIS states the Arkansas River shiner (shiner) is potentially present in the Cimarron River in Oklahoma. This should be corrected, as the shiner is known to be present in this location.

Page 3.8-28, paragraph 2: The DEIS shows that the Project would cross the North and South Canadian Rivers, and states that the Arkansas River shiner is known to occur in the South Canadian River and potentially occurs in the North Canadian River. In addition, the Project would cross designated critical habitat in the South Canadian River.

The USFWS did not recommend surveys for the shiner in the South Canadian and North Canadian Rivers in Oklahoma because the presence of this species at these crossings is assumed. The USFWS does, however, recommend that a 300-foot buffer from bank-full width be maintained on each side of the South Canadian River and North Canadian River. This is especially important along the South Canadian River due to the critical habitat. The USFWS also recommends that a maximum 3-foot-wide, hand-cleared, path be constructed, and that no clearing be done during the shiner’s spawning season (main channels in June to July, and possibly into August.)

Page 3.8-33, Table 3.8.1-5, Suitable American Burying Beetle Habitat column: The Table uses the following terms under the Suitable ABB (*Nicrophorus americanus*) Habitat column: extensive, limited, unknown, and unlikely. We recommend that definitions for these terms be provided.

The DEIS also uses “historic, confirmed, and likely” for the Oklahoma portion of the Project. We recommend the following definitions of these terms be included:

¹ Historical Range - According to specimen records, the recovery plan and available life history information, this county is within the documented historical range of the ABB.

² Non-Historical Range - This county is not within the documented historical range of the ABB. However, suitable habitat is present and this county is adjacent to at least one county with current positive findings, suggesting ABBs are likely to be present within this county.

³ Unconfirmed - Surveys within the last 15 years are lacking or insufficient to determine presence of the ABB. However, suitable habitat is present and this county is adjacent to at least one county with current positive findings. In some instances, occurrences of ABBs have been reported by reputable individuals, but identification has not been verified by a USFWS biologist or trained entomologist.

⁴ Confirmed - Surveys within the last 15 years have documented the presence of the ABB within the county.

Page 3.8-33, paragraph 1: The DEIS states that construction would take place during the daylight hours and construction areas would not use artificial lighting, and concludes no impacts from artificial lighting during construction would therefore occur. This information should be reconciled with information provided in the DBA, stating that night construction may be necessary.

The DEIS also states soil heating associated with Project operation could produce some increase in the activity period for the ABB, although the overall impacts of this increased activity would likely be negligible because species survival is more closely linked to its access to carrion and the availability of whole vertebrate carcasses (USFWS 2008c).

Soil moisture is believed to be an important habitat factor. An increase in soil temperature will result in decreased soil moisture. Consequently, ABBs could be affected.

Page 3.8-34, Section 3.8.1.6: The DEIS discusses conservation measures to avoid and minimize adverse impacts to the ABB, and states it is likely that all direct impacts to the ABB may not be avoided. However, the DEIS also states the Project may affect but is not likely to adversely affect the ABB.

Comment: Conservation measures to avoid and minimize adverse Project effects to the species, and compensatory mitigation to offset some of the habitat losses, should be developed through further discussions with USFWS. It is the USFWS' opinion that even if all the recommended conservation measures are implemented, take cannot be completely avoided. The USFWS recommends that the DOS request initiation of formal consultation on the effects to ABB from the proposed Project.

Page 3.8 to 34, paragraphs 3 and 4: The DEIS provides a list of state-specific conservation measures for the endangered ABB "that have been recommended by respective USFWS offices." This list includes the statement that if "route changes and future surveys indicate the presence of

the ABB in Lamar County, Texas, bait away or trap and relocate efforts would be undertaken prior to construction activities.”

Comment: The USFWS Ecological Services field office does not recommend the use of these procedures as a means to avoid impacts to ABBs in Texas. Rather, if ABBs are known to be present in a Project area, we would offer construction planning recommendations to avoid impacts or minimize them to the point of insignificance. If adverse impacts were unavoidable, we recommend formal consultation. Because AECOM Environment’s 2009 surveys did not find ABBs along the proposed pipeline ROW in Lamar County, Texas, we do not believe that adverse impacts are likely for a period of at least 1 year post-survey.

Page 3.14-23, paragraph 4: Construction and operation of the Project would not just result in long-term habitat modification; a certain amount of wildlife habitat will be permanently lost and/or degraded. This statement should be revised accordingly.

Appendix B, Section 6.5.3, Page 51: Flooded Push/Pull Wetland Crossing Method: The DEIS states, “Where standing surface water or high groundwater levels make trenching difficult, trench widths up to 35 feet are common.”

Comment: We strongly recommend avoiding wetlands. Where avoidance is not feasible, we recommend directionally drilling under wetlands. The DEIS does not mention directionally drilling of wetlands as an option, we recommend this be included as an option in the FEIS. Directional drilling is especially important in wetlands that are unable to be crossed utilizing the “standard wetland crossing method” and potentially requiring a 35-foot trench width. We further recommend that a wetland mitigation plan be developed describing the different types, conditions, and sizes of wetlands that will be impacted and how these impacts will be mitigated. No net loss should be the goal of the wetland mitigation plan. This information should be part of the FEIS.

