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**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA
GREAT FALLS DIVISION**

INDIGENOUS ENVIRONMENTAL
NETWORK and NORTH COAST
RIVER ALLIANCE,

and

NORTHERN PLAINS RESOURCE
COUNCIL, et al.,

Plaintiffs,

v.

UNITED STATES DEPARTMENT
OF STATE, et al.,

Defendants,

TRANSCANADA KEYSTONE
PIPELINE and TRANSCANADA
CORPORATION,

Defendant-Intervenors.

CV 17-29-GF-BMM

CV 17-31-GF-BMM

**Northern Plains Plaintiffs'
Memorandum in Support of
Motion for Partial Summary
Judgment**

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INTRODUCTION

The State Department (Department) and U.S. Fish and Wildlife Service (Service) violated our nation's bedrock environmental laws when they reviewed and approved Keystone XL, a massive pipeline that would import vast amounts of tar sands crude oil from Canada. Tar sands crude oil—named for its thick, tar-like consistency—is one of the planet's most environmentally destructive energy sources. Because of how it is mined, transported, and refined, tar sands crude oil emits significantly more greenhouse gases than other crude oils. If built, Keystone XL would accelerate climate change by bringing up to 830,000 barrels (roughly 35 million gallons) per day of tar sands to refineries on the Gulf Coast. Its construction would also harm local lands, water, and wildlife along the 1,200-mile route.

Both the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA) required the Department and the Service to evaluate the effects of Keystone XL on the environment. But the agencies reviewed the project before knowing the pipeline's final route through Nebraska. Without that critical information, the agencies could not possibly have determined how the project would affect the local environment, and thus they violated both NEPA and the ESA on this basis alone.

The agencies also flouted NEPA and the ESA in other ways. The Department's Environmental Impact Statement (EIS) concludes that approving Keystone XL would have no effect on our climate, improperly assuming that the same amount of tar sands would be transported by other means if the pipeline were not built. But NEPA prohibits that sort of fatalistic reasoning. The EIS also ignores the cumulative climate impacts of approving Keystone XL and other massive tar sands pipelines, including the expansion of the Alberta Clipper pipeline, which was under Department review at the same time. The Department further erred by refusing to prepare a supplemental EIS before approving the project in 2017, relying instead on an outdated EIS from early 2014. In doing so, it ignored critical new information about oil prices, the feasibility of transporting tar sands by rail, the impacts of oil spills, and the new Nebraska route, among other things. Finally, the Department illegally reversed its 2015 decision *denying* the permit for Keystone XL, disregarding previously relied-upon facts without providing a meaningful explanation for changing course.

The Department and the Service also violated the ESA by erroneously concluding that Keystone XL is “not likely to adversely affect” three protected bird species: the whooping crane, piping plover, and interior least tern. The iconic whooping crane is critically endangered; fewer than 350 remain in the wild. The project requires construction of hundreds of miles of power lines—the greatest

threat to the species—in the cranes’ migratory corridor. Yet the agencies ignored the best available science on this issue: data showing that the birds rely on habitat areas near the proposed power lines. According to the world’s foremost whooping crane experts, these data prove that the project’s power lines would undoubtedly harm the species. The agencies improperly relied on unenforceable promises from third parties to implement conservation measures, and, in any case, those measures are insufficient to protect the cranes, as the Service’s own guidance document shows. The agencies also relied on an outdated guidance document to mitigate harm to plovers and terns. Their conclusion that Keystone XL is “not likely to adversely affect” these imperiled birds is fundamentally flawed.

Keystone XL would be one of the largest pipelines in the world, carrying the world’s dirtiest oil. The agencies’ conclusions that it would not harm our climate or the endangered species in its pathway are not only arbitrary and capricious, but contrary to common sense. The Court should grant this motion for partial summary judgment and vacate the approval of Keystone XL.

BACKGROUND

Intervenor TransCanada first applied to the Department for a cross-border permit for Keystone XL in 2008, pursuant to Executive Order 13,337. DOSKXLDMT0013308; 69 Fed. Reg. 25,299 (Apr. 30, 2004). Because the issuance of the permit is a “major federal action” triggering NEPA, the Department

prepared an environmental impact statement for the project.

DOSKXLDMT0013329-30.

After Congress imposed a deadline for a decision on the project, the Department denied TransCanada's application in 2012, explaining that Congress's arbitrary deadline left the agency insufficient time to complete its consideration of environmental impacts. DOSKXLDMT0017457. Shortly thereafter, TransCanada announced that it would build the southern segment of the pipeline in Oklahoma and Texas, which it renamed the "Gulf Coast Pipeline." DOSKXLDMT0005744-45. TransCanada did not seek a cross-border permit before building the Gulf Coast Pipeline because it does not cross a U.S. border. DOSKXLDMT0005745.

On May 4, 2012, TransCanada submitted a new application to the Department for a cross-border permit for Keystone XL. DOSKXLDMT0000001. The pipeline would import up to 830,000 barrels per day of tar sands crude oil from Alberta, Canada, and would cross Montana, South Dakota, and Nebraska. DOSKXLDMT0005646-47. In Steele City, Nebraska, it would connect to existing pipelines that serve Gulf Coast refineries. DOSKXLDMT0005646.

Following TransCanada's application, the Department and the Service began informally consulting on Keystone XL's threats to protected species pursuant to Section 7 of the ESA. On December 21, 2012, the Department submitted a final Biological Assessment to the Service. FWS000000000543. The Biological

Assessment concluded that the pipeline is “not likely to adversely affect” three protected species, among others: the whooping crane, interior least tern, and piping plover.¹ FWS00000000564-65. On May 15, 2013, the Service issued a Biological Opinion and concurrence statement for Keystone XL. FWS000000002036. The Service concurred with the Department’s conclusion that Keystone XL was “not likely to adversely affect” the whooping crane, interior least tern, and piping plover. FWS000000002044.

As part of its NEPA review, the Department released a Draft Supplemental EIS for Keystone XL in 2013, and after public comment, a Final Supplemental EIS in January 2014. DOSKXLDMT0005646, 5640. Among other things, the EIS concluded that the pipeline would not have a significant effect on tar sands production in Canada. DOSKXLDMT0005658.

In November 2015, TransCanada asked the Department to suspend its review of Keystone XL in response to state-court litigation that made it impossible to know what route the project would take through Nebraska.

DOSKXLDMT0001135. Shortly thereafter, the Department denied the cross-border permit. DOSKXLDMT0001157-59. In the Record of Decision (ROD) and National Interest Determination, the Department found that Keystone XL was

¹ The only species the Department determined that the pipeline was “likely to adversely affect” was the American burying beetle. FWS000000002045.

contrary to the national interest, citing the project's adverse climate and environmental impacts. DOSKXLDMT0001185-87.

Shortly after taking office in January 2017, President Trump invited TransCanada to reapply for the permit and directed the Department to make a permitting decision within sixty days of TransCanada's submission of an application. 82 Fed. Reg. 8663 (Jan. 24, 2017). Two days later, TransCanada filed a new permit application. DOSKXLDMT0001194. TransCanada also applied to Nebraska's Public Service Commission for approval of its preferred pipeline route through Nebraska. ECF No. 100-1 at 3.

The Department reinitiated ESA consultation with the Service in light of the new application. FWS000000002737. The agencies reevaluated the species they had previously determined would not likely be adversely affected, including the whooping crane, interior least tern, and piping plover. FWS000000002738-39. The Service decided that no new analysis was necessary, concurring again with the Department's "not likely to adversely affect" determination. FWS000000002749.

On March 23, 2017, the Department issued a new ROD and National Interest Determination, concluding that Keystone XL would serve the national interest. DOSKXLDMT0002520. In reaching that conclusion, it relied on the 2012 Biological Assessment, the 2013 Biological Opinion, and the 2014 EIS. DOSKXLDMT0002492, 2495-96. The Department then issued a cross-border

permit, which allows TransCanada to construct and operate Keystone XL along the route analyzed in the EIS. DOSKXLDMT0002485-86.

On March 30, 2017, Plaintiffs Northern Plains Resource Council, Bold Alliance, Center for Biological Diversity, Friends of the Earth, Natural Resources Defense Council, and Sierra Club (collectively, Plaintiffs) filed suit against the Department under NEPA and the Administrative Procedure Act (APA).² ECF No. 1. In June and August 2017, Plaintiffs amended their complaint to include ESA and APA claims against the Service and Department. ECF No. 46 ¶¶ 164-172; ECF No. 58 ¶¶ 164-178.

Plaintiffs are non-profit organizations with members who will be harmed by the project. Decls. of Allpress, Greenwald, Guisinger, Hartl, Hoff, Jewett Johnsgard, Miller-Richardson, Sikorski, Tanderup, Towe, and Trujillo. Plaintiffs participated in the comment process that culminated in the Department's issuance of the 2014 EIS, and identified serious problems with the EIS that the Department never cured. DOSKXLDMT0000565, 581, 1010, 1107, 1108, 2529, 2541.

² Plaintiffs also sued the Bureau of Land Management (BLM) under NEPA for its expected approval of right-of-way grants for the pipeline over approximately forty-seven miles of federal land. ECF No. 58 ¶¶ 153-158. Because BLM had not acted at the time the Court heard the motions to dismiss, the Court held that claim in abeyance. ECF No. 94 at 3. The Court should continue to hold that claim in abeyance until BLM issues its decision, which is expected within the next few months.

Plaintiffs also repeatedly requested a supplemental EIS in 2017, after TransCanada re-submitted its application. DOSKXLDMT00001235, 1847, 2112. 2142.

On November 20, 2017, months after the Department approved the cross-border permit, the Nebraska Public Service Commission denied TransCanada's application for its preferred route and instead approved the "Mainline Alternative" route. ECF No. 100-1 at 50-51. The new route goes through at least five different counties, crosses several distinct water bodies, and would be longer, requiring an additional pump station and accompanying power line infrastructure. *Id.*

After the Nebraska decision, Plaintiffs notified the agencies that they needed to reinitiate ESA Section 7 consultation on the Mainline Alternative route. Prange Decl., Ex. A. Plaintiffs also reiterated their request for a supplemental EIS. *Id.*, Ex. B. Although the agencies have taken steps to reinitiate consultation under the ESA on the new route, the Department has not committed to supplementing the EIS. *Id.*, Ex. C.

