

**Northern Plains Resource Council • Bold Alliance
Center for Biological Diversity • Friends of the Earth
Natural Resources Defense Council • Sierra Club**

**Comments of the Northern Plains Resource Council, *et al.*,
to the Department of State on the Scope of the Environmental Assessment for the
TransCanada Keystone XL Pipeline**

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On behalf of Northern Plains Resource Council, Bold Alliance, Center for Biological Diversity, Friends of the Earth, Natural Resources Defense Council, and Sierra Club, we submit these comments to the U.S. Department of State (Department) on the scope of the Environmental Assessment (EA) for the Keystone XL pipeline project. On May 25, the Department published a Notice of Intent (NOI) to prepare an EA to evaluate the Keystone XL Mainline Alternative Route in Nebraska, and invited public comment on the scope of the EA through June 25, 2018. Notice of Intent to Prepare an Environmental Assessment for the Proposed Keystone XL Pipeline Mainline Alternative Route in Nebraska, 83 Fed. Reg. 24,383 (May 25, 2018).

As the undersigned groups (Commenters) explain in more detail below, the Department cannot use an EA to correct the legally deficient Environmental Impact Statement (EIS) it issued for Keystone XL in 2014 (2014 EIS). That EIS was flawed in many key respects when it was issued, and now requires supplementation due to significant new information and changes to the Keystone XL project that have arisen since 2014.¹ The Department must vacate its cross-border permit and prepare a supplemental EIS to inform its decision as to whether to issue a new cross-border permit.

Notwithstanding Commenters' disagreement with this process, they nonetheless offer comments on the Department's proposed EA for the Mainline Alternative. The Department's review must be broad in scope and address the myriad deficiencies of the 2014 EIS. Furthermore, Commenters hereby request that the Department allow an opportunity for public comment on the draft EA or EIS that is prepared pursuant to this notice, and to hold a public hearing due to the significant public interest in this project. *See* 43 C.F.R. §§ 2804.25(e)(1), 2884.21(d)(4).

I. The Department's proposed procedure for evaluating the Mainline Alternative Route violates NEPA

There are numerous problems with the Department's proposed approach for evaluating the impacts of the Mainline Alternative Route. As an initial matter, it is unclear what the Department means when it says that it plans to "evaluate the potential environmental impacts of the Mainline Alternative Route in support of the Bureau of Land Management's review of TransCanada's application for a right-of-way." 83 Fed. Reg. at 24,383. When more than one federal agency is involved in a project, Council on Environmental Quality regulations require the agencies to decide which will serve as the "lead" agency. 40 C.F.R. § 1501.5(c). The lead agency is responsible for ensuring the involvement of all other agencies and supervising the EIS preparation. *Id.* §§ 1501.5(a), 1501.6(a). That EIS must evaluate *all* aspects of the project. *See, e.g., id.* § 1508.25.

¹ The undersigned groups (Commenters) are currently litigating the Department's and U.S. Fish and Wildlife Service's violations of the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and Administrative Procedure Act (APA) in approving Keystone XL in federal court in the District of Montana. *See Northern Plains Resource Council v. Shannon*, No. 4:17-cv-31-BMM (D. Mont.). Commenters' participation in this comment period does not affect the current litigation in any way, or excuse the agencies' failure to fully comply with the NEPA and ESA *before* they took action to approve Keystone XL in early 2017.

Here, the Department is the lead agency for Keystone XL, 2014 EIS at 1.5-1, and should be the agency to evaluate the Nebraska route in a revised supplemental EIS, not a separate EA ostensibly prepared for *another* agency's review. Furthermore, as Commenters have explained in detail in their briefs in the federal litigation, the Department must set aside or vacate the cross-border permit for the project until it completes this supplemental review. *See* Northern Plains Plaintiffs' Memorandum in Support of Motion for Partial Summary Judgment (NPP Brief) 64; Northern Plains Plaintiffs' Reply in Support of Motion for Partial Summary Judgment (NPP Reply Brief) 96-99.² The Department must prepare a supplemental EIS that evaluates the new route in Nebraska, as well as all other significant new information on the project's environmental impacts, *before* reaching a new decision on the cross-border permit.

In addition to the legal problems described here, there are major practical concerns with the Department's proposed approach. What will become of the 2014 EIS's evaluation of the route in Nebraska? Will the EA's evaluation supersede that analysis or supplement it? How will the cumulative impacts of the new route be properly evaluated in a document that purports to cover only the new route? Will cooperating agencies, such as the Bureau of Land Management (BLM) and the U.S. Army Corps of Engineers (the Corps), rely on both the 2014 EIS and the EA in making their forthcoming decisions about Keystone XL, or just one or the other? If this EA only covers the new route in Nebraska, how will it be used to inform the BLM's permitting action over BLM lands in Montana? The answers to these questions are unclear, and the Department's project will only confuse the public and decision makers. For that reason alone, the Department should prepare a revised supplemental EIS for the project rather than an EA for just the Nebraska portion of the route.

In any case, under NEPA, it is illegal for the Department to prepare a separate EA for a portion of a project for which it has already prepared an EIS and which has significant environmental impacts. Indeed, the Department cannot plausibly claim that it can evaluate the impacts of the route through Nebraska without preparing a revised supplemental EIS. Rather than segmenting this portion of the project for separate review, the Department must revoke the cross-border permit for the project and revise the 2014 EIS to include the new information about the route, as well as address the flaws identified by the Commenters below and in the federal litigation.

The law makes clear that if after the original EIS is prepared, the agency "makes substantial changes in the proposed action that are relevant to environmental concerns," or if there are "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts," the agency must prepare a supplemental EIS. 40 C.F.R. § 1502.9(c)(1). The standard for determining when a supplemental EIS is required is "essentially the same" as the standard for determining when an EIS is required in the first place. *Env'tl. Def. Fund v. Marsh*, 651 F.2d 983, 991 (5th Cir. Unit A 1981). If the changes in the project that were not previously analyzed "will have a significant impact on the environment that has not previously been covered by the original EIS, a supplement is necessary." *Sierra Club v. U.S. Army Corps of Engineers*, 295 F.3d 1209, 1215-16 (11th Cir. 2002) (internal quotation

² A copy of each brief, as well as plaintiffs' third amended complaint, is enclosed. *See* Exs. A-C.

marks and alterations omitted). That is precisely the case here. NPP Brief 25-36; NPP Reply Brief 34-53.

Finally, NEPA mandates that agencies cannot take any action on a project that would “have an adverse environmental impact” or “limit the choice of reasonable alternatives” before the agencies issue a record of decision. 40 C.F.R. § 1506.1(a). Furthermore, if any agency “is aware that the applicant is about to take an action” that would have an adverse environment impact or limit the choice of reasonable alternatives, “then the agency shall promptly notify the applicant that the agency will take appropriate action to insure that the objectives and procedures of NEPA are achieved.” *Id.* § 1506.1(b). Given the legal inadequacies of the Department’s review described here and in Commenters’ attached briefs, NPP Brief 12-36; NPP Reply Brief 13-53, no cooperating agencies can take further action on the pipeline until the EIS is properly supplemented. Additionally, the Department must ensure that TransCanada does not begin construction or any construction-related activities, or otherwise take any action that may affect the environment before NEPA review is complete.

II. The Department’s NEPA analysis must be broad in scope

While we strongly dispute that the Department can satisfy its NEPA obligations by preparing an EA, as opposed to vacating its permit and preparing a supplemental EIS, the Department should nonetheless use this opportunity to address the full range of direct, indirect, and cumulative impacts of Keystone XL, and this analysis should not be limited to the Mainline Alternative Route in Nebraska. We therefore urge a broad approach as discussed herein.

A. NEPA requires evaluation of all direct, indirect, and cumulative impacts

NEPA requires all agencies of the federal government to prepare an EIS for all “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). To determine whether a proposed action significantly affects the environment and thus requires an EIS, the lead federal agency may first prepare an environmental assessment. 40 C.F.R. § 1508.9. An environmental assessment must provide sufficient evidence and analysis to determine whether to prepare an EIS. *Id.* The lead agency must take a “hard look” at the relevant environmental concerns and alternatives to the proposed action. *Id.* If the agency concludes in an environmental assessment that a project may have significant impacts on the environment, then an EIS must be prepared. *Id.* § 1501.4. If an environmental assessment concludes that there are no potentially significant impacts to the environment, the federal agency must provide a detailed statement of reasons why the project’s impacts are insignificant and issue a finding of no significant impact (FONSI). *Id.* § 1508.13.

To determine whether a proposed action may significantly affect the environment, the agency must consider both the context and intensity of the proposed action, including whether the project will take place in “ecologically critical areas,” and whether the project will affect endangered species. *Id.* § 1508.27 (a), (b). NEPA also mandates that the lead agency consider the project’s cumulative impacts, which are the incremental impacts of the action “when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” *Id.* § 1508.7. A federal action will

significantly affect the environment “if it is reasonable to anticipate a cumulatively significant impact on the environment.” *Id.* § 1508.27(b)(7). Notably, significance “cannot be avoided by terming an action temporary or by breaking it down into small component parts.” *Id.*

NEPA requires agencies’ environmental analyses to address “the environmental impact of the proposed action,” “any adverse environmental effects which cannot be avoided should the proposal be implemented,” “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity,” and “any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.” 42 U.S.C. § 4332(2)(i), (ii), (iv), (v). This analysis should include discussion of the following:

- (a) Direct effects and their significance[;]
- (b) Indirect effects and their significance[;]
- (c) Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned[;]
- (d) The environmental effects of alternatives including the proposed action[;]
- (e) Energy requirements and conservation potential of various alternatives and mitigation measures[;]
- (f) Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures[;]
- (g) Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures[;]
- (h) Means to mitigate adverse environmental impacts

40 C.F.R. § 1502.16 (EIS); *id.* § 1508.9 (environmental effects must also be analyzed in EA).

Direct effects are “caused by the action and occur at the same time and place.” *Id.* § 1508.8(a). Indirect effects “are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.” *Id.* § 1508.8(b). Courts have interpreted these provisions to require agencies to “take a ‘hard look’ at the impacts of its action by providing ‘a reasonably thorough discussion of the significant aspects of the probable environmental consequences.’” *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1194 (9th Cir. 2008).