Appendix B, page 62: The DEIS states that during hydrostatic test water withdrawals, the Contractor will maintain adequate flow rates in the water body to protect aquatic life and provide for downstream uses, in compliance with regulatory and permit requirements.

The term “adequate flow” is ambiguous and subject to the aquatic life being considered. Consequently, water withdrawal location, timing, and quantity from the North Canadian, Canadian, and Red Rivers must be coordinated with and approved by the Oklahoma Ecological Services field office prior to implementation of hydrostatic testing. These rivers support the Arkansas River shiner and the interior least tern. It is important to maintain adequate flow for these species. We recommend that water not be withdrawn directly from these major rivers, but rather from an upstream tributary. The withdrawal site from the upstream tributary should be at least 0.25 mile from the main river.

Appendix L, pages 14-16, Oklahoma City, Oklahoma, Figure 23 to Figure 27: The figures do not appear to support conclusions in the EIS that soil temperatures will remain unchanged.

Please see our comments for section 3.2 regarding the need to correct/clarify soil temperature information.

Appendix V, Distribution List

Comment: The Oklahoma Department of Wildlife Conservation apparently did not receive a copy of the DEIS. A copy should be provided to them and a suitable comment period allowed.

Enclosure 2

USFWS Offices

Ecological Services Field Offices		phone
Clear Lake, Texas		(281) 286-8282
Arlington, Texas		(817) 277-1100
Tulsa, Oklahoma		(918) 581-7458
Manhattan, Kansas		(785) 539-3474
Grand Island, Nebraska		(308) 382-6468
Pierre, South Dakota		(605) 224-8693
Helena, Montana		(406) 449-5225
Billings suboffice		(406) 247-7366
Regional Migratory Bird Offices		phone
Albuquerque, New Mexico		(505) 248-6878
Lakewood, Colorado		(303) 236-5420

Enclosure 3

USFWS's Recommended Best Management Practices for Proposed Construction Activities Associated with Streams/Rivers

- Avoid earth moving activities or fill/bank armoring during native fish spawning periods from May 15 – July 31, construct stream crossings or other associated temporary embankments during low flow periods (usually July – September in Texas and Oklahoma, and August – October from Kansas to Montana);
- Minimize work area at stream locations: Cross streams, stream banks and riparian zones at right angles and at gentle slopes;
- Limit in-stream equipment use to that needed to construct crossings. Avoid driving equipment through the streambed. The majority of the work (including heavy equipment and storage sites) should occur above the high bank line;
- Construction equipment should cross the stream at one confined location over an existing bridge, equipment pads, clean temporary native rock fill, or over a temporary portable bridge;
- When feasible, directionally bore under stream channels;
- Implement comprehensive and effective erosion and sediment controls. These methods should be implemented and maintained for the duration of the Project and considered at all stages of the Project planning and design. Close attention is warranted for the placement and maintenance of temporary erosion control measures at the construction site to minimize sediment loading. These erosion/sediment control techniques should keep sediments from entering the stream and remain in place until work areas become re-vegetated and stable. Such erosion control measures may include properly placed sediment/silt screens or curtains and hay bales. Proper techniques are important to the placement of these types of structures and include trenching, staking and backfilling as well as using the appropriate number of bales. These techniques are best used in combination with each other rather than separately.
- Erosion and sediment controls should be monitored daily during construction to ensure effectiveness, particularly after storm events, and only the most effective techniques should be utilized. Clean, repair and replace structures as necessary.
- Exposed stream banks must be stabilized immediately after construction activity. Eroded surfaces should not be left exposed for greater than one day. If rain is predicted, no construction should commence unless eroded surfaces are immediately treated with geotextile fabric, mulch, seeding or some techniques that would stabilize the bank or exposed areas from eroding.

- Erosion repair and stream bank restoration should use appropriate bioengineering solutions.
- Develop and implement a hazardous materials safety protocol. This would include that all temporary storage facilities for petroleum products, other fuels and chemicals must be located and protected to prevent accidental spills from entering streams within the Project area.
- Disturb riparian and floodplain vegetation only when necessary;
- Place trench spoil at least 25 feet away landward from stream banks;
- Use sediment filter devices to prevent movement of spoil off ROW when standing or flowing water is present;
- Trench de-watering, as necessary, should be conducted to prevent discharge of silt laden water into the stream channel;
- Maintain the current contours of the bank and channel bottom;
- Do not store hazardous materials, chemicals, fuels, lubricating oils, and other such substances within 100 feet of stream banks. Refuel construction equipment at least 100 feet from stream banks;
- Re-vegetate all disturbed areas as soon as possible after construction to prevent unnecessary soil erosion. Use only native riparian plants to help prevent the spread of exotics;
- Maintain sediment filters at the base of all slopes located adjacent to the streams until ROW vegetation becomes established;
- Maintain a vegetative filtration strip adjacent to streams and wetlands. The width of a filter strip is based on the slope of the banks and the width of the stream;
- Direct water runoff into vegetated areas.

Reference

FISRWG. 1998. Stream Corridor Restoration: Principles, Processes, and Practices. By the Federal Interagency Stream Restoration Working Group (FISRWG) (15 Federal agencies of the U. S. Government). GPO item No. 0120-A; SuDocs No. A 57.6/2:EN 3/PT.653. ISBN-0-934213-59-3.