STANDARD OF REVIEW

Plaintiffs' claims are governed by the APA's standard of review. *See W. Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 481, 496 (9th Cir. 2011) (APA standard of review applies to NEPA claims and ESA citizen suit claims); *Bennett v. Spear*, 520 U.S. 154, 174 (1997) (same for other ESA claims). Hence, the Court must "set aside agency action that is 'arbitrary, capricious, an abuse of discretion,

or otherwise not in accordance with law.” *Kraayenbrink*, 632 F.3d at 481 (quoting 5 U.S.C. § 706(2)(A)). “Critical to that inquiry is whether there is a rational connection between the facts found and the conclusions made in support of the agency’s action.” *Id.* (internal quotation marks omitted).

ARGUMENT

I. The agencies could not properly analyze Keystone XL’s environmental impacts without knowing its route through Nebraska

The Department and the Service were required to analyze Keystone XL under NEPA and the ESA before the Department approved the cross-border permit. *See* ECF No. 93. However, because the pipeline route through Nebraska had not yet been established at the time of approval, the agencies could not have legally fulfilled their duties under these statutes.

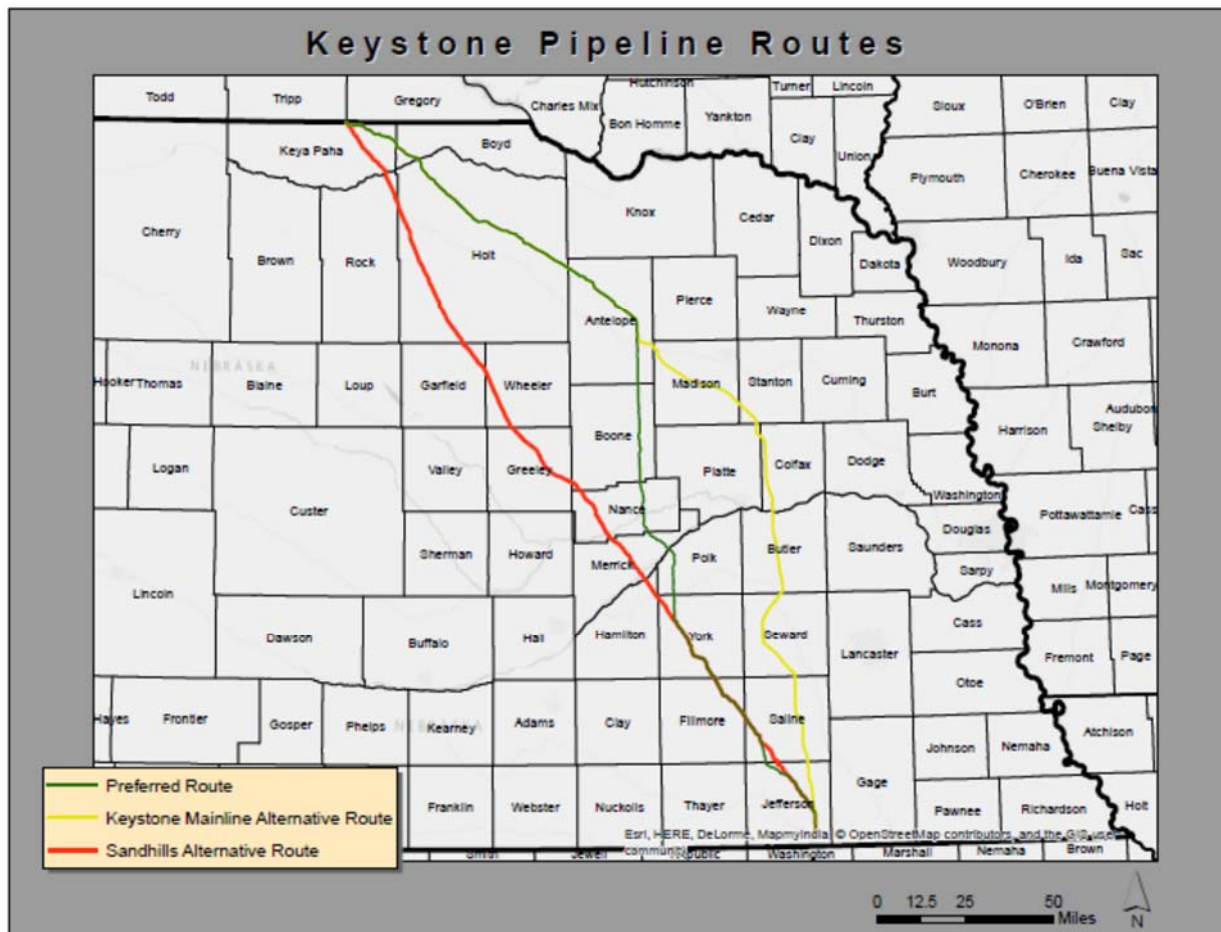
NEPA is our “basic national charter for protection of the environment.” 40 C.F.R. § 1500.1(a). It requires all federal agencies to prepare a “detailed statement” for any “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). This statement—the EIS—must describe the environmental impacts of the proposed action. *Id.* § 4332(2)(C)(i), (ii). It must include a “full and fair discussion” of the effects of the action, including those on “the affected region, the affected interests, *and the locality.*” 40 C.F.R. §§ 1502.1, 1508.27(a) (emphasis added). For a “site-specific action, significance would usually depend upon the effects in the locale....” *Id.* § 1508.27(a). Further, the

agency must consider the “[u]nique characteristics of the geographic area” when determining the significance of an action. *Id.* § 1508.27(b)(2).

The ESA likewise requires agencies to analyze the site-specific impacts of proposed projects. Under Section 7 of the ESA, all federal “action agencies” must, “in consultation with” the Service, “insure” that the actions they fund, authorize, or undertake are “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. 16 U.S.C. § 1536(a)(2). The ESA requires agencies to evaluate which species or critical habitats are present in the “action area,” which includes “all areas to be affected directly or indirectly by the Federal action.” 50 C.F.R. §§ 402.02, 402.12(a); *see also id.* § 402.14(c)(2) (stating that any request to initiate formal consultation with the Service must include a description of “the specific area that may be affected by the action”).

Here, at the time the agencies conducted their review of Keystone XL, the route in Nebraska was still undetermined. TransCanada itself requested that the Department suspend its review in 2015 for precisely this reason, stating that a delay would “allow a decision on the Permit to be made later based on certainty with respect to the route of the pipeline.” DOSKXLDMT0001135. TransCanada was right to be wary; in November 2017, the Nebraska Public Service Commission approved a route—the Mainline Alternative route—that differs substantially from

the “preferred” route analyzed in the agencies’ NEPA and ESA documents. ECF No. 100-1. Even now, the route in Nebraska is far from certain, as landowners along the new route are challenging the Commission’s decision in state court.



Map of Keystone XL routes: The green route was analyzed by the agencies in the NEPA and ESA documents, but the yellow route was recently approved by the Nebraska Public Service Commission.³ See Prange Decl., Ex. C.

³ This map also shows, in red, the “Sandhills Alternative Route,” which was considered in the EIS as the “2011 Steele City Alternative.” DOSKXLDMT0006096, 6112.

Without knowing where the pipeline or its associated infrastructure would be built, the agencies could not analyze the project's adverse environmental effects in Nebraska, such as which waterbodies or sensitive areas it would cross, or which protected species and habitats it would harm. As a threshold matter, the agencies' determinations were based on incomplete information, and were therefore arbitrary and capricious in violation of both NEPA and the ESA.

II. The Department violated NEPA when it approved Keystone XL

A. The Department's conclusion that Keystone XL would not affect the rate of tar sands production is misleading and contrary to NEPA

Based on a faulty understanding of NEPA's legal requirements, the Department arbitrarily concluded that Keystone XL—one of the largest oil pipelines ever proposed—would have no effect on our climate because the increased production of tar sands crude oil is inevitable. The Department then used that arbitrary conclusion as the basis for its no action alternative, further obscuring the project's climate-polluting effects. The Department's analysis is misleading and violates NEPA.

The EIS repeatedly states that denying Keystone XL would have no effect on greenhouse gas emissions because the same amount of tar sands would be transported to market regardless of whether the project is built.

DOSKXLDMT0005654, 5658, 5661, 5760, 5767, 5890-91, 6053-54. Because tar

sands deposits are landlocked in northern Alberta, the future growth of the tar sands industry is dependent on pipelines or similar infrastructure to bring the oil to refineries and export markets. Without additional transportation capacity, further development of the tar sands industry in Alberta will be constrained. *See* DOSKXLDMT0005654, 5788. Indeed, the EIS admits that “[t]ransportation constraints” can significantly affect crude oil markets, including the tar sands market. DOSKXLDMT0005804. However, in a “market analysis” section, the EIS finds that if Keystone XL is not built, the same amount of oil would be transported by other means, such as by new pipelines or by train. DOSKXLDMT0005891-92.

The EIS then discusses three “no action” alternatives claiming to analyze what would happen if the Department denied the project: a “Rail and Pipeline Scenario,” a “Rail and Tanker Scenario,” and a “Rail Direct to the Gulf Coast Scenario.” DOSKXLDMT0005673. The EIS assumes that each of these “no action” alternatives would “[t]ransport similar quantities of crude oil as the proposed Project” over the same period. DOSKXLDMT0007456-57, 5673 (stating that these no action alternatives “*are believed to meet the proposed Project’s purpose* (i.e., providing [tar sands] and Bakken crude oil to meet refinery demand in the Gulf Coast area)” (emphasis added)). Based on the market analysis and these “no action” alternatives, the EIS concludes that denying the project would have no beneficial effect on the climate. *See* DOSKXLDMT0005679, 5661. The

Department relied heavily on this conclusion in its 2017 ROD approving the project. DOSKXLDMT0002502, 2514.