NEPA also requires federal agencies to analyze a project and all of its connected, cumulative, and similar actions together in a single EA or EIS before the project is allowed to proceed. 40 C.F.R. § 1508.25(a). Connected actions are defined as actions that: “Cannot or will not proceed unless other actions are taken previously or simultaneously,” or “Are interdependent parts of a larger action and depend on the larger action for their justification.” *Id.* § 1508.25 (a)(1).

In addition to “connected actions,” the scope of a NEPA analysis must also include cumulative actions, “which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.” *Id.* § 1508.25(a)(2). Cumulative effects, in turn, are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” *Id.* § 1508.7. Thus, the obligation to consider cumulative effects is not limited to actions taken by a particular agency, nor actions that are “major federal actions” triggering NEPA. An agency is required by 40 C.F.R. § 1508.7 to consider the cumulative effects of actions taken by other agencies, and in fact other actions not subject to NEPA at all. *See Grand Canyon Trust v. FAA*, 290 F.3d 339, 345 (D.C. Cir. 2002) (the FAA’s EA for an airport expansion had to analyze the cumulative increase in air traffic from other sources in the area).

“The justification for the rule against segmentation is obvious: it ‘prevent[s] agencies from dividing one project into multiple individual actions each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.’” *Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1314 (D.C. Cir. 2014) (quoting *NRDC v. Hodel*, 865 F.2d 288, 297 (D.C. Cir. 1988)); *see also Taxpayers Watchdog, Inc. v. Stanley*, 819 F.2d 294, 298-99 (D.C. Cir. 1987) (the segmentation doctrine “was developed to insure that interrelated projects the overall effect of which is environmentally significant, not be fractionalized into smaller, less significant actions”).

Courts have allowed individual components of pipelines and other linear projects to be analyzed in a separate NEPA document only if they would have “independent utility.” *Hammond v. Norton*, 370 F. Supp. 2d 226, 244 (D.D.C. 2005) (applying the independent utility test and holding that an entire 480-mile oil pipeline must be analyzed in a single NEPA document); *Coal. on Sensible Transp., Inc. v. Dole*, 826 F.2d 60, 69 (D.C. Cir. 1987) (applying the independent utility test to a highway project).

The D.C. Circuit issued a decision on pipeline segmentation in *Delaware Riverkeeper Network v. FERC*, 753 F.3d 1304. There, the court held that the Federal Energy Regulatory Commission’s (FERC’s) EA for a 40-mile natural gas pipeline project called the Northeast Project violated NEPA by failing to include all connected actions pursuant to 40 C.F.R. § 1508.25(a). The court held that the Northeast Project was actually one of four “physically, functionally, and financially connected and interdependent” components that resulted in a complete overhaul of a 200-mile pipeline, and that FERC had improperly segmented its NEPA analysis. 753 F.3d at 1308. The court also found that FERC was required to analyze all of the pipeline sections together as cumulative actions. The court discussed the requirements of 40 C.F.R. § 1508.7 and held:

It is apparent that FERC did not draft these pages with any serious consideration of the cumulative effects of the other project upgrades on the Eastern Leg of the 300 Line. In light of the close connection between the various sections of the line that have been upgraded with new pipe and other infrastructure improvements,

FERC was obliged to assess cumulative impacts by analyzing the Northeast Project in conjunction with the other three projects.

753 F.3d at 1320.

In short, NEPA requires analysis of a projects' direct, indirect, and cumulative impacts in a single document. That analysis must include all connected actions and their cumulative effects.

B. The Department must evaluate the entirety of Keystone XL together and correct the flaws in the 2014 EIS

The Department's NOI suggests that the EA will address only the Mainline Alternative Route in Nebraska. However, the Department must correct and update the outdated 2014 EIS in many more ways than simply evaluating the new route. This is especially true if cooperating agencies such as the BLM and Corps intend to rely on the Department's NEPA analyses to satisfy their independent NEPA obligations.

The Nebraska portion of the pipeline undoubtedly meets the criteria for a connected action. Without that section of the pipeline, TransCanada cannot transport tar sands from Canada to the connecting point with TransCanada's existing infrastructure in southern Nebraska. Therefore, the Department cannot segment that portion of the pipeline and evaluate it separately. The connected actions include *all* parts of the pipeline itself, as well as the actions listed in section 2.1.12 of the 2014 EIS, such as the electrical distribution stations and transmission lines. All sections of the Keystone XL pipeline must therefore be analyzed together in a single EIS as cumulative actions pursuant to 40 C.F.R. § 1508.25(a)(2); and/or as projects that would have cumulative impacts pursuant to 40 C.F.R. § 1508.7.

As such, the Department must use this opportunity to correct the deficiencies of the 2014 EIS as set forth in numerous comment letters submitted by the undersigned groups as well as in the attached briefs.³ Those deficiencies include, but are not limited to:

- i. Failure to evaluate a single *status quo* "no-action alternative."
- ii. Improper and illogical conclusion that Keystone XL is not likely to increase tar sands development because if not for Keystone XL, some other future transportation projects might also allow tar sands to increase.
- iii. Failure to evaluate the cumulative climate impacts of other past, present, and reasonably foreseeable pipeline projects including but not limited to Enbridge's Alberta Clipper expansion.

See NPP Brief 12-24; NPP Reply Brief 13-34. The Department and the BLM must also evaluate the significant new information and changed circumstances relevant to the environmental impacts of Keystone XL that have arisen since the publication of the 2014 EIS, as

³ Commenters' letters of January 27, 2017, February 22, 2017, March 2, 2017 (letter to BLM), March 13, 2017, and December 4, 2017, are incorporated here by reference.

set forth in Commenters' previous letters to the Department and BLM, as well as in the attached briefs. Those include, but are not limited to:

- i. A dramatic and sustained drop in oil prices that has occurred since 2014;
- ii. Failure of crude by rail to emerge as a significant transporter of tar sands crude;
- iii. Failure of many other tar sands export pipelines to come online, such as TransCanada's Energy East pipeline, Enbridge's Northern Gateway pipeline, and Kinder Morgan's TransMountain pipeline expansion;
- iii. A National Academy of Sciences report on the dangers of spills of diluted bitumen into waterways;
- iv. An increase in the number of pipeline oil spills, including significant spills on TransCanada's own Keystone pipeline;
- v. The new GREET model that estimates that greenhouse gas emissions from tar sands are up to 20% higher than previously estimated;
- vi. The Department's own estimates that the cumulative climate impact of building both Keystone XL and Alberta Clipper would result in up to 49.9 million metric tons of greenhouse gas emissions per year.

See NPP Brief 25-36; NPP Reply Brief 34-53.

The impacts of the Keystone XL pipeline easily meet the "significance" threshold, thus requiring an EIS as opposed to an EA. The Department has admitted as much by its preparation of EISs as opposed to EAs for this project in the past.

C. Even taken alone, the Mainline Alternative Route would have significant environmental impacts and requires an EIS

The Department must evaluate the full range of social and environmental impacts associated with the new Mainline Alternative Route in Nebraska. As an initial matter, we restate that an EA that is *limited* to the Mainline Alternative Route does not satisfy the Department's NEPA obligations; rather the Department must vacate its permit and prepare a supplemental EIS that evaluates the Mainline Alternative Route along with the rest of the pipeline. That is particularly important in this case because landowners and other members of the public located along the Mainline Alternative Route must have the opportunity to fully participate in the NEPA process for this massive pipeline project that would cross their backyards, ranches, and communities.

The CEQ regulations require a give and take between an agency and members of the public. See 40 C.F.R. §§ 1500.1(b) ("public scrutiny [is] essential"), 1500.2(d) (the agency must "encourage and facilitate public involvement"), 1506.6 (the agency must "[m]ake diligent efforts to involve the public" in preparing environmental documents, give "public notice of . . . the availability of environmental documents so as to inform those persons . . . who may be interested or affected," and "solicit appropriate information from the public"). CEQ regulations require federal agencies to give the public as much information as is practicable, so that the public has a sufficient basis to address those areas that the agency must consider in preparing the environmental assessment. *Id.* § 1501.4. The Supreme Court has explained that the EIS

requirement serves NEPA's purpose by ensuring that the agency carefully considers "detailed information concerning significant environmental impacts" and "guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

Members of the public and landowners along the Mainline Alternative Route must be given a full opportunity to participate in a NEPA analysis of the overall Keystone XL pipeline *before* the Department has issued its permit, not after the pipeline has been approved and the agency is narrowing its focus on the new route through Nebraska.

But even taken alone, there is no argument that the section of the pipeline through Nebraska would not have a significant impact on the environment. The construction of a massive pipeline through an entire state will have significant impacts on the land, water, and species in its path. Thus, even if the Department prepares an EA limited in scope to the Mainline Alternative Route, that EA will lead to the inescapable conclusion that a full EIS is needed. *See* 40 C.F.R. § 1508.9(a)(1).

Furthermore, the Department must consider the direct, indirect, and cumulative impacts of that portion of the pipeline, which include the climate effects of mining, transporting, refining, and combusting 830,000 barrels per day of dirty tar sands crude oil.

In its February 16, 2017 application to the Public Service Commission, TransCanada described the Mainline Alternative Route in detail:

The Keystone Mainline Alternative Route would start at the Nebraska-South Dakota border in Keya Paha County, Nebraska near pipeline milepost 601 of the proposed Project This alternative route would follow the Preferred Route for 110 miles to just south of the Elkhorn River in Antelope County, then head in a southeasterly direction across Madison and Stanton counties for approximately 43 miles to intercept the existing Keystone Mainline pipeline, and then heads south. The Keystone Mainline Alternative Route parallels the existing Keystone Mainline for a total of 97.6 miles, crossing Shell Creek and the Platte River in Colfax County. The route would shift away from this co-location with the existing Keystone Mainline pipeline for 29.8 miles by routing west around the Seward County Wellhead Protection Area (WPA). Keystone made this adjustment to be consistent with NDEQ's recommendation to avoid WPAs. This route would then rejoin the existing Keystone Mainline pipeline route and continue through Saline County and terminate in Jefferson County.

Keystone XL Pipeline Application at 8.⁴

⁴ Available at <http://www.psc.nebraska.gov/natgas/Keystone/20170216%20KXL%20PSC%20Application%20with%20attachments.pdf>.

TransCanada also described the additional environmental impacts the Mainline Alternative Route would have:

The Keystone Mainline Alternative Route would be 280.5 miles long—adding in an incremental five miles—and would require an additional pump station, for a total of six pump stations, including the station at Steele City. In addition, as compared to the Preferred Route and as summarized at Section 20.3, the Keystone Mainline Alternative Route would:

- Result in a greater total number of acres disturbed due to the increase in the route length;
- Increase the crossing of the ranges of federally-listed threatened and endangered species;
- Increase the crossing of highly erodible soils;
- Increase the crossing of ecological unusually sensitive areas; and
- Increase the number of crossings of perennial streams, railroads and total road crossings.

Id. at 8.

TransCanada further detailed these impacts via expert testimony. In his rebuttal testimony, TransCanada witness Jon A. Schmidt, Ph.D stated that “the number of federally and state listed threatened and endangered species ranges crossed by the Mainline Alternative Route is greater than the number of federally and state listed threatened and endangered species ranges crossed by the Preferred Route. Specifically, on the Mainline Alternative Route, the habitat ranges of four more threatened and endangered species would be crossed, and those species are the Pallid Sturgeon, the Topeka Shiner, the Sturgeon Chub, and the Lake Sturgeon. Those species’ ranges are avoided along the Preferred Route.” Rebuttal Testimony of Jon A. Schmidt, Ph.D at 1.⁵ He also stated that “ the Mainline Alternative Route will increase the crossing of highly erodible soils as compared to the Preferred Route.” *Id.* at 2. Finally, Dr. Schmidt stated that “the Mainline Alternative has 10 more Perennial Stream/River crossings than the Preferred Route.” *Id.* at 8.

TransCanada therefore agrees that the Mainline Alternative Route poses unique environmental impacts compared to the preferred route. The Department must analyze those impacts. It must evaluate the full range of infrastructure associated with the Mainline Alternative Route, including but not limited to the pipeline right of way, electric transmission lines, pump stations, and permanent and temporary access roads and storage yards. And it must analyze how the Mainline Alternative Route will harm protected species. *See infra* section IV.

Similarly, the Department must evaluate the impacts of all water crossings along the pipeline route, including but not limited to U.S. waterways under the jurisdiction of the Corps. This includes both construction and operational impacts (e.g., oil spills) on major waterways, such as the Niobrara National Scenic River and Platte River, as well as smaller rivers, streams,

⁵ Available at:

<http://www.psc.nebraska.gov/natgas/Keystone/Rebuttal%20Testimony/013%20Rebuttal%20Testimony%20-%20Schmidt%20w%20Exs%20A-F.pdf>.

and wetlands. The Department must also evaluate potential impacts of the conversion of forested wetland areas to lower quality scrub/shrub wetlands, as well as the other impacts associated with maintaining a permanent right of way for the entire length of the pipeline through Nebraska, and the cumulative impacts of numerous water crossings along the pipeline route. This is especially important because neither the Department nor the Corps has ever evaluated these water crossings in any NEPA analysis.⁶

The Department must engage in consultation with tribes along the Mainline Alternative Route pursuant section 106 of the National Historic Preservation Act, and identify and avoid historic and cultural sites including but not limited to the Ponca Trail of Tears. On June 10, 2018, Nebraskan landowners Art and Helen Tanderup gifted a parcel of land along the pipeline route, and along the Trail of Tears, back to the Ponca Tribe.⁷ This land was ancestral Ponca Land, and has been used for the past five years to plant sacred Ponca Corn. The Department must evaluate potential impacts to this land and explore ways to avoid it.

Finally, the Department must also evaluate the potential impacts to private property along the pipeline route, including the extent to which eminent domain will be necessary to acquire easements across properties; the impacts to owners' use of property for agricultural or other uses; and the impacts of having multiple crude oil pipelines co-located in the same right of way for much of the Mainline Alternative Route.

III. Other agencies have independent NEPA and other statutory obligations

A. The cooperating agencies must independently comply with NEPA

Under NEPA, no other agencies can approve any aspect of this project until the environmental review is legally adequate. Here, the BLM and the Corps have agreed to be cooperating agencies for NEPA review.⁸ 2014 EIS at 1.5-2 to 1.5-7. As cooperating agencies, they are required to, *inter alia*, participate in the NEPA process at the earliest possible time and assume responsibility, at the Department's request, for preparing environmental analyses in areas concerning their special expertise. 40 C.F.R. § 1501.6; *see also id.* § 1508.5 (defining

⁶ As set forth below, it appears that the Corps intends to approve the Mainline Alternative Route using Nationwide Permit 12, which means there would be no public review process pursuant to section 404 of the Clean Water Act.

⁷ Mark Hefflinger, *In Historic First, Nebraska Farmer Returns Land to Ponca Tribe Along "Trail of Tears,"* Bold Nebraska (June 11, 2018), <http://boldnebraska.org/in-historic-first-nebraska-farmer-returns-land-to-ponca-tribe-along-trail-of-tears/>.

⁸ The full list of cooperating agencies includes the Corps, BLM, U.S. Department of Agriculture—Farm Service Agency, U.S. Department of Agriculture—Natural Resource Conservation Service, U.S. Department of Agriculture—Rural Utilities Service, U.S. Department of Energy, U.S. Department of Interior—National Park Service, U.S. Department of Interior—U.S. Fish and Wildlife Service, U.S. Department of Transportation—Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety, and U.S. Environmental Protection Agency (EPA).

“cooperating agency”). Additionally, BLM may, upon the Department’s agreement, help identify issues to be addressed, arrange for the collection and analysis of relevant data, develop and evaluate alternatives, and carry out any other task necessary for the development of environmental analysis and documentation. 43 C.F.R. § 46.230.⁹

A cooperating agency may adopt an EIS prepared by the lead agency without recirculation if it undertakes “an independent review of the statement” and determines that its “comments and suggestions have been satisfied.” 40 C.F.R. § 1506.3(c). According to the BLM’s own regulations and guidance documents, if BLM concludes otherwise, it must initiate a new or supplemental NEPA analysis.¹⁰ After adopting the EIS, BLM must then issue its own decision.¹¹ “This may be done in an individual decision document or in a decision document signed by more than one agency, as long as it is clear that only the BLM decisionmaker is making a decision regarding resources under BLM authority.”¹² Likewise, if the Corps has “substantial doubt as to [the] technical or procedural adequacy or omission of factors important to the Corps decision,” the Corps must prepare a supplemental EIS. 33 C.F.R. § 230.21.

Because, as explained in the attached briefs, the 2014 EIS is legally inadequate, NPP Brief 12-36; NPP Reply Brief 13-53, neither the BLM nor the Corps (or any other cooperating federal agency) can approve any aspect of the Keystone XL project without completing a supplemental EIS correcting the identified flaws. As cooperating agencies, they must ensure compliance with NEPA and either adopt the Department’s NEPA analyses or initiate their own NEPA review. For the reasons explained herein and in the attached briefing, the BLM and the Corps must prepare a supplemental EIS that corrects the deficiencies of the 2014 EIS and evaluates all of the new information and changed circumstances that have occurred since 2014. The BLM and the Corps must also ensure that the supplemental EIS fully informs the federal actions they must take on Keystone XL. The agencies may not rely on a flawed EA to approve the project.

B. BLM must comply with the Mineral Leasing Act and Federal Land Policy and Management Act

Before granting any right-of-way or temporary-use applications for Keystone XL and its related infrastructure, BLM must first ensure compliance with the Mineral Leasing Act (MLA) and the Federal Land Policy and Management Act (FLPMA).

⁹ See also BLM, A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners (BLM Desk Guide) 37 (2012), https://www.blm.gov/sites/blm.gov/files/uploads/IM2012-115_att1.pdf (asserting that, as a cooperating agency, “BLM should collaborate to the fullest extent possible concerning those issues relating to its jurisdiction and special expertise”).