Both the Department's conclusion that Keystone XL would have no effect on tar sands production, and its use of that conclusion to shape the no action alternatives, violate NEPA. An EIS must include a "full and fair discussion" of the "direct," "indirect," and "cumulative" effects of the proposed action. 40 C.F.R. §§ 1502.1, 1502.16(a), (b), (h), 1508.25(c). Indirect effects include those "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable," including "growth inducing effects." *Id.* § 1508.8(b). Here, the indirect effects of Keystone XL include the greenhouse gas emissions caused by the mining, transportation, and consumption of the tar sands transported by the pipeline, including the growth-inducing effect the pipeline would have on tar sands production in Canada. *See* DOSKXLDMT0007214 (purporting to analyze indirect greenhouse gas emissions).

An EIS also must address "all reasonable alternatives" to the proposed action, including "the alternative of no action." 40 C.F.R. § 1502.14(a), (d). The no action alternative "provide[s] a baseline against which the action alternative...is evaluated." *Ctr. for Biological Diversity v. U.S. Dep't of the Interior*, 623 F.3d 633, 642 (9th Cir. 2010). "Without [accurate baseline] data, an agency cannot carefully consider information about significant environment impacts...resulting in

an arbitrary and capricious decision.” *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1085 (9th Cir. 2011). As part of the no action alternative, the agency should consider the “predictable actions of others.” 46 Fed. Reg. 18,026, 18,027 (Mar. 23, 1981).

However, a no action alternative is “meaningless if it assumes the existence of the very plan being proposed.” *Pac. Coast Fed’n of Fishermen’s Ass’ns v. U.S. Dep’t of the Interior*, 655 F. App’x 595, 598 (9th Cir. 2016) (internal quotation marks omitted). Accordingly, “courts not infrequently find NEPA violations when an agency miscalculates the ‘no build’ baseline or when the baseline assumes the existence of a proposed project.” *N.C. Wildlife Fed’n v. N.C. Dep’t of Transp.*, 677 F.3d 596, 603 (4th Cir. 2012); *see also Friends of Yosemite Valley v. Kempthorne*, 520 F.3d 1024, 1038 (9th Cir. 2008) (“The baseline alternative should not have ‘assume[d] the existence of the very plan being proposed.’”). In short, an agency cannot assume that the effects of the project are inevitable. *Davis v. Mineta*, 302 F.3d 1104, 1122-23 (10th Cir. 2002) (noting that “[a] conclusory statement that growth will increase with or without the project, or that development is inevitable, is insufficient”), *abrogated on other grounds*.

For example, in *Center for Biological Diversity*, BLM prepared an EIS for a transfer of federal land to a mining company. 623 F.3d at 636. The Ninth Circuit rejected the agency’s assumption that mining would occur on the land regardless of

whether BLM approved the transfer. *Id.* at 643. That assumption, the court reasoned, had the effect of conflating the project with the no action alternative, when, in fact, approving the project would make it much more likely that mining would occur. *Id.* at 642-43, 646.

The court in *WildEarth Guardians v. U.S. BLM* rejected a similar assumption. 870 F.3d 1222 (10th Cir. 2017). There, the government claimed that leasing tracts of land in Wyoming’s Powder River Basin for coal mining would have no effect on coal consumption because “the key determinant of energy consumption is population,” and so coal from another source would be substituted to meet energy demands. *Id.* at 1229. The court held that this “perfect substitution” theory was an abuse of discretion. *Id.* at 1236, 1234-38. “Even if we could conclude that the agency had enough data before it to choose between the preferred and no action alternatives,” the court reasoned, “we would still conclude this perfect substitution assumption arbitrary and capricious because the assumption itself is irrational (i.e., contrary to basic supply and demand principles).” *Id.* at 1236; *see also High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1197 (D. Colo. 2014) (rejecting the government’s argument that “the same amount of coal will be burned” regardless of whether the government approved leases for coal production).

The EIS here suffers from the same flaws. Like the agency in *Center for Biological Diversity*, 623 F.3d at 646, the Department wrongly concluded that the same level of tar sands production was inevitable regardless of whether Keystone XL was approved, and used that flawed conclusion as the basis for its no action alternatives. Although the EIS's "market analysis" claims to support this conclusion, no amount of modeling can validate a legally faulty premise. The Department's assumption that other rail, tanker, or pipeline projects would be built to carry Keystone XL's same capacity is especially problematic because those other infrastructure projects could also be subject to NEPA or other environmental laws. *See id.* at 643-46 (stating that the agency must consider whether NEPA or other environmental laws would apply projects in the no action alternative). And the Department's reasoning that the "dominant drivers of oil sands development are more global than any single infrastructure project," DOSKXLDMT0005658, is nearly identical to BLM's unlawful excuse in *WildEarth Guardians* that "the key determinant of energy consumption is population," 870 F.3d at 1229. The global demand for oil, whatever it may be, does not excuse an agency from fully disclosing and analyzing a project's contribution to climate change. That other future projects might also enable additional development of tar sands does not negate the fact that Keystone XL surely would.

The Department's inclusion of three no action alternatives further shows how this inevitability conclusion is flawed. While the no action alternative should analyze "predictable actions by others," 46 Fed. Reg. at 18,027, the fact that the Department felt compelled to analyze *three* different no action scenarios reveals that it could not predict what would happen if it denied Keystone XL. Agencies are "obligated to provide a *single*, comprehensive no-action alternative" to compare to the action alternatives. *Conservation Nw. v. Rey*, 674 F. Supp. 2d 1232, 1247 (W.D. Wash. 2009) (emphasis added); *see also id.* (agreeing that having more than one no action alternative "makes no cognitive sense" because "there can be only one baseline").

In fact, the Department fully admitted that it had no idea whether any of its three no action alternatives would be built if it denied Keystone XL. DOSKXLDMT0006056 (stating that the scenarios are merely "representation[s]"). The absurd nature of the alternatives also makes that clear. For example, the "Rail and Pipeline Scenario" assumes construction of *seven* crude-oil offloading terminals on 3,500 acres, or 5.5 square miles, in the tiny town of Stroud, Oklahoma. DOSKXLDMT0007458, 7469. Likewise, the "Rail and Tanker Scenario" assumes construction of a new rail and marine terminal "encompassing approximately 4,200 acres [6.5 square miles] and capable of accommodating two Suezmax tankers" on the remote northern Pacific coast of Canada.

DOSKXLDMT0005673. As far as Plaintiffs are aware, these projects never materialized after Keystone XL was denied in 2015. They are far from being predictable or inevitable. Yet the Department used these alternatives, with their massive infrastructure footprints, to artificially inflate the negative environmental consequences of denying the project. DOSKXLDMT0005678-81, 7461-557 (nearly 100 pages of analysis of the purported local impacts of the no action alternatives).

In sum, the Department's inevitability assumption turns NEPA analysis into a perpetual shell game, where each EIS for an oil infrastructure project argues that other future projects would cause the same increase in greenhouse gases. But project proponents can *always* claim that someone else will build something similar if their project is rejected. And yet without each of these individual projects, no additional oil would be brought to market. By including multiple no action alternatives that assume that the exact same amount of tar sands will be produced and consumed, the EIS effectively assumes the existence of the project in the baseline. It is patently arbitrary, and a violation of NEPA, for the Department to approve Keystone XL based on this false notion of inevitability.

B. The Department failed to analyze the cumulative climate impacts of Keystone XL and other tar sands pipelines

The Department violated NEPA by failing to evaluate the cumulative climate change impacts of Keystone XL combined with other past, present, and

reasonably foreseeable tar sands pipelines, including the proposed expansion of the massive Alberta Clipper pipeline.

NEPA requires that an EIS consider the cumulative impacts of the proposed federal agency action, including “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.” 40 C.F.R. § 1508.7. NEPA also requires agencies to evaluate, in a single EIS, all cumulative actions—those 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).

The Supreme Court has likewise held that “when several proposals...that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together.” *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976); *see also Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d 1291, 1306 (9th Cir. 2003). NEPA’s cumulative analysis mandate thus guards against “the tyranny of small decisions,” *Kern v. U.S. BLM*, 284 F.3d 1062, 1078 (9th Cir. 2002), by forcing federal agencies to confront the possibility that their choices may result in cumulatively significant impacts, even where individual projects appear insignificant in isolation, *see* 40 C.F.R. § 1508.27(b)(7).

In 2013, the Department announced that it would prepare an EIS for a new application from another pipeline company, Enbridge, to expand the capacity of its Alberta Clipper pipeline from 450,000 barrels per day to 880,000 barrels per day. 78 Fed. Reg. 16,565, 16,566 (Mar. 15, 2013). Following that announcement, Plaintiffs repeatedly urged the Department to evaluate the cumulative climate impacts of Keystone XL *and* the Alberta Clipper expansion, as well as all other past, present, and reasonably foreseeable tar sands pipelines. *See, e.g.*, DOSKXLDMT0001235, 1847, 2112, 2142; Prange Decl., Ex. B at 5-6.

Indeed, Plaintiffs submitted an article written by leading scientists and economists that warned that the “current pattern of incremental decisions creates the misguided idea that [tar sands] expansion is inevitable” and that “[w]hen judged in isolation, the costs, benefits and consequences of a particular [tar sands] proposal may be deemed acceptable....” DOSKXLDMTD0002053. However, the “collective result of these decisions is unnecessarily high social, economic and environmental costs.” DOSKXLDMTD0002053. The article warns that the failure to evaluate the cumulative effects of these projects undermines U.S. and Canadian efforts to meet greenhouse gas reduction targets. DOSKXLDMTD0002052-54.

These numerous requests were met with silence. The EIS and the 2017 ROD both acknowledge the pending application for the Alberta Clipper expansion. DOSKXLMTD0005805, 2501. However, neither discusses any cumulative climate

effects associated with approving both pipelines, or other tar sands pipelines the Department and other agencies had approved in recent years.⁴ *See, e.g.*, DOSKXLDMT0007266 (focusing cumulative impacts analysis on regional impacts); DOSKXLDMT0007343-44 (limiting evaluation of cumulative greenhouse gas emissions to direct emissions caused by pipeline construction and operation). In fact, the EIS did exactly what scientists warned against—it viewed Keystone XL in isolation and concluded that the “approval or denial of *any one crude oil transport project, including the proposed Project*, is unlikely to significantly impact the rate of extraction in the oil sands or the continued demand for heavy crude oil at refineries in the United States....” DOSKXLDMT0005661 (emphasis added). Similarly, the 2017 ROD concludes: “*By itself* the proposed project is unlikely to significantly impact the level of [greenhouse gas]-intensive oil-sands crude or the continued demand for heavy crude oil at refineries in the United States.” DOSKXLDMT0002517-18 (emphasis added).

Notably, the Department admitted that approving multiple tar sands pipelines has significant cumulative climate impacts in the EIS for the Alberta Clipper expansion, which it issued just five months after it approved Keystone XL.

⁴ For example, the Department approved the 550,000-barrel-per-day Keystone I pipeline, 73 Fed. Reg. 11,456 (Mar. 3, 2008), and the 450,000-barrel-per-day Alberta Clipper pipeline, 74 Fed. Reg. 43,212 (Aug. 26, 2009).

That EIS estimates that approval of both Keystone XL and Alberta Clipper could cumulatively result in up to 49.9 million metric tons of greenhouse gas emissions per year (due to increased tar sands development) over the forty-year lifespans of the pipelines.⁵ That is equivalent to 10.6 million cars driven, or 12.4 coal-fired power plants operated, each year.⁶

The Department's failure to evaluate these cumulative climate impacts in the Keystone XL EIS violates NEPA and the APA. In *Western Land Exchange Project v. U.S. BLM*, the court held that BLM failed to adequately consider the cumulative impacts of opening a 6,478-acre parcel of land to development where there were other concurrent proposals before that agency that would result in the total development of 36,747 acres into a population center of over 200,000 residents. 315 F. Supp. 2d 1068, 1094-95 (D. Nev. 2004). The court rejected BLM's argument that it need not analyze cumulative impacts of all these proposals

⁵ See Prange Decl., Ex. B at 5-6 (referencing Line 67 Expansion Final Supplemental EIS (Aug. 2017), at 6-83 to 6-86, <https://www.state.gov/documents/organization/273539.pdf>). The Department's approval of the Alberta Clipper expansion in August 2017, and its analysis in that EIS of the cumulative climate effects of approving both pipelines, constitutes significant new information requiring a supplemental EIS for Keystone XL. See section II.C., *infra*.

⁶ These estimates are based on the U.S. EPA's greenhouse gas equivalencies calculator, <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>, which the Department relies on throughout the EIS. See, e.g., DOSKXLDMT0007344.

because rapid growth of the region was already occurring and was expected to continue. *Id.* at 1095; *see also Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1378-80 (9th Cir. 1998) (finding the Forest Service violated NEPA by failing to analyze the cumulative impacts of four separate logging projects that, together, would further deplete existing old-growth habitat).

Similarly, in *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 538 F.3d 1172, 1215-17 (9th Cir. 2008), the court struck down NHTSA's failure to analyze the cumulative effects of multiple agency actions on greenhouse gas emissions, explaining:

The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct. Any given rule setting a [fuel economy] standard might have an "individually minor" effect on the environment, but these rules are "collectively significant actions taking place over a period of time."

Id. at 1217 (quoting 40 C.F.R. § 1508.7).

The Department committed the same error here. Relying on the erroneous assumption that tar sands expansion is inevitable, the Department's EIS completely ignored the cumulative effects of approving multiple pipelines, including increased tar sands development and associated climate pollution. These consequences cannot be disputed, as the Department's own Alberta Clipper EIS demonstrates. In short, NEPA required the Department to analyze the cumulative impacts of approving multiple tar sands pipelines before approving Keystone XL.

C. The Department’s failure to supplement the EIS despite new information and changed circumstances was arbitrary and capricious

The Department further violated NEPA when it approved the cross-border permit for Keystone XL in 2017 based on an outdated and obsolete EIS from 2014. In the three years since the Department released the EIS, new information and changed circumstances bearing on Keystone XL’s impacts have come to light—including a dramatic drop in oil prices that has upended the tar sands industry, new data on the feasibility of tar sands transport by rail, new information about tar sands crude oil spills, new information on greenhouse gas emissions from tar sands, and a new pipeline route through Nebraska—all of which require a supplemental EIS. The Department attempted to address some of this new information in the 2017 ROD, but failed to explain why a supplemental EIS was not necessary, and it ignored other new information altogether. This is inconsistent with NEPA.

1. The Department failed to take a “hard look” at new information regarding oil markets, crude by rail, oil spills, and greenhouse gas emissions

NEPA regulations dictate that an agency must prepare a supplemental EIS if it makes substantial changes in the proposed action, or if there are significant new circumstances or information that are relevant to environmental concerns. 40 C.F.R. § 1502.9(c)(1). The Department’s own regulations likewise provide that

“[a] final EIS *shall* be supplemented when a substantial change is made...or when significant new information on the environmental impacts comes to light...or when the draft is otherwise out of date.” 22 C.F.R. § 161.9(k) (emphasis added); *see also Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 372 (1989) (recognizing the duty to supplement); *Klamath Siskiyou Wildlands Ctr. v. Boody*, 468 F.3d 549, 562 (9th Cir. 2006) (stating that the bar for triggering a supplemental EIS is low).

An agency’s decision not to prepare a supplemental EIS is controlled by the APA’s arbitrary-and-capricious standard.⁷ *Marsh*, 490 U.S. at 375-76. The court must decide whether the agency took a “hard look” at the new information to determine whether supplemental review was necessary. *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 557 (9th Cir. 2000); *see also Idaho Wool Growers Ass’n v. Vilsack*, 816 F.3d 1095, 1107 (9th Cir. 2016). In determining whether a supplemental EIS is required, courts consider the environmental significance of the new information, its probable accuracy, the degree to which the agency considered the new information and its impact, and the degree to which the agency supported its decision not to supplement with explanation or additional data. *Warm Springs Dam Task Force v. Gribble*, 621 F.2d 1017, 1024 (9th Cir. 1980).

⁷ Alternatively, the Court can consider the failure to prepare a supplemental EIS as “agency action unlawfully withheld or unreasonably delayed” pursuant to 5 U.S.C. § 706(1). *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 560 (9th Cir. 2000).

Here, new information and changed circumstances since issuance of the EIS required supplemental analysis. The Department's cursory review of this information in the 2017 ROD fails to meet the APA's "hard look" requirement and violates NEPA.

a. Change in oil markets

High oil price projections were the foundation of the EIS's assumption that Keystone XL would be unlikely to cause an increase in tar sands development. The EIS assumed oil prices would range from \$100 per barrel to \$140 per barrel over the next twenty years, DOSKXLDMT0005849-97, and that unfettered tar sands growth was inevitable because, at those prices, the product would find a way to market with or without Keystone XL. DOSKXLDMT0005661.

The EIS's projections have proven to be wildly inaccurate. Just months after the EIS's release, oil prices plummeted to \$38 per barrel and remained at or below \$50 for years. DOSKXLDMT0001168, 1849, 1237, 1282, 1283. The U.S. Energy Information Agency now predicts prices will remain low, and likely will not reach \$100 per barrel again until around 2040. DOSKXLDMT0001849, 1872, 1883.

Significantly, the EIS acknowledged that lower oil prices would alter the Department's analysis. DOSKXLDMT0005895 ("[L]ower-than-expected oil prices could affect the outlook for oil sands production...."); DOSKXLDMT0001255 ("[C]rude oil price thresholds potentially relevant to future production levels could

change if supply costs or production expectations prove different than estimated in the Supplemental EIS.”). It even found that if oil prices dropped below \$75 per barrel, Keystone XL could lead to increased tar sands development.

DOSKXLDMT0005657-58, 5884, 5896.

The 2017 ROD acknowledges these dramatic changes in oil prices, but arbitrarily dismisses them by claiming they would not alter the EIS’s conclusions. *See, e.g.*, DOSKXLDMT0002503-04. The EIS, however, found that lower oil prices *would* significantly affect the Department’s analysis, rendering the ROD’s contrary conclusion arbitrary and capricious. DOSKXLDMT0005657-58, 5884, 5896. Because the federal government’s own best information now predicts lower oil prices, the Department must supplement its EIS to evaluate this new information.

The Environmental Protection Agency (EPA), which commented on the EIS in 2015, specifically called on the Department to revise its analysis based on the drop in oil prices, among other things. As the EPA pointed out, the EIS’s conclusion that Keystone XL would have no effect on greenhouse gas emissions was “based in large part on projections of the global price in oil.”

DOSKXLDMT0000973. The EPA further noted that construction of the pipeline could have a significant effect on tar sands development if oil prices were lower.

DOSKXLDMT0000974. “Given the recent variability in oil prices,” said the EPA,

“it is important to revisit these conclusions.” *Id.* (emphasis added). Yet the Department refused to do so.

The Department’s reliance on the EIS’s outdated and demonstrably inaccurate market projections, and failure to revise this analysis in a supplemental EIS, violates NEPA and the APA.

b. Crude by rail

The EIS assumed that in the absence of Keystone XL, significant amounts of tar sands would be shipped by rail, and that neither increased costs nor tank car availability would pose any constraints to such rail shipments.

DOSKXLDMT0005769, 5811-49. These assumptions led to the EIS’s conclusion that the same amounts of tar sands would be extracted and transported to market with or without Keystone XL. DOSKXLDMT0005892

These projections have now been proven wrong. Many of the proposed on- and off-loading rail facilities that the EIS assumed would be built have been deferred or canceled. DOSKXLDMT0001241, 1857. More important, tar sands crude oil simply has not been moving by rail in any significant amount—even after Keystone XL was denied in 2015—either because of cost or other limitations. Recent data from the U.S. Energy Information Agency (which tracks crude-by-rail shipments), as well as the Department’s own internal analysis, show that contrary to what the EIS predicted in 2014, oil imports by rail from Canada have not

increased. *Compare* DOSKXLDMT0005813-15 (stating that imports by rail were at roughly 130,000 barrels per day (bpd) in 2013), *with* DOSKXLDMT0001861-63; 2129 (noting that imports by rail “equaled 107,000 bpd and 91,000 bpd in 2015 and 2016 respectively”).