¹⁰ BLM Desk Guide at 40.

¹¹ *Id.* at 38.

¹² *Id.*

The MLA governs the issuance of right of ways and temporary use permits for oil pipelines. 30 U.S.C. § 185(a). In addition to requiring compliance with NEPA, the MLA also requires BLM to implement additional environmental protection measures. *Id.* § 185(h). Where, as here, a project has the potential to significantly impact the environment, the applicant must submit a “plan of construction, operation, and rehabilitation.” *Id.* § 185(h)(2). BLM must then issue regulations or impose stipulations that include: (a) requirements for restoration, revegetation, and curtailment of erosion; (b) requirements to insure that the project will not violate air and water quality standards; (c) requirements designed to control or prevent damage to the environment (including damage to fish and wildlife habitat), damage to public or private property, and hazards to public health and safety; and (d) requirements to protect the interests of individuals living in the vicinity who rely on the natural resources of the area for subsistence purposes. *Id.*; 43 C.F.R. § 2885.11; *see also id.* § 2881.2 (“It is BLM’s objective to grant rights-of-way . . . in a manner that: (a) Protects the natural resources associated with public lands and adjacent lands . . . [and] (b) Prevents unnecessary or undue degradation to public lands . . .”). BLM must also impose requirements on the project’s operation that will ensure worker safety and “protect the public from sudden ruptures and slow degradation of the pipeline.” 30 U.S.C. § 185(g). Finally, BLM must ensure that the proposed use is consistent with existing land use plans. *See* 43 C.F.R. § 2884.23(a) (referencing consistency with “the purpose for which BLM or other Federal agencies manage the lands” as a relevant concern); *id.* § 2884.21 (instructing BLM to determine whether the proposed use complies with applicable federal and state laws, regulations, and local ordinances).

The Federal Land Policy and Management Act authorizes BLM to grant rights of way for a pipeline’s ancillary facilities, including roads and electrical power generation, transmission, and distribution systems. 30 U.S.C. § 185(g). As with the MLA, rights of way granted under FLPMA must comply with all applicable NEPA requirements, *see id.* § 1764(c) (stating that all rights of way must be issued consistent with applicable law), and projects that may have a significant impact on the environment must include a “plan of construction, operation, and rehabilitation,” *id.* § 1764(d). BLM must then impose terms and conditions that: (a) minimize damage to scenic and esthetic values, fish and wildlife habitat, and otherwise protect the environment; (b) require compliance with applicable air and water quality standards; (c) efficiently manage the lands subject to the right of way and protect other lawful users of adjacent lands; (d) protect lives and property; (e) protect the interests of individuals living in the area who rely on local resources for subsistence purposes; and (f) otherwise protect the public interest. *Id.* § 1765; 43 C.F.R. § 2805.12; *Trout Unlimited v. U.S. Dep’t of Agric.*, 320 F. Supp. 2d 1090, 1108 (D. Colo. 2004) (“FLPMA requires all land-use authorizations to contain terms and conditions which will protect resources and the environment.”). BLM must also locate the right of way along a route that will cause least damage to the environment, including by considering whether an applicant can use an existing right-of-way corridor and by drawing right-of-way boundaries so as to avoid “unnecessary damage to the environment.” 43 U.S.C. §§ 1763, 1764(a), 1765(b). Consistent with these statutory requirements, “[i]t is BLM’s objective to grant rights-of-way . . . in a manner that: (a) Protects the natural resources associated with public lands and adjacent lands, . . . [and] (b) Prevents unnecessary or undue degradation to public lands . . .” 43 C.F.R. § 2801.2.

BLM may deny right-of-way and temporary-use applications on several grounds, such as when the proposed use would not serve the public interest, or would have serious environmental consequences that cannot be mitigated. *Id.* §§ 2804.26(a), 2884.23(a).¹³ If BLM chooses to grant an application, it may prohibit the applicant from constructing or operating the project until certain stipulations and conditions are met. *See id.* § 2886.10.

As discussed in the attached briefs and throughout these comments, Keystone XL will have substantial harmful effects on the environment, which BLM must carefully consider as part of its NEPA analysis. By transporting vast quantities of tar sands crude oil—one of the planet’s most environmentally destructive energy sources— each day, Keystone XL will accelerate climate change. Construction and operation of the pipeline will harm species and their habitats, including federally protected species. The risk of oil spills also poses significant threats to the land and water along the pipeline route, as well as to the people and species that depend on those resources.

In light of these “serious environmental consequences,” BLM must deny the right-of-way applications for Keystone XL and its ancillary facilities under the MLA and FLPMA. If BLM grants these applications, it must impose terms and conditions that adequately protect the environment, the surrounding areas, and public health and safety, as dictated by both statutes. *See Trout Unlimited*, 320 F. Supp. 2d at 1108-09 (holding that agency’s failure to impose terms and conditions that minimize environmental degradation, as required by FLPMA, is arbitrary and capricious).

C. The Corps must comply with the Clean Water Act

To the best of Commenters’ knowledge, it appears that the Corps is engaging in piecemeal approval of Keystone XL prior to the conclusion of the Department’s EA process, and prior to the Corps or the Department ever evaluating the updated Keystone XL route (including but not limited to impacts to water crossings) in any NEPA review. As described herein, this approach violates the NEPA and Clean Water Act (CWA). The Corps must participate in the preparation of a supplemental EIS that evaluates all federal approvals, all impacts to waterways along the route, and refrain from taking any action to approve Keystone XL until that process is complete.

1. Section 404 permits

The CWA was enacted by Congress in 1972 to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). To achieve this goal, section 404 of the CWA prohibits the discharge of any pollutant, including dredged spoil or other fill material, into navigable waters unless authorized by a permit. *Id.* § 1344.

The Corps oversees the section 404 permit process and must comply with guidelines promulgated by EPA, which are incorporated into the Corps’ own regulations. *Id.* § 1344(b)(1);

¹³ *See also* BLM, *Obtaining a Right-of-Way on Public Lands* 10 (Mar. 10, 2018), https://www.blm.gov/sites/blm.gov/files/Lands_ROW_ObtainingaROWPamphlet.pdf.

33 C.F.R. §§ 320.4(b)(4), 325.2(a)(6). The EPA guidelines pertinent to this case are set forth in EPA's section 404(b)(1) regulations, at 40 C.F.R. Part 230. The intent behind the regulations is that dredged or fill material should not be discharged if it will result in an unacceptable impact on the aquatic ecosystem. 40 C.F.R. § 230.1(c).

In general, the regulations provide that no discharge of dredged or fill material shall be permitted: (1) if there is a practicable alternative to the proposed discharge; (2) if the discharge causes or contributes to violations of applicable state water quality standards; (3) if the discharge will cause or contribute to significant degradation of the environment; and (4) unless all appropriate steps have been taken to minimize potential adverse impacts. *Id.* § 230.10. The Corps' regulations also require that destruction of wetlands is to be avoided to the extent practicable. 33 C.F.R. § 320.4(r).

The regulations further provide that "practicable alternatives" include "not discharging into the waters of the U.S. or discharging into an alternative aquatic site with potentially less damaging consequences." 40 C.F.R. §§ 230.5(c), 230.10(a). If a project is not "water dependent," as is the case with crude oil pipelines, the regulations contain a presumption that a less environmentally damaging practicable alternative exists, and require that the applicant clearly demonstrate that practicable alternatives which would not involve discharge of fill material into special aquatic sites were not available. *Id.* § 230.10(a)(3).

In addition, the regulations require that when information is prepared by the applicant, it shall be independently evaluated and verified by the Corps. *See id.* § 1506.5(a); *see also* 33 C.F.R. Part 325. Under 40 C.F.R. § 1506.5(b), the "agency shall independently evaluate the information submitted and shall be responsible for its accuracy. . . . It is the intent of this paragraph that acceptable work not be redone, but that it be verified by the agency."

An alternative to the individual permit process is the nationwide permit program. Section 404(e) allows the Corps to, "after notice and opportunity for public hearing, issue general permits on a State, regional, or nationwide basis for any category of activities involving discharges of dredged or fill material if the Secretary determines that the activities in such category are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment." 33 U.S.C. § 1344(e)(1).

On January 6, 2017, the Corps issued a final rule issuing and reissuing 52 nationwide permits, including Nationwide Permit 12 (NWP 12), which is at issue here. *See* 82 Fed. Reg. 1860, 1892 (Jan. 6, 2017). The Corps also issued a "Decision Document" and FONSI for NWP 12, which purports to comply with NEPA.¹⁴

The Corps' NWP 12 authorizes "[a]ctivities required for the construction, maintenance, repair, and removal of utility lines and associated facilities [including oil pipelines] in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of

¹⁴ Available at <https://usace.contentdm.oclc.org/utills/getfile/collection/p16021coll7/id/6725>.

waters of the United States for each single and complete project.” *Id.* at 1985. However, the definition of “single and complete linear project” allows the Corps to treat each water crossing as a separate “single and complete project.” *Id.* at 1978.

NWP 12 relies on the discretion of division and district engineers to ensure that specific utility projects permitted under NWP 12 would not have more than minimal individual and cumulative adverse environmental effects, as required by CWA section 404(e). For example, the Federal Register announcement states that in evaluating a specific project:

[T]he district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. . . . For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP.

Id. at 2004-05. If a project would result in more than minimal environmental effects, the Corps must require an individual permit application before the project can proceed.