In 2015, the federal government also adopted new oil train regulations that require retrofits of existing tank cars and other safety measures. DOSKXLDMT0001241; 80 Fed. Reg. 26,644 (May 8, 2015); Pub. L. No. 114–94, 129 Stat. 1312 (2015). These regulations will increase the costs of transporting oil by rail and make securing tank cars increasingly difficult. Indeed, a recent analysis by Oil Change International shows that per-barrel cost of rail transport is nearly double that of transport by pipeline, and that the majority of new tar sands extraction projects are unlikely to move forward with rail as their only transportation option. DOSKXLDMT0001863-65.

The ROD fails to analyze any of this new information or articulate why a supplemental EIS is not warranted. Instead, it acknowledges that rail “remains a more expensive form of transportation than pipelines,” DOSKXLDMT0002504, and that the “extent to which rail transport will actually occur [] or would prove to be a major form of transport for [tar sands] crude to the United States in the long-term, remains uncertain,” DOSKXLDMT0002504. This is not the “hard look” that NEPA requires. *See Friends of the Clearwater*, 222 F.3d at 557.

The Department made crude by rail the centerpiece of its conclusion that approving Keystone XL would have no effect on tar sands production; new information showing that the transport of tar sands by rail remains limited and will be significantly costlier than anticipated requires a supplemental EIS.

c. Oil spills

The Department also failed to consider new information regarding oil spills. Numerous oil pipeline spills have occurred since the 2014 EIS was published, many of which were significant. DOSKXLDMT0001238-40. Recent crude oil spills from TransCanada's existing Keystone I pipeline, for example, indicate such spills are more likely to occur than TransCanada or the Department had estimated.

In approving the Keystone I pipeline, the Department estimated that the chance of a leak of more than 50 barrels was "not more than once every seven to 11 years over the entire length of the pipeline in the United States." Prange Decl., Ex. B at 4. Yet the Keystone I pipeline has now had three spills of over 50 barrels—including a 16,800-gallon spill in 2016 and a 210,000-gallon spill on November 16, 2017—since coming online in 2010. *Id.*; DOSKXLDMT0001239. The 2014 EIS similarly predicts no more than 1.1 spills from Keystone XL every ten years. DOSKXLDMT0012067-68. However, the proven inaccuracy of TransCanada's spill projections for Keystone I demands that the Department

reexamine its projections for Keystone XL in a supplemental EIS. *See Friends of the Clearwater*, 222 F.3d at 557.

Moreover, the Department has disregarded a critical new study about the difficulty of cleaning up tar sands crude oil spills. In 2016, the National Academies of Science, Engineering, and Medicine (NAS) published a seminal report highlighting the dangers of spills of diluted bitumen (dilbit), which is the diluted form of tar sands transported in pipelines. DOSKXLDMT0002506, 1373-1516. The NAS study, which was conducted at the direction of Congress, found that dilbit spills pose a higher risk to people and the environment due to unique properties that differentiate it from conventional oil, and that federal “regulations and agency practices do not take the unique properties of diluted bitumen into account, nor do they encourage effective planning for spills of diluted bitumen.” DOSKXLDMT0001393. This new information bears on the risks of Keystone XL, the frequency of spills, and the development of mitigation measures and best practices.

The ROD acknowledges that the NAS Study constitutes new information relevant to the environmental impacts of Keystone XL. *See* DOSKXLDMT0002506 (noting the study is one of “several new studies related to cleanup of diluted bitumen [that] have been published” since the EIS; and recognizing its key findings that dilbit spills present more challenges for cleanup

response than conventional crude and that agencies and first responders are ill-equipped to respond to such spills). However, the ROD arbitrarily dismisses this new information by reasoning: “[T]he measures that Keystone *has already committed to* [in the 2014 EIS]...adequately address the *new* challenges, training needs, and communication needs identified in the 2016 study.”

DOSKXLDMT0002507 (emphasis added).

The ROD provides no discussion of the specific challenges and needs identified by the 2016 NAS study, including the unique ways dilbit behaves when released into the environment, the logistical challenges associated with responding to dilbit spills, and recommendations for mitigating long-term environmental and public health impacts. *See, e.g.*, DOSKXLDMT0001465-67, 1470-71.

Nor does the ROD explain how the measures developed in 2014 adequately address these new findings from 2016. In fact, the only specific measures the ROD mentions are requirements for providing “material safety data sheets” to first responders and potable water to affected communities in the event of a spill.

DOSKXLDMT0002506-07. This cursory treatment of the NAS study fails to constitute the “hard look” at new information that NEPA requires. *See Neighbors of Cuddy Mountain*, 137 F.3d at 1380-81 (holding the Forest Service’s “broad generalizations and vague references to mitigation measures” failed to provide enough detail to satisfy NEPA).

d. Greenhouse gas emissions

The Department's EIS for the Alberta Clipper pipeline used a new model developed by the Argonne National Laboratory in November 2016 for evaluating greenhouse gas emissions from various crude oils such as tar sands, called GREET (Greenhouse Gases, Regulated Emissions, and Energy use in Transportation model). DOSKXLDMT0001857. The 2017 ROD acknowledges the new GREET model, and states that the model estimates tar sands crude oil to have up to 20% higher life cycle greenhouse gas emissions than previously projected in the EIS. DOSKXLDMT0002501. It also discusses the potential reasons for, and uncertainties underlying, these higher estimates. *Id.*

This major increase in estimated greenhouse gas emissions from tar sands is exactly the type of new information the Department must evaluate in a supplemental EIS and allow the public to comment on. *See* 40 C.F.R. § 1502.9(c)(4) (new information must be evaluated in a supplemental EIS and circulated for public comment “in the same fashion (exclusive of scoping) as a draft and final statement”); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) (explaining that the EIS “provides a springboard for public comment”). The ROD fails to take a “hard look” at this new information and explain why a supplemental EIS is not warranted.

2. The Department has ignored significant post-decisional information and changes to the project that warrant a supplemental EIS

Since the Department issued the cross-border permit for Keystone XL in March 2017, changes to the project and new information require the preparation of a supplemental EIS.

First, in November 2017, the Nebraska Public Service Commission approved the Mainline Alternative route, which would require the construction of approximately 150 miles of pipeline across five new counties in Nebraska. *See* section I., *supra*. This constitutes a “substantial change[] in the proposed action,” requiring supplemental NEPA analysis.⁸ 40 C.F.R. § 1502.9(c)(1)(i). Despite this clear requirement, the Department has given no indication that it intends to prepare a supplemental EIS or to explain why one is not required.

In addition, the Department released an EIS for the Alberta Clipper expansion in August 2017 that estimates approving both Keystone XL and Alberta Clipper could cumulatively result in up to 49.9 million metric tons of greenhouse gas emissions per year. *See* section II.B., *supra*. The Department subsequently

⁸ The cross-border permit expressly requires TransCanada to seek additional Department approval for any such change. *See* DOSKXLDMT0002486 (stating that “the permittee shall make no substantial change” to the project without Department approval and that the “construction, operation, and maintenance...shall be in all material respects as described in the permittee’s application for a Presidential permit...and Final Supplemental Environmental Impact Statement”).

issued the cross-border permit for Alberta Clipper on October 16, 2017. Prange Decl., Ex. B at 5. This constitutes significant new information demonstrating the proposal “will have a significant impact on the environment in a manner not previously evaluated and considered.” *Westlands Water Dist. v. U.S. Dep’t of the Interior*, 376 F.3d 853, 873 (9th Cir. 2004) (internal quotation marks omitted).

In *Friends of the Clearwater*, the court held that the Forest Service violated NEPA by failing to explain whether new information—the designation of sensitive tree species in the decade since the last EIS—was significant enough to warrant a supplemental EIS. 222 F.3d at 558. The court explained that an agency must “continue to take a ‘hard look at the environmental effects of [its] planned action, even after a proposal has received initial approval.’” *Id.* at 557 (quoting *Marsh*, 490 U.S. at 374). “When new information comes to light the agency must consider it, evaluate it, and make a reasoned determination whether it is of such significance as to require [a supplemental EIS].” *Id.* at 558 (quoting *Warm Springs Dam Task Force*, 621 F.2d at 1024). The court found a NEPA violation because there was no evidence in the record that the Forest Service ever did so. *Id.*

The same is true here. There is no evidence that the Department has even considered the new route or new information on cumulative effects, or documented a reasoned decision as to whether a supplemental EIS was warranted. Accordingly, the Department violated NEPA and the APA.

D. The Department failed to give a reasoned explanation when it reversed course and approved the cross-border permit for Keystone XL

In its 2015 ROD, the Department concluded that Keystone XL did not serve the national interest because it would undermine U.S. leadership on climate change while having a negligible impact on energy security, and, accordingly, denied the cross-border permit. DOSKXLDMT0001185-88. In its 2017 ROD, on precisely the same NEPA record, the Department reached the opposite conclusion and granted the permit. DOSKXLDMT0002516-20. This reversal is arbitrary and capricious, in violation of NEPA and the APA.

The APA requires that an agency “examine the relevant data and articulate a satisfactory explanation for its action.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins.*, 463 U.S. 29, 43 (1983). A “more detailed justification” is required when an agency reverses course, adopting a new policy that “rests upon factual findings that contradict those which underlay its prior policy.” *FCC v. Fox Television Stations*, 556 U.S. 502, 515 (2009). Indeed, “an agency’s decision to change course may be arbitrary and capricious if the agency ignores or countermands its earlier factual findings without reasoned explanation for doing so.” *Id.* at 537 (Kennedy, J., concurring).