The Corps has not issued any public notices regarding its review of Keystone XL, nor has it responded to Commenters’ March 9, 2018 request under the Freedom of Information Act. However, counsel for the government has informed Commenters that the Corps has at least partially already verified Keystone XL under NWP 12 in South Dakota and Montana.

The Corps’ use of NWP 12 to approve Keystone XL is inappropriate, and violates the NEPA and CWA. First, as explained in these comments, the Corps has independent NEPA obligations and must prepare a supplemental EIS that adequately evaluates all aspects of this project. That includes the issues described in the attached briefing. In particular, the water crossings in Nebraska have never been evaluated in any NEPA or CWA analysis. To this day, we do not know the location or number of water crossings or proximity to each other, the level of impacts to different types of waterways, the mitigation requirements, the acreage of permanent and temporary impacts to streams and wetlands, the acreage of forested wetland conversion, or the cumulative impacts of multiple water crossings associated with Keystone XL. The Corps has also never evaluated the risk or impacts of oil spills into U.S. waterways along the entire length of the pipeline that could occur from the Keystone XL project.

Furthermore, the impacts of the Keystone XL water crossings, either measured on an individual water crossing basis or cumulatively, exceed the “minimal effects” threshold and thus require an individual section 404 permitting process. It is unclear whether or how the Corps has evaluated cumulative effects or made a cumulative effects determination, especially since counsel for TransCanada confirmed that, as of June 25, 2018, the company had not even submitted a pre-construction notification for the Mainline Alternative Route in Nebraska. As such, the Corps must evaluate Keystone XL under the individual section 404 permit process, and prepare a supplemental EIS that evaluates the direct, indirect, and cumulative impacts of Keystone XL.

2. Section 408 permit

To the best of Commenters' knowledge, the Corps is considering issuance of a permit pursuant to section 14 of the Rivers and Harbors Act, 33 U.S.C. § 408 (commonly known as section 408) for Keystone XL to tunnel under the Missouri River in Montana. Section 408 allows the Corps to "grant permission for the alteration or permanent occupation or use of any of the aforementioned public works when *in the judgment of the Secretary such occupation or use will not be injurious to the public interest and will not impair the usefulness of such work.*" *Id.* (emphasis added).

As the Corps has acknowledged with respect to a section 408 permit for another project, a "decision on a Section 408 request is a federal action, and therefore subject to the National Environmental Policy Act (NEPA) and other environmental compliance requirements."¹⁵ To date, the Corps has not issued any public notices or indicated that it has conducted any NEPA review for the section 408 permit for Keystone XL.

The Corps' supplemental EIS for this section 408 determination must be evaluated in conjunction with all connected and cumulative actions pursuant to NEPA regulations. 40 C.F.R. § 1508.25. The supplemental EIS must also evaluate all direct, indirect, and cumulative impacts of the project, including but not limited to climate change impacts, risk and impacts of oil spills, and impacts to waterways, wildlife, and forested areas along the pipeline route. A careful consideration of these impacts will demonstrate that the Keystone XL pipeline will be injurious to the public interest, and the section 408 permit should be rejected.

Therefore, the NEPA regulations apply, and the Corps must analyze all direct, indirect, and cumulative impacts of Keystone XL; the project's purpose and need; and all reasonable alternatives to the project. The scope of the supplemental EIS must include all connected/cumulative federal approval actions (including but not limited to other Corps actions), as well as non-federal connected/cumulative actions. It should address the deficiencies of the 2014 EIS and new information and changed circumstances that have occurred since 2014, as discussed in the attached briefing.

IV. The Department must evaluate harm to species, including federally protected species

Due to the significant impacts that the project would have on wildlife, and listed species in particular, it is readily apparent that a full EIS—or a supplement to the existing 2014 EIS—must be developed regarding the Mainline Alternative Route. *See* 40 C.F.R. § 1508.27(b)(3), (7),

¹⁵ Corps, *Des Moines Market and 1st Stormwater Pump Station Improvements (Public Notice ID #2017-968)* (June 16, 2018), <http://www.mvr.usace.army.mil/Portals/48/Users/050/86/1586/2017-968%20Sec%20408%20PN%20non-CATEX%20Des%20Moines%201st%20Market%20pump%20station.pdf?ver=2018-06-01-092555-340>; *see also* 82 Fed. Reg. 5543 (Jan. 18, 2018) (discussing NEPA review for section 408 permit for the Dakota Access pipeline).

(9); *Habitat Educ. Ctr., Inc. v. U.S. Forest Serv.*, 673 F.3d 518, 528 (7th Cir. 2012) (holding that agencies are required to take a “hard look” at new information when deciding whether to supplement their environmental analyses); *supra* section I. Furthermore, it is our understanding that the Department has reinitiated section 7 ESA consultation on the Mainline Alternative Route, and the results of that analysis should be made available for public comment as part of the NEPA process. *See* 40 C.F.R. § 1502.25(a) (“To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with environmental impact analysis and related surveys and studies required by the . . . Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), and other environmental review laws and executive orders.”). Notwithstanding Commenters’ position that a supplemental EIS is required for the whole project, they offer the following comments on the Department’s proposed EA for the Mainline Alternative with respect to harm to species.

To comply with NEPA, the EA must fully address the project’s potential impacts to mammals, reptiles, birds, invertebrates, and fish, their habitats, and the ecological systems that link them, not only along the Mainline Alternative Route but throughout the entire project area or other areas affected by the project. This must include an evaluation of the direct, indirect and cumulative impacts from the Mainline Alternative Route and the project as a whole, including those from construction, operation, and decommissioning of the pipeline and related infrastructure. Impacts to terrestrial and freshwater biology from mining and combustion of the tar sands must also be analyzed, including impacts from the project’s contribution to climate change on terrestrial and freshwater biological resources. The EA should further describe effects on specific areas of plant communities and sensitive species’ habitats, including, but not limited to, impacts associated with erosion, sedimentation, down-slope and downstream water quality impacts, invasion by non-native plant species, spills and leaks from the pipeline, increased predation of sensitive species, and impacts associated with power lines including loss and fragmentation of habitat and collisions. Alternatives and measures to mitigate and avoid these impacts must also be considered.

Furthermore, the EA must identify all federal and state-listed endangered, threatened and rare species that are known to reside within, or migrate through, areas that will be affected by the project, as well as any other species subject to special protections, such as golden and bald eagles (protected under the Bald and Golden Eagle Protection Act) and migratory birds (protected by the Migratory Bird Treaty Act). A detailed habitat assessment should be conducted and thorough surveys undertaken to identify the presence of suitable habitat and to establish the presence of federally protected species in the project area. The results of these surveys and the methodology employed should be made available, so that the public may review the information and provide comments as to its accuracy.

A. Federally protected species

Congress enacted the Endangered Species Act (ESA or Act) in 1973 to provide for the conservation of endangered and threatened fish, wildlife, plants and their natural habitats. 16 U.S.C. §§ 1531, 1532. Under section 9(a)(1)(B) of the Act, it is illegal to engage in any activity that “takes” an endangered species. *Id.* § 1538(a)(1)(B). The ESA further imposes substantive and procedural obligations on all federal agencies and persons with regard to listed species and

their critical habitats. *See id.* §§ 1536(a)(1), (2), 1538(a); 50 C.F.R. § 402.10. Each federal agency has a duty to consult with the U.S. Fish and Wildlife Service (Service) to ensure that “any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species” *See* 16 U.S.C. § 1536(a)(2).

Congress intended the term “take” to be defined in the “broadest possible manner to include every conceivable way” in which a person could harm or kill wildlife. S. Rep. No. 93-307, 93d Cong., 1st Sess. 1, reprinted in 1973 USCAAN 2989, 2995. The term “take” is defined in the statute to include “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(18). The implementing regulations for the Act define “harm” to include “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.” 50 C.F.R. § 17.3.

The approval of the Mainline Alternative Route invalidates the Department’s prior assessment of the likelihood of harm to listed species in Nebraska, as well as the analysis of the cumulative effects of impacts to listed species across the entire project. This includes impacts to species that were determined “not likely to be adversely affected” by the project, such as whooping cranes, interior least terns, and piping plovers. This new route—which was not analyzed at all, and for which no surveys have been completed—requires the Department and Service to revisit their prior determinations for these species in the new EA.

There are several federally protected species that may be impacted by the proposed project and the use of the Mainline Alternative Route, including, but not limited to, whooping cranes, interior least terns, piping plovers, pallid sturgeon, black-footed ferret, Topeka shiner, and western prairie fringed orchid. The EA must also revisit the effects the new route would have on American burying beetle, and whether the route would adversely affect species that were previously determined to have “no effect,” including Eskimo curlew and blowout penstemon.

Both NEPA and the ESA require a thorough review of the direct, indirect and cumulative impacts of the project, which includes related and connected actions as well. 40 C.F.R. §§ 1502, 1508. This requires a full analysis of the potential impacts to these protected species from the construction, operation, maintenance and decommissioning of the pipeline and the power lines for the project’s pump stations, as well as impacts associated with the mining of the tar sands, transportation of the product to and through the pipeline and associated spills, refinement of the product, and consumption/use of the oil for energy.

The EA must consider potential alternatives, including alternative routes, construction methods and mitigation measures to ensure that the project will not result in take of listed species, or jeopardize their continued existence. This should include completing *formal* ESA consultation with the Service, and incorporating the results of that process into the Department’s NEPA analysis.