Here, the Department’s 2017 ROD rests on factual findings that directly contradict those underpinning the 2015 ROD. The 2015 ROD—relying heavily on

the 2014 EIS and its public comments—makes several key findings regarding Keystone XL’s climate impacts. It cites the “conclusive scientific evidence” on climate change, DOSKXLDMT0001182, and observes that the project would directly and indirectly cause a substantial increase in greenhouse gas emissions, DOSKXLDMT0001165-66. The ROD goes on to discuss the “vital importance of climate change leadership to U.S. foreign policy.” DOSKXLDMT0001182. It explains that U.S. actions on climate have a significant leveraging effect on other countries; that reducing emissions abroad is “one of the United States’ best tools to reduce the significant and costly adverse impacts of climate change at home”; and that it is therefore “strategically important for the U.S. to continue to play a leadership role” on this issue. DOSKXLDMT0001183-84, 1187. These findings—which, in fact, underestimate Keystone XL’s climate impacts, *see* sections II.A., II.B., and II.C., *supra*—led the Department to conclude that approving a cross-border permit for Keystone XL “would undermine U.S. climate leadership and thereby have an adverse impact” on global efforts to address climate change. DOSKXLDMT0001187.

The 2017 ROD ignores these findings. Instead, it simply states: “there have been numerous developments related to global action to address climate change, including announcements by many countries of their plans to do so. In this

changed global context, a decision to approve this proposed Project at this time would not undermine U.S. objectives in this area.” DOSKXLDMT0002518.

The agency failed to provide a reasoned explanation for this contradiction. At the time of the 2015 decision, “more than 150 countries,” including China, had come forward with greenhouse gas emissions targets. DOSKXLDMT0001183. The 2015 ROD made clear that, despite these developments, the United States “has and *must continue to play*” a leadership role on climate change. DOSKXLDMT0001182 (emphasis added). The 2017 ROD similarly asserts that “many countries” have announced plans to address climate change. Yet it fails to explain how this fact constitutes a “changed global context,” or why continued U.S. leadership is no longer necessary.⁹ Nor can it. The 2017 ROD rests on the *same record* as the 2015 decision, since the Department did not supplement or revise the EIS or seek further public comment before issuing its new decision. ECF No. 93 at 5, 8. The Department provided no other rationale for its flip-flop on this issue. *Compare* DOSKXLDMT0001182-84 (2015 ROD including three-page section entitled “Climate Change-Related Foreign Policy Considerations”), *with* DOSKXLDMT0002516-19 (2017 ROD omitting section entirely). The

⁹ To the extent this fact does represent a “changed global context,” that only underscores Plaintiffs’ argument that the Department should have prepared a supplemental EIS before issuing its 2017 ROD. *See* section II.C., *supra*.

Department's failure to provide a reasoned explanation for its conflicting findings violates the APA.

The 2017 ROD contains similar contradictions with respect to energy security. Whereas the 2015 ROD concludes that Keystone XL's significance for U.S. energy security is "negligible" to "limited," DOSKXLDMT0001185, the 2017 ROD concludes that Keystone XL "will meaningfully support U.S. energy security," DOSKXLDMT0002516. However, the 2017 ROD copies most of its explanation for this inconsistent finding, word-for-word, from the 2015 ROD. In fact, the 2017 ROD keeps the language tending to support its new position and simply omits the rest. *Compare* DOSKXLDMT0001180 (finding that "Canadian oil is a relatively stable and secure source of energy supply for many reasons," but concluding that "the significance of the pipeline for U.S. energy security is limited"), *with* DOSKXLDMT0002517 (repeating 2015 ROD's finding that "Canadian oil is a relatively stable and secure source of energy supply for many reasons," and omitting the rest). This selective copy-and-paste job is far from the reasoned explanation the APA requires.

The two new rationales the Department did provide similarly fall short of the APA's requirements.¹⁰ First, the Department asserted that over the past year, there

¹⁰ Again, to the extent these rationales represent new information, that further supports Plaintiffs' argument that the Department should have prepared a supplemental EIS. *See* section II.C., *supra*.

were more international crude oil supply disruptions, implying that Keystone XL is necessary for access to supply from Canada. DOSKXLDMT0002516. But this implication is inconsistent with the Department's conclusion in the 2015 and 2017 RODs and the 2014 EIS that Canadian tar sands will reach U.S. markets regardless of whether Keystone XL is constructed. *See, e.g.*, DOSKXLDMT0001180-81. Although that conclusion is itself flawed, *see* section I.A., *supra*, the Department cannot rely on an internally contradictory factual finding to justify a change in course.

Second, the Department cited the conditional approval of Kinder Morgan's expansion of the Trans Mountain pipeline as evidence that failure to approve a permit for Keystone XL "*may* redirect this source of reliable supply to Asian markets." DOSKXLDMT0002517 (emphasis added). Once again, this statement is inconsistent with the agency's assertion—reaffirmed in the 2017 ROD—that Canadian crude oil will continue to reach U.S. markets irrespective of whether Keystone XL is approved. *See* DOSKXLDMT0001185 (“[T]he absence of the proposed Project will not prevent Canada from continuing to serve as a secure source of energy supply.”). In any event, this speculative, “one-sentence explanation fails to provide good reasons for the agency's change in position, as required by the APA.” *Inland Empire-Immigrant Youth Collective v. Duke*, No.

EDCV 17-2048 PSG (SHKx), 2017 WL 5900061, at *7 (C.D. Cal. Nov. 20, 2017) (internal quotation marks omitted).

The Department's failure to provide a reasoned explanation for its inconsistent findings on climate change and energy security violates the APA. Indeed, the Ninth Circuit's decision in *Organized Village of Kake v. United States Department of Agriculture* is dispositive. There, the Department of Agriculture, relying on a detailed factual record, decided not to exempt the Tongass National Forest from a rule that would limit road construction and timber harvesting in national forests, explaining in a ROD that the benefits would outweigh the potential economic loss. 795 F.3d 956, 959-61, 967-68 (9th Cir. 2015) (en banc). Just two years later, on "precisely the same record," the agency issued a new ROD reversing course. *Id.* at 968. The Ninth Circuit held that this reversal was a "direct, and entirely unexplained, contradiction." *Id.* The new decision "did not simply rebalance old facts to arrive at the new policy," the court found. *Id.* "Rather, it made factual findings directly contrary to the [earlier decision] and expressly relied on those findings to justify the policy change." *Id.* The court concluded that the "absence of a reasoned explanation for disregarding previous factual findings violate[d] the APA." *Id.* at 969.

The same result is compelled here. Relying on its NEPA analysis, the Department in 2015 decided not to grant a cross-border permit for Keystone XL,

explaining that the need for U.S. leadership on climate change outweighed the pipeline's "negligible-to-limited benefit" to energy security.

DOSKXLDMT0001185-88. But, as in *Kake*, the agency reversed course just two years later. Relying on the same record, the Department concluded in 2017 that U.S. leadership on climate change was no longer necessary and that Keystone XL would "meaningfully support U.S. energy security." DOSKXLDMT0002516-18.

This is a "direct, and entirely unexplained, contradiction." *Kake*, 795 F.3d at 968. The agency did not contest the accuracy or integrity of any of its earlier, inconsistent findings. Instead, it merely ignored them. *See California v. U.S. BLM*, No. 17-cv-03804-EDL, 2017 WL 4416409, at *11 (N.D. Cal. Oct. 4, 2017) (agency's reversal violated APA where agency failed to show that earlier decision "was based on inaccurate facts or faulty...studies," and in fact, agency's subsequent decision relied on same economic analysis as before), *appeal filed*, No. 17-17456 (9th Cir.). An agency cannot "disregard contrary or inconvenient factual determinations that it made in the past, any more than it can ignore inconvenient facts when it writes on a blank slate." *Fox*, 556 U.S. at 537 (Kennedy, J., concurring); *accord Humane Soc'y of U.S. v. Locke*, 626 F.3d 1040, 1051 (9th Cir. 2010) ("[An agency] cannot avoid its duty to confront these inconsistencies by blinding itself to them."). In sum, the Department's failure to provide a reasoned explanation for its reversal is arbitrary and capricious.

III. The Department and the Service violated the ESA and APA

Congress enacted the Endangered Species Act (ESA) in 1973 to conserve endangered and threatened species and their natural habitats. *See* 16 U.S.C. § 1531. The ESA requires federal agencies to “insure that any action authorized, funded, or carried out by [an] agency...is not likely to jeopardize the continued existence of any endangered species or threatened species....” *Id.* § 1536(a)(2). Specifically, Section 7 and its implementing regulations set forth a detailed consultation process that agencies must follow before they take actions that could affect listed species. Pursuant to Section 7, if the action agency concludes in a “biological assessment” that a proposed action is “not likely to adversely affect” listed species—and the Service lawfully concurs in writing—then the process is concluded. If the action agency (or the Service) concludes that an action is “likely to adversely affect” listed species, it must enter “formal consultation” with the Service. 50 C.F.R. §§ 402.12(k), 402.14(a). The threshold for triggering formal consultation is “low.” 51 Fed. Reg. 19,926, 19,949 (June 3, 1986). If the action agency’s determination or the Service’s concurrence violates these requirements, it must be set aside. *See* 16 U.S.C. § 1536(a)(2); 5 U.S.C. § 706(2).

In fulfilling Section 7, agencies must “use the best scientific and commercial data available.” 16 U.S.C. § 1536(a)(2). The purpose of this “best available science” standard is to “prevent an agency from basing its action on speculation

and surmise.” *San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 995 (9th Cir. 2014) (citing *Bennett*, 520 U.S. at 176 (1997)). Failure to rely on the best available science undermines the ESA’s purpose to conserve listed species. *See Conner v. Burford*, 848 F.2d 1441, 1454 (9th Cir. 1988) (“FWS cannot ignore available biological information...which may indicate potential conflicts between development and the preservation of protected species.... To hold otherwise would eviscerate Congress’ intent to ‘give the benefit of the doubt to the species.’” (citations omitted)).