1. New species affected by the Mainline Alternative Route

The Mainline Alternative Route poses a risk of adverse effects to several species that were not considered in the prior NEPA and ESA documents for the project. TransCanada conceded this in its testimony before the Nebraska Public Service Commission. In his rebuttal testimony for TransCanada, Jon A. Schmidt, Ph.D., explained what the company meant when it stated in its application that the Mainline Alternative Route would “[i]ncrease the crossing of the ranges of federally listed threatened and endangered species.” As Dr. Schmidt explained:

That statement was intended to mean that the number of federally and state listed threatened and endangered species ranges crossed by the Mainline Alternative Route is greater than the number of federally and state listed threatened and endangered species ranges crossed by the Preferred Route. Specifically, on the Mainline Alternative Route, the habitat ranges of four more threatened and endangered species would be crossed, and those species are the Pallid Sturgeon, the Topeka Shiner, the Sturgeon Chub, and the Lake Sturgeon. Those species’ ranges are avoided along the Preferred Route.

Rebuttal Testimony of Jon A. Schmidt, Ph.D at 1-2.¹⁶ The Mainline Alternative Route would require construction and operation of the pipeline through or near the aquatic habitats that these species rely on. Sediment from construction activities, a frac-out of drilling fluids during horizontal directional drilling (if used),¹⁷ and leaks and spills from the pipeline all threaten these species, and could jeopardize their continued existence.

For example, the Topeka shiner is hovering on the brink of extirpation in Nebraska. According to the Service, the Topeka shiner was “once a common fish throughout its range but its presence has declined by about 70 percent at known collection sites during the last 40 to 50 years. Habitat destruction, sedimentation, and changes in water quality are thought to have caused the population decline.”¹⁸ The Mainline Alternative Route would run very close to Taylor Creek, which is designated as critical habitat for the Topeka Shiner. Construction activities that

¹⁶ Available at

<http://www.psc.nebraska.gov/natgas/Keystone/Rebuttal%20Testimony/013%20Rebuttal%20Testimony%20-%20Schmidt%20w%20Exs%20A-F.pdf>.

¹⁷ Drilling under the streams using horizontal directional drilling (HDD) poses a threat of “frac-out,” which is when pressurized fluids and drilling lubricants escape the active bore, migrate through the soils and surface at or near the construction site. The Department’s 2012 Biological Assessment for Keystone XL notes that “[f]rac-outs that may release drilling fluids into aquatic environments are more difficult to contain primarily because bentonite readily disperses in flowing water and quickly settles in standing water.” See Biological Assessment at 2.0-50.

¹⁸ *Topeka Shiner Questions and Answers*, Service (Mar. 12, 2018), <https://www.fws.gov/midwest/endangered/fishes/TopekaShiner/tosh-qas.html>.

cause sedimentation, or spills that affect water quality, could therefore be the death knell for this endangered population.

The Mainline Alternative Route would also traverse known pallid sturgeon habitat along the Platte River. Sturgeon are very sensitive to harm from frac-outs, sedimentation, and oil spills, which can smother the benthic habitat they rely on for feeding and breeding and contaminate their food sources. The Service's most recent five-year review for the pallid sturgeon notes that the "lower Platte River may be an important tributary for spawning."¹⁹ This pallid sturgeon population in the Platte River is one of the last remaining pallid sturgeon populations left on Earth, and would be decimated should a spill—such as the spill that occurred recently in South Dakota at the Keystone I pipeline—happen along the pipeline's crossing of the Platte River south of Richland, Nebraska.²⁰

The Service summarized the threats to this species in its most recent recovery plan:

The Pallid Sturgeon is native to the Missouri and Mississippi rivers and adapted to the pre-development habitat conditions that historically existed in these rivers. These conditions generally can be described as large, freeflowing, warm-water, and turbid rivers with a diverse assemblage of dynamic physical habitats. Limiting factors include: 1) activities which affect in-river connectivity and the natural form, function, and hydrologic processes of rivers; 2) illegal harvest; 3) impaired water quality and quantity; 4) entrainment; and 5) life history attributes of the species (i.e., delayed sexual maturity, females not spawning every year, and larval drift requirements).²¹

Importantly, the effect of oil and gas development, and resulting oil and gas pipelines, on pallid sturgeon has recently been identified as a "potential new threat," but not yet adequately studied:

¹⁹ Service, 5-Year Review: Summary and Evaluation of Pallid Sturgeon (*Scaphirhynchus albus*) (2005). The 5-year review states that "[t]he importance of the lower Platte River for pallid sturgeon has been documented (Snook 2002, Swigle 2003). The largest factor affecting habitat in the lower Platte River is upstream water withdrawal." *Id.* at 41. It is not yet clear whether TransCanada would be withdrawing water for HDD at the Platte River stream crossing. The 5-year review further states that "contaminant research suggests a link between environmental contaminants and potential reproductive problems in several sturgeon species (Feist et al. 2005; Koch et al. 2006)." *Id.* at 52. Whether the project poses these risks to sturgeon must be assessed through formal consultation.

²⁰ See Steven Mufson & Chris Mooney, *Keystone pipeline spills 210,000 gallons of oil on eve of permitting decision for TransCanada*, Wash. Post (Nov. 16, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/11/16/keystone-pipeline-spills-210000-gallons-of-oil-on-eve-of-key-permitting-decision/?utm_term=.03530c190524.

²¹ Service, Revised Recovery Plan for the Pallid Sturgeon 6 (Jan. 2014), <http://www.pallidsturgeon.org/recovery/>.

Gas and Oil Pipelines: The federal authority for pipeline safety is the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration. This agency reports that there were 2.3 million miles of pipelines in the United States carrying natural gas and hazardous liquids (primarily petroleum, refined petroleum products, and other chemicals). Many pipelines cross rivers within the range of Pallid Sturgeon; some of which are buried under the river bed.

While not directly within the historical range of Pallid Sturgeon, the 2011 rupture of the Silvertip Pipeline crossing under the Yellowstone River serves as a reminder that accidental releases of hazardous materials can occur. Depending on the timing, magnitude, and the material leaked, a ruptured pipeline could pose a threat to Pallid Sturgeon.²²

The Department has prepared a Pipeline Risk Assessment and Environmental Consequence Analysis for Keystone XL, which indicates that the “estimated spill risk occurrence within the flyway migration corridor is [an average of one spill every] 39 years or 0.026 incidences per year.” 2014 EIS at 3.0-20. Even if this is accepted—and Commenters believe that this low estimate is unsupported, as is made evident by similar, incorrect estimates for Keystone I, which has already spilled 15 times²³—it still means that there will be spills over the course of the 50-year life of the project. In fact, it has been estimated that Keystone XL is likely to spill as frequently as about twice per year, every year, throughout its 50-year lifespan.²⁴ The most-recent spill of over 200,000 gallons at the Keystone I pipeline, described by TransCanada as a state-of-the-art pipeline that would “meet or exceed world-class safety and environmental standards” and be operated in accordance with 51 special safety conditions, exemplifies the likelihood of this harm.²⁵

²² *Id.* at 40.

²³ See *Keystone pipeline leak in South Dakota about double previous estimate*, Reuters (Apr. 7, 2018), <https://www.reuters.com/article/us-transcanada-pipeline-leak/keystone-pipeline-leak-in-south-dakota-about-double-previous-estimate-paper-idUSKBN1HE0T7>; Molly Olmstead, *Report: Keystone Pipeline Has Leaked Much More Than Expected*, Slate (Nov. 27, 2017), http://www.slate.com/articles/health_and_science/science/2017/11/the_keystone_pipeline_has_spilled_much_more_than_expected_new_report_finds.html.

²⁴ John Stansbury, Ph.D., P.E., *Analysis of Frequency, Magnitude and Consequence of Worst-Case Spills from the Proposed Keystone XL Pipeline 3*, http://big.assets.huffingtonpost.com/keystone_spills.pdf; see also *Keystone Pipeline Starts Deliveries to U.S. Midwest*, TransCanada (June 30, 2010), <https://www.transcanada.com/en/announcements/2010-06-30keystone-pipeline-starts-deliveries-to-u.s.-midwest/>.

²⁵ See Mufson & Mooney, *supra*.

Oil spills and other contamination of waterways (such as sediment loading or frac-outs during construction), as well as water withdrawals and the spread of diseases from construction and operation of Keystone XL, will adversely affect listed species, such as the pallid sturgeon, Topeka shiner, sturgeon chub, and lake sturgeon. While the likelihood of a spill at any particular crossing may be relatively low or hard to estimate, that does not suggest that harm cannot occur—especially if a spill were to occur near or upriver from critical breeding or feeding areas for these species. In fact, as the Department’s Biological Assessment for Keystone XL acknowledges:

The potential magnitude of spill effects varies with multiple factors, the most significant of which includes the amount of material released, the size of the spill dispersal area, the type of spill, the species assemblage present, climate, and the spill response tactics employed.

Biological Assessment at 3.0-19.

These concerns must be fully addressed by the Department in the EA (which, again, should be a supplemental EIS) and through formal ESA consultation, given the risk the project now poses to these listed species.

2. Species previously considered by the Department that require further analysis

a. Whooping cranes

The whooping crane (*Grus americana*) is a critically endangered bird that was listed as endangered on March 11, 1967. 32 Fed. Reg. 4001, 4001 (Mar. 11, 1967). Whooping cranes are bi-annual migratory birds that occur only in North America. They spend summer in central Canada and winter on the Texas coast. Biological Assessment at 3.0-13. The Department’s 2012 Biological Assessment for Keystone XL notes that following decades of recovery efforts, the population of whooping cranes in 2006 was merely an estimated 338 birds: 215 in the self-sustaining Aransas-Wood Buffalo National Park population (the Texas-central Canada migratory population at issue here), and 123 captive-raised birds that have been released in Florida in an attempt to rebuild the eastern United States’ population. *Id.* The Service’s most recent available estimates put the population at 350 or fewer birds.²⁶ Studies have found that in order to be genetically viable, the population needs to reach at least 1,000 individuals.²⁷ Given the species’ low numbers, slow reproduction and other factors, many in the scientific community believe that

²⁶ Wade Harrell & Mark Bidwell, *Report on Whooping Crane Recovery Activities* 330 (2016), https://www.fws.gov/uploadedFiles/WC%20Recovery%20Activities%20Report_Sept-April%202016_Appendices.pdf.

²⁷ See Thomas V. Stehn & Tom Wassenich, *Whooping Crane Collisions with Power Lines: An Issue Paper*, *Proc. North Am. Crane Workshop* 25 (2008), <http://digitalcommons.unl.edu/nacwgproc/203>.

the loss of even a few cranes, or even one breeding adult, could jeopardize the continued existence of this iconic species.²⁸

The twice-yearly migration of the Aransas-Wood Buffalo National Park wild population takes the whooping cranes across the Great Plains states of the central United States, including Montana, North Dakota, South Dakota, and Nebraska.²⁹ The whooping cranes typically leave their wintering grounds in Texas sometime between late March and early May, and begin to migrate south from Canada sometime after mid-September, the majority arriving in Texas between late October and mid-November. Biological Assessment at 3.0-13. The primary migration corridor, encompassing 95% of known sightings of whooping cranes, is about 2,400 miles long and 220 miles wide.³⁰

During their migration, whooping cranes use a variety of habitats closely associated with river bottoms, prairie grasslands, seasonally or semi-flooded palustrine wetlands, shallow portions of reservoirs (for roosting), and undisturbed, submerged sandbars commonly found in river channels. Biological Assessment at 3.0-13. These habitats are critical for whooping crane feeding patterns while migrating; these birds primarily feed on frogs, fish, insects, and various types of plants often found in submerged areas.³¹ They travel during the day, in pairs or small flocks, and stop daily to feed and rest.

Whooping cranes are monogamous, forming pairs as early as 3 years of age (though most pairs begin breeding around 5 years of age). They have substantial site fidelity to their breeding territories and spend nearly a month incubating their eggs until hatching occurs in late May to early June. Though two eggs are laid on average per pair, the survival rate of chicks per pair is generally less than one chick annually. This slow reproductive potential has been a major issue in trying to recover whooping crane populations.

Whooping cranes were listed due to threats caused by destruction of nesting habitat, low population numbers, slow reproductive potential, and pressures on wintering habitat caused by humans. More current threats include collisions with manmade objects like powerlines and fences, shootings, chemical spills, predation, habitat destruction, and a loss of genetic material.

The primary known cause of whooping crane mortality is collisions with power lines.³² Whooping cranes rely on sight to avoid obstacles they may encounter along their migration

²⁸ *See id.* (“[T]he species is in a race against time as the limited genetic material that survived the bottleneck continues to be lost in each generation Thus, it is important to accelerate the rate of species recovery to minimize genetic loss.”).

²⁹ *See Species Profile for Whooping Crane (Grus Americana), supra.*

³⁰ *See Species Profile for Whooping Crane (Grus Americana), supra.*

³¹ *See Species Profile for Whooping Crane (Grus Americana), supra.*

³² *See Stehn & Wassenich, supra, at 25.*

route, particularly those encountered at take-off and landing. According to a 2008 scientific study, “cranes and other birds apparently collide with lines because they do not see them in time to avoid them and suffer traumatic injury from the collision itself, or from the resulting impact of falling to the ground.”³³ These encounters with power lines usually occur as whooping cranes “are making short, low altitude flights between foraging and roosting areas,” which “frequently occur near sunrise and sunset when light levels are diminished.”³⁴

Opportunities for whooping cranes to collide with power lines are therefore multiplied when these power lines are suspended across or located near river channels, wetlands, or other low-lying wet areas that serve as whooping cranes’ primary foraging or roosting habitats.³⁵

Whooping crane mortality via power line collision has been observed under even optimal weather conditions.³⁶ However, inclement weather associated with poor visibility (fog, dense cloud cover, precipitation) and reduced flight control (high-velocity winds) is “one of the most frequently described factors affecting collisions and can increase the probability of collisions.”³⁷ Conditions such as high-velocity winds have even been shown to buffet whooping cranes into “fully visible power lines with which they are quite familiar, but which they cannot avoid because they cannot maintain flight control.”³⁸

Therefore, while marking power lines with bird diverters is commonly used to reduce the potential for collisions, these devices do not prevent or eliminate the potential for harm. In fact, most studies have found that bird diverters are around 50% effective, and thus do not come close to eliminating the collision risks for whooping cranes.³⁹

The severity of the threats posed by power lines is compounded by the fact that many of the power line segments proposed to serve Keystone XL will have to cross riverine roosting and wetland roosting and foraging habitat. Biological Assessment at 3.0-21. Because of this, the Biological Assessment determined that “future electrical power transmission lines and the distribution lines that would serve pump stations and MLVs of the proposed Project . . . could

³³ *Id.* at 27.

³⁴ *Id.* at 29.

³⁵ *Id.* at 31.

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ See, e.g., Robert K. Murphy et al., *Effectiveness of Avian Collision Averters in Preventing Migratory Bird Mortality from Powerline Strikes in the Central Platte River, Nebraska* 1 (2008-2009), http://www.fwspubs.org/doi/suppl/10.3996/052016-JFWM-037/suppl_file/052016-jfwm-037.s6.pdf?code=ufws-site.

incrementally increase the collision hazard for . . .” whooping cranes. *Id.* at 3.0-22. The Biological Assessment further admits that bird diverters “*may* reduce crane collisions,” suggesting that such collisions are still likely to occur. *Id.* at 3.0-20 (emphasis added).

Importantly, research has found that “[p]ower lines dividing wetlands used for roosting from grain fields used for feeding caused the most collisions for cranes because these circumstances encouraged crossing the lines at low altitude several times each day.”⁴⁰ The EA must therefore examine the areas surrounding the proposed power line locations, and where whooping-crane sightings have been reported. This is necessary to show whether roosting and feeding areas are located in the vicinity of the power lines, indicating a high potential for collisions.

As set forth in detail in the attached briefing and the expert report authored by plaintiffs’ experts in the federal litigation,⁴¹ the best available data indicates that whooping cranes do indeed rely on stopover habitat in the vicinity of the project, and that the project poses a significant risk to the species. The Department and Service previously ignored these data when they assessed Keystone XL’s potential impacts on cranes. The new EA must consider the best available science—the sighting database maintained by the Service as well as telemetry data collected by the Whooping Crane Tracking Partnership, which are discussed in detail in the Crane Report⁴²—and use these data to assess the potential for harm to this critically imperiled species.

The EA must also consider whether the proposed power lines conform to the Service’s “Region 6 Guidance for Minimizing Effects from Power Line Projects within the Whooping Crane Migration Corridor” (Region 6 Guidance), which requires 5-mile buffers for documented high-use areas (which can only be ascertained from the sighting and telemetry data), that power lines be buried if they are within 1 mile of suitable whooping crane habitat, and that proposed and existing lines be marked with bird flight diverters. In order to comply with this Guidance, each power line should be evaluated in the EA to assess the quality of habitat and the documented use in the proximity of the proposed power lines, to determine the risk of adverse effects to this critically endangered species.

⁴⁰ Stehn & Wassenich, *supra*, at 31.

⁴¹ See report of Drs. Gil, Weir, and Chavez-Ramirez, the “Crane Report,” attached at Exhibit D and incorporated herein by reference.

⁴² Indisputably, the telemetry and sighting data represent the “best available science” for the species. The telemetry data are collected from radio-tagged cranes by the Whooping Crane Tracking Partnership, of which the Service is a partner. Crane Report at 4-5. The sighting data, meanwhile, are historical records of visual sightings of cranes maintained by the Service, stretching back several decades. *Id.* These two data sets help determine those areas that cranes have historically relied on as stopover habitat, and unquestionably represent the best available science for assessing potential harm to the species during migration.

While the Mainline Alternative Route would place a small portion of the pipeline route just outside the delineated migratory corridor, this does not mean that the potential for adverse impacts in that area has been eliminated.⁴³ The telemetry data maintained by the Whooping Crane Tracking Partnership, of which the Service is a member, and the historical sighting data maintained directly by the Service, constitute the best available science on whooping crane movement and habitat use, and these data illustrate that whooping cranes rely on the area around the Mainline Alternative Route, especially where it crosses the Platte River, even in areas outside the designated corridor.⁴⁴ Moreover, there is no publicly available information as to where the pump stations and associated power lines would now be placed for the new Nebraska route. The Department must obtain this information and provide it with the draft EA for public comment, so that the public can fully assess the risk of harm to the species.