Here, the Department and Service violated the ESA in several ways. The Department’s 2012 Biological Assessment and the Service’s 2013 and 2017 concurrences incorrectly determined that Keystone XL is “not likely to adversely affect” three listed species: the whooping crane, piping plover, and interior least tern. As explained below, the agencies ignored the best available science, including telemetry and sighting data showing habitat areas whooping cranes have historically relied on during migration. According to a report by preeminent whooping crane experts, these data prove that the project will adversely affect the species. *See Northern Plains Plaintiffs’ Expert Report (the Crane Report)*, ECF No. 110.¹¹ The agencies also relied on unenforceable and inadequate conservation

¹¹ In accordance with the Court’s order, ECF No. 105, Plaintiffs have moved to admit the Crane Report for their claim against the Department, and to

measures to mitigate impacts to the crane. Finally, the agencies relied on an outdated version of a guidance document to mitigate harm to plovers and terns. All of these actions violate the ESA and APA.

A. The Department and the Service failed to use the best available science to assess harm to whooping cranes

In its 2012 Biological Assessment, the Department erroneously concluded that Keystone XL is “not likely to adversely affect” the critically endangered whooping crane. FWS00000000565. Fewer than 350 of these iconic cranes remain in the only wild population, which migrates from Texas to Canada each year. FWS00000000663. To be genetically viable, the population must reach at least 1,000 individuals. Crane Report at 7.

Collisions with power lines are the leading cause of whooping crane mortality. *Id.* at 5, 10; FWS000000002134. Indeed, the Biological Assessment acknowledges that Keystone XL, which would require hundreds of miles of new power lines in the birds’ migratory flyway, risks harming whooping cranes. FWS00000000645, 671 (noting the power lines “would incrementally increase

supplement the Service’s record with the report. *See* Pls.’ Mot. to Admit and to Suppl. the Administrative Records (filed herewith).

the collision hazard” for cranes within the migration corridor).¹² The Biological Assessment, however, never analyzes these impacts; nor does the Service’s concurrence. The Biological Assessment merely concludes that “with implementation of conservation measures, it is not expected that these lines would have cumulative impacts on [whooping cranes].” FWS000000000646. The Department provided no data to support this conclusion, however, and the Service declined to take a closer look through formal consultation.

An agency violates the ESA’s best available science mandate when it ignores available and relevant studies or data. *See Kern Cty. Farm Bureau v. Allen*, 450 F.3d 1072, 1080 (9th Cir. 2006) (“The best available data requirement... prohibits an agency from disregarding available scientific evidence that is in some way better than the evidence it relies on.” (alterations and internal quotation marks omitted)); *Greenpeace v. Nat’l Marine Fisheries Serv.*, 80 F. Supp. 2d 1137, 1149-50 (W.D. Wash. 2000) (holding that the Service violated ESA by admittedly failing to analyze and develop projections based on available information). That is precisely what occurred here. The Department and the Service completely ignored readily available data on whooping cranes—in particular, telemetry and sighting

¹² The agencies acknowledged that the project’s power lines are interrelated and interdependent actions that must be considered during consultation. *See* FWS000000000565-66, 2071; 50 C.F.R. § 402.02.

data—when determining the harm Keystone XL’s power lines would pose to whooping cranes.¹³

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 telemetry project was created in 2009 to study the crane’s migratory pathways and habitat use. *Id.* at 4-5, 13. One of its “fundamental objectives” is “to provide reliable scientific knowledge for conservation, management, and recovery of whooping cranes.” *Id.* at 4. 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 during their migration, and unquestionably represent the best available science for assessing potential harm to the species during migration.¹⁴

The Department’s and Service’s failure to rely on the telemetry and sighting data directly contradicts the ESA’s clear mandate that agencies “carefully examine

¹³ The Service confirmed that it did not consider these data sets when reviewing Keystone XL. Hines Decl., ECF No. 104-4 ¶ 5.

¹⁴ The telemetry and sighting data were readily available to the Department and the Service at the time of their review in 2012-2013, as well as when they revisited their prior determinations in 2017. *See* Pls.’ Mot. to Admit and to Suppl. the Administrative Records, Exs. 2-4.

the available scientific data” and “give the ‘benefit of [any] doubt’ to the species.” *NRDC v. Kempthorne*, 506 F. Supp. 2d 322, 361-62 (E.D. Cal. 2007). In *Kempthorne*, the court held that the Service had failed to use the “best available science” where it “failed to analyze all the available data” on a species. *Id.* at 365-66. The court distinguished a case in which the Service met the best available science mandate by seeking recommendations from a species-specific recovery team and “evaluat[ing] the spatial and temporal distribution” of the species at issue, such that the determinations were based “on a reasonable evaluation of available data, not on pure speculation.” *Id.* (quoting *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1337 (9th Cir. 1992)).

Here the agencies ignored the available data on cranes, meaning they could not have properly evaluated the spatial and temporal distribution of the species. The record also shows no attempt by either agency to seek recommendations from species-specific experts, such as the Whooping Crane Recovery Team. The agencies’ total failure to consider the available data proves that their “no adverse effects” conclusion is based on “pure speculation.” *See id.* at 366; *see also Rocky Mt. Wild v. U.S. Fish & Wildlife Serv.*, No. CV 13-42-M-DWM, 2014 WL 7176384, at *4-5 (D. Mont. Sept. 29, 2014) (holding Service violated the best available science mandate when it failed to consider the historical range of the species). The agencies’ failure to consider this species-specific data is particularly

egregious given that the data sets are maintained *by the Service*, and should have been provided to the Department when it initiated consultation. *See* 50 C.F.R. § 402.12(d)(2) (requiring the Service to provide “available information (or references thereto) regarding [affected] species”).

Accordingly, the agencies failed to consider the best available science in violation of the ESA and APA, and the “not likely to adversely affect” determination and concurrence are arbitrary and capricious.

B. The best available science shows that construction and operation of Keystone XL will harm whooping cranes

The Department’s and Service’s failure to consider the best available science renders their whooping crane analysis arbitrary and capricious. Moreover, when the telemetry and sighting data are actually applied to Keystone XL, it becomes clear that the Department’s “not likely to adversely affect” determination and the Service’s concurrence are erroneous. In fact, after applying these data to the project, some of the world’s leading whooping crane experts conclude that Keystone XL is virtually certain to kill, injure, or otherwise harm whooping cranes. Crane Report at 31-32.

1. The best available science indicates whooping cranes are at risk of colliding with the project’s power lines

In the Crane Report, preeminent whooping crane experts analyze the best available science on crane movement and habitat use—the telemetry and sighting

data—to assess whether Keystone XL’s power line infrastructure will increase the risk of crane collisions. The Crane Report provides maps showing the telemetry and sighting data with the Keystone XL route and the proposed pump station power lines.¹⁵ Using these maps, the experts evaluated crane collision risk based on the location of the proposed power lines in relation to habitat used historically by whooping cranes during spring and fall migration.

The Crane Report’s conclusions completely undermine the Department’s unsupported “not likely to adversely affect” determination and the Service’s erroneous concurrences in 2013 and 2017. For example, the Report analyzes the Big Bend to Witten transmission line, which is an interrelated action.¹⁶

FWS00000002071, 565. The data show the high risk of collisions and likelihood of harm to cranes from this power line:

¹⁵ The experts used the route and infrastructure maps provided by the Department in the 2012 Biological Assessment as well as updated maps provided in the Service’s administrative record. *See* Crane Report at 16, 20. For Nebraska, those maps did not include power line locations for the preferred route approved in the cross-border permit or the Mainline Alternative approved by the Nebraska Public Service Commission.

¹⁶ Interrelated actions are part of a larger action and depend on the larger action for their justification. They must be included in the analysis of the effects of the action. 50 C.F.R. § 402.02.

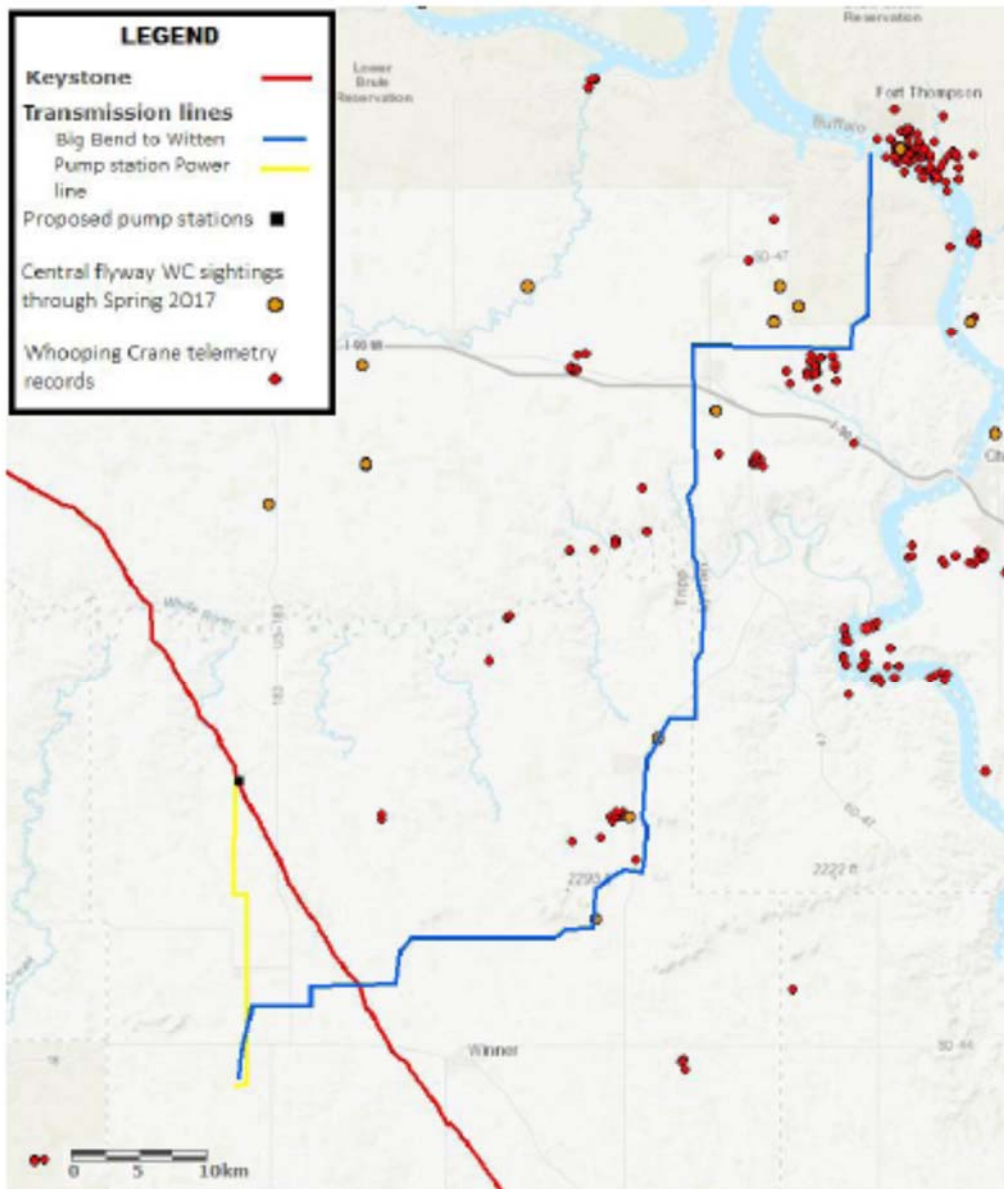


Figure 9: Whooping Crane historical sightings (orange dots) and telemetry project records (red dots) located in the proximity of the Big Bend to Witten 230-kV Transmission Line that is part of the Keystone XL project in South Dakota. The map shows 231 Whooping Cranes telemetry project records from 15 radio-tagged individuals and 10 USFWS Whooping Crane historical sightings in close proximity to the power line.