Nonetheless, given the proximity of crane stopover habitat to the project as shown in the Crane Report, it is evident that there is a high likelihood of harm to whooping cranes from construction and operation of Keystone XL, which must be fully assessed in the EA. However, it is already readily apparent from the attached Crane Report, and as set forth in the attached briefing, that the pump station power lines for Keystone XL *will* result in harm to whooping cranes from collisions and habitat disturbance. According to some of the foremost whooping crane experts, the project is not only likely to result in harm, but would jeopardize the continued existence of this iconic endangered species, since the loss of even a few breeding pairs could push it over the brink due to its low numbers, slow reproduction, and lack of genetic diversity.⁴⁵

Furthermore, the Department must consider the fact that the Service has failed to include the Region 6 Guidance measures into the conservation measures for the project, and none of the power line providers have committed to implementing the Region 6 Guidance conservation measures. *See* NPP Brief 61; NPP Reply Brief 87-90. Rather, the power providers have only committed to installing bird flight diverters, which are less than 50% effective at reducing collisions; therefore, collisions with the power lines are almost certain to occur, and the agencies do not have Section 9 take coverage, since impacts to whooping cranes were not analyzed through formal ESA consultation, and no incidental take statement has been issued for the species.

⁴³ Notably, the official “corridor” accounts for 95% of sightings, but that is based on older data. The telemetry data, gathered by the Whooping Crane Tracking Partnership, provide the best available science, and indicate that cranes do use areas outside the Service’s mapped corridor.

⁴⁴ This data set was provided to Commenters by U.S. Geological Survey through a request under the Freedom of Information Act.

⁴⁵ *See* Crane Report [page](#); Stehn & Wassenich, *supra*, at 25 (“[T]he species is in a race against time as the limited genetic material that survived the bottleneck continues to be lost in each generation. Thus, it is important to accelerate the rate of species recovery to minimize genetic loss.”).

Given that the Service has stated that “if one had to choose a species . . . to symbolize the endangered species program, the whooping crane would be the prime candidate,”⁴⁶ and the U.S. Supreme Court has unequivocally held that listed species are to be afforded the “highest of priorities,” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 174 (1978); 16 U.S.C. § 1536(a)(2),⁴⁷ it is evident from the best available data that this project poses an unacceptable risk to an iconic endangered species.

b. Terns and plovers

As set forth in the attached briefing, the Department failed to fully consider the potential impacts to interior least terns and piping plovers from the increased predation associated with raptor perching on the pump station power lines, and relied on outdated guidance regarding the use of pole top raptor guards to mitigate this adverse impact. The EA should therefore fully evaluate the potential for harm to these listed species, not only along the Mainline Alternative Route, but across the entire project area.

Furthermore, the Mainline Alternative Route would go through areas with significantly more interior least tern sightings,⁴⁸ as well as breeding habitat along the Platte River that was not analyzed by the agencies in their prior consultation documents. Similarly, the Mainline Alternative Route may pose a higher risk of harm to piping plovers breeding or nesting along the Platte River or other waterways that would be crossed by this new route—such as Union Creek and Shell Creek—which were not considered for the preferred alternative. Impacts to these listed species must be re-evaluated given the route change, and the cumulative impacts associated with additional harm must be considered.

B. Other concerns regarding impacts to habitat and species

1. Stream and river crossings

One of the biggest concerns that this project poses regarding potential harm to species are the various river crossings that would be required. River crossings pose a risk of harm to bird species that may feed and breed along the rivers, which behaviors may be adversely impacted by construction activities and noise. River crossings may also cause sedimentation of waterways with adverse impacts to aquatic species and habitats. Construction of a pipeline across a river entails burying the line beneath the river, which can be done several ways. The proposed

⁴⁶ Service, Whooping Crane Recovery Plan 6 (2007), https://www.fws.gov/refuge/Aransas/wwd/science/intl_recovery_plan.html.

⁴⁷ Consequently, where there is uncertainty regarding how a federal or federally authorized action may harm a listed species, the ESA requires that the Service “give ‘the highest of priorities’ and the ‘benefit of the doubt’” to listed species. *Sierra Club v. Marsh*, 816 F.2d 1376, 1386 (9th Cir. 1987) (citing *TVA v. Hill* and H.R. Conf. Rep. No. 697, 96th Cong., 1st Sess. 12 (1979)).

⁴⁸ As reported to eBird. See eBird.com.

crossings are likely to be performed via horizontal directional drilling (HDD), which involves drilling below the river. While this does not interrupt flow or cause as much damage to the streambed as other methods, this method still poses risks of harm to the river, and would still have the potential to harm aquatic species as well as birds in the construction area. Streams would likely be crossed using the open-cut wet method, which has the potential to alter flow and introduce sediment and other pollutants to the waterways, which can adversely affect aquatic biota through direct harm as well as alterations of the benthic streambed that they rely on for feeding, breeding, and sheltering.

We urge the Department to conduct a full analysis of the various alternative methods of stream crossings at the specific locations they would occur along the Mainline Alternative Route to ensure that there is a complete understanding of the threats these activities pose to the aquatic and riparian habitats and the alternatives available, including alternative methods and locations for stream and river crossings. The EA should also evaluate the use of temporal restrictions to avoid disrupting birds during certain critical seasons, and sufficient buffers to ensure that construction-related activities do not adversely affect wildlife, including listed species.

2. Habitat fragmentation and invasive species from roads, power lines, and pipeline rights of way

Construction of access roads, power lines and the pipeline right of way has the potential to produce myriad impacts to species and habitats through:

- Soil erosion, compaction, loss of forest/grassland productivity;
- Pollution: sedimentation, thermal loading;
- Rapid water runoff: peak flows;
- Impaired floodplain function;
- Barrier to movement of wood and spawning gravel;
- Fragmentation: wildlife dispersal barrier;
- Human disturbance, weed vector, hunting pressure, loss of snags, litter, nest predation, human fire ignition, etc.

Roads and other linear constructions, like pipelines and power lines, have a particularly negative influence on aquatic and riparian ecosystems and organisms. Roads interfere with movement of materials and organisms in three dimensions: upstream/downstream, channel/upland, and surface/subsurface.⁴⁹ Roads also act as conveyor belts for delivering chronic sediment to streams.⁵⁰

⁴⁹ Jim Doyle, *Where the Water Meets the Road*, <http://web.archive.org/web/20070325061623/http://www.fsl.orst.edu/geowater/RRR/jim/aquaha b/index.html>.

⁵⁰ Michael Derrig, *Road Improvements for Watershed Restoration*, <http://www.fsl.orst.edu/geowater/PEP/calFed/derrig/index.html>.

Over the last few decades, studies in a variety of terrestrial and aquatic ecosystems have demonstrated that road and cleared right-of-ways, like the proposed pipeline right-of-way, aggravate many of the most pervasive threats to biological diversity, including habitat destruction and fragmentation, edge effects, exotic species invasions, and pollution. These areas have been implicated as mortality sinks for animals ranging from snakes to wolves; as displacement factors affecting animal distribution and movement patterns; as population fragmenting factors; as sources of sediments that clog streams and destroy fisheries; as sources of deleterious edge effects; and as access corridors that encourage development, logging and poaching of rare plants and animals. Road building therefore threatens the existence of species in the project area—especially those that depend on connected habitat, or are susceptible to competition from invasive species.⁵¹

The EA must consider the full range of impacts to habitats and species, including those protected by federal law, from the construction and maintenance of the roads necessary to construct the pipeline, as well as the pipeline right of way itself.

3. Migratory birds

The migratory bird treaty act (MBTA) implements protections for all native migratory game and non-game birds with exceptions for the control of species that cause damage to agricultural or other interests. The MBTA prohibits the take of any migratory bird, part, nest, egg or product. Take, as defined in the MBTA, includes by any means or in any manner any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof.

The project has the potential to take migratory birds through construction-related impacts to migratory bird feeding and breeding habitats, loss of habitat and fragmentation of habitat areas, and impacts associated with power lines needed for the project, including increased risk of collision as well as predation from the increase in raptor nesting.⁵²

The EA must fully analyze the potential impacts to migratory birds, and should consider potential alternatives for the minimization of land and vegetation disturbance during project construction.

V. Conclusion

In sum, the Department cannot evade its duties under NEPA by preparing a belated Environmental Assessment for the Mainline Alternative Route now. It must vacate the cross-

⁵¹ Reed Noss, *The Ecological Effects of Roads*, <http://www.wildlandscpr.org/ecological-effects-roads>.

⁵² See Paul A. Johnsgard, *Wings Over the Great Plains: Bird Migrations in the Central Flyway* (2012), <http://digitalcommons.unl.edu/zeabook/13> (“Judging from available regional, state and local information, nearly 400 species of 50 avian families regularly use the Central Flyway during their migrations.”).

border permit and prepare a new supplemental EIS that evaluates the impacts of the new route and corrects the other deficiencies identified by Commenters in the attached briefs.

But even assuming this separate process is somehow appropriate, the Department cannot unduly restrict the scope of the EA. Rather, it must look at all direct and indirect effects, and connected and cumulative actions associated with the new route; examine the pipeline route as a whole; correct all the numerous deficiencies in the 2014 EIS; and take a hard look at all the new information that has come to light since the issuance of the 2014 EIS. Even the pipeline through Nebraska—taken alone—would have significant environmental impacts, requiring the preparation of an EIS.

As cooperating agencies, BLM and Corps have a duty to ensure the new EIS satisfies NEPA before they make their decisions on Keystone XL. They also have separate obligations under other statutes, including the MLA, FLPMA, and CWA.

Rather than proceeding under the legally and practically flawed path, we urge the Department to vacate the cross-border permit for Keystone XL and deny this environmentally destructive project once and for all.

Dated: June 25, 2018

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