Several clusters of historic whooping crane activity are close to this power line. Whooping cranes show high “site fidelity,” meaning they return to the same location year after year. *Id.* at 14-15, 31. Thus, placing power lines in areas that

cranes have previously visited puts them at significant risk because they are highly likely to return to these areas during future migrations. *Id.*

The Crane Report also explains that the Big Bend to Witten line is likely to result in crane death, injury, or harm, since “[t]hat location creates a potential trap for cranes...and [they] would be at high risk of collisions as they land or take off from this stopover location, making this area particularly dangerous.” Crane Report at 27. The Avian Power Line Interaction Committee’s “Mitigating Bird Collision with Power Lines” likewise notes that lines oriented perpendicular to primary flight patterns, such as the Big Bend to Witten line and several other proposed lines, pose a higher risk of collisions. FWS000000000260. The Crane Report provides many other examples of proposed power lines that overlap significantly with habitat historically used by cranes during migration. Crane Report at 17-30.

Notably, the data significantly underrepresent the project’s risk to cranes. *Id.* at 19. Only 20% of the population is radio-tagged, so these maps do not even show *all* habitat areas that cranes rely on or the extent of their reliance on certain areas. *Id.* Indeed, cranes often travel in large family groups that stop over together during migrations, which could lead to multi-bird collisions that would be devastating for the species. *Id.* at 6-7, 13, 15, 32. Likewise, the sighting data are limited to those areas where the public has viewed the birds, yet much of the migratory corridor has

very low populations with few opportunities for sightings and/or is on private land that the public cannot access. Therefore, the vast majority of whooping crane stopover sites are not observed and/or reported. *Id.* at 19.

Based on the best science that *is* available, however, the Crane Report concludes that “*this Project will result in harm to Whooping Cranes*, and that such harm could jeopardize the continued existence of the species since it is so critically endangered.” *Id.* at 32 (emphasis added). Although Plaintiffs need not show that the project would jeopardize the existence of the species, the Crane Report also finds that “[*t*]he loss of a few, and even one, breeding Whooping Crane could jeopardize its recovery and continued existence.” *Id.* at 7 (emphasis added). There simply can be no dispute that this project is likely to “adversely affect” whooping cranes, and that the agencies should have initiated *formal* ESA consultation.

2. The best available science indicates construction of Keystone XL would also harm whooping cranes through habitat disturbance

The telemetry and sighting data further indicate that construction and operation of Keystone XL would harm cranes by disturbing their habitat. *Id.* at 34-35. Construction of access roads, power lines, pump stations, and other infrastructure would change the landmarks used by cranes as reference points to memorize their stopover sites. *Id.* This modification of landscape features could

push cranes away from their historical stopover locations, making it more difficult for them to complete their long migration. *Id.*

Because the cranes show high site fidelity, even minor changes to the landscape could impair their ability to identify or utilize their historic stopover locations, which would, in turn, adversely affect these birds. *Id.* at 31, 33. For example, if a crane family arriving at its historical stopover is unable to recognize the habitat, or is confronted with construction activities or a power line, it will likely have to search for a new roost. That additional searching would cause stress and further deplete the birds' energy during the long migration. *Id.* at 34-35. Additionally, the cranes may need to search for new roosts during low-light conditions, which increases the risk of power line collisions, and may also cause the cranes to land in fragmented habitat with insufficient food and water, and higher predation risk. *Id.*

The Crane Report therefore concludes that whooping cranes “will be harmed” by construction-related activities and “changes to the landscape that will prevent cranes from using their known stopover sites, requiring the birds to find new habitat, thereby increasing the risk of collision, predation and stress.” *Id.* at 6. These adverse impacts were ignored entirely by the Department and the Service. The best available science does not support—indeed, is wholly absent from—the

agencies' determinations, and the agencies should have analyzed these impacts to cranes through *formal* ESA consultation.

C. The Service's correspondence with power line providers does not satisfy the agencies' ESA duties and is insufficient to prevent harm to cranes

Rather than relying on the best available science to evaluate Keystone XL's risks to whooping cranes through formal consultation, the Department and the Service supported their "not likely to adversely affect" determination by improperly relying on informal promises from private power providers to implement "recommended" conservation measures. This scheme to avoid formal consultation is unlawful. The recommended conservation measures are unenforceable, and in any case, will not prevent harm to cranes.

1. The power providers' unenforceable commitments to implement recommended conservation measures do not satisfy the agencies' ESA duties

An agency may rely on conservation measures to mitigate harm to species only if those measures are reasonably specific and enforceable. *Ctr. for Biological Diversity v. U.S. BLM*, 698 F.3d 1101, 1114-17 (9th Cir. 2012); *Ctr. for Biological Diversity v. Salazar*, 804 F. Supp. 2d 987, 1002 (D. Ariz. 2011). Here, the Department stated that specific conservation measures for the whooping cranes would be developed in consultation with the Service. FWS00000000673. The Service, however, relied on conservation measures that were, on their face,

unspecific and unenforceable. Indeed, in its correspondence with the power providers the Service merely indicated general areas where bird flight diverters should be placed, and suggested construction should halt if cranes are present. But the Service specifically stated that such conservation measures were just “recommendations,” and there is no evidence that the Service has any means of enforcing their implementation. *See, e.g.*, FWS000000001947, 1959, 1968-69 (“We recommend marking in compliance with APLIC’s Reducing Avian Collisions with Powerlines....”); FWS000000002662 (asking TransCanada to provide assurances that power providers will abide by the conservation measures, even though it has no authority to do so). By their plain language, the commitments made by TransCanada and the power providers to implement these recommendations are insufficient to ensure that such measures will actually be implemented. *See Ctr. for Biological Diversity v. U.S. BLM*, 698 F.3d at 1114 (“[I]f a non-federal party promises to take action mitigating the impact of a federal action on listed species but fails to do so, the contemplated protections of listed species may never materialize.”).

Unsurprisingly, some power providers have already disregarded the Service’s recommendations. For example, one power provider, citing the “design of the transmission line,” refused to move the line further west to avoid harm to cranes. The Service conceded that the power provider was “too far along with

planning to do any line re-routes,” and apparently took no other action to ensure that the line’s placement minimized harm. FWS00000000453, 1878.

In another instance, the Service relied on a power provider’s determination that a particular power line would not adversely affect whooping cranes and so did not need any bird flight diverters. *See* FWS000000002012 (email to Westar Energy stating “please mention your recent assessment...where you did not find any suitable whooping crane habitat and thus decided that marking was unnecessary. That will close the loop on both of these powerlines and potential effects on whooping cranes”). The Service’s reliance on the power provider’s determinations is an unlawful delegation of its ESA duties, and fails to “give the benefit of the doubt to the species.” *Conner*, 848 F.2d at 1454; *cf. Selkirk Conservation All. v. Forsgren*, 336 F.3d 944, 955 (9th Cir. 2003) (stating agencies cannot delegate the protection of the environment).

In short, the Service’s dependence on unenforceable and informal commitments by power providers to implement recommended conservation measures violates the ESA.

2. The proposed conservation measures are inadequate to prevent harm to whooping cranes

Even if the power providers implement the Service’s recommended conservation measures, whooping cranes will be harmed by the construction and operation of Keystone XL. The agencies rely almost exclusively on the use of bird

flight diverters to support their conclusion that the project is not likely to increase the risk of power line collisions.¹⁷ However, the best available science indicates that these devices are inadequate.

Bird flight diverters are devices placed on power lines to alert birds to the line's presence. While these devices may marginally reduce the potential for collisions, they will not prevent all, or even most, collisions from occurring. In fact, the Biological Assessment acknowledges that “[b]ird diverter devices [] *may* reduce crane collisions and mortality from power lines....” FWS000000000670-71 (emphasis added). This is an implicit admission that even with diverters the project is likely to adversely affect whooping cranes, undermining the agencies’ ultimate determination.

The best available science confirms that bird flight diverters will not eliminate this risk. For diverters to be effective, cranes must be able to see and react to them in time. Crane Report at 32. There are several factors that may prevent them from doing so. For example, cranes regularly make short, low-altitude flights between foraging and roosting areas, often at sunrise and sunset when visibility is low. *Id.* at 9-10, 30-32. Fog, dense cloud cover, and precipitation also cause poor visibility. *Id.* Meanwhile, high winds may push cranes into power

¹⁷ See FWS000000002059-61 (summary of conservation measures); FWS000000001947-48, 1959, 1968-69, 1980, 1992 (letters to power providers).

lines, even if the cranes can see the lines. *Id.* at 10.

Additionally, recent studies indicate that bird flight diverters are less effective for cranes than for other species. While studies have found that bird diverters are generally 50% effective, cranes have extensive blind spots, making it harder for them to see diverters. *Id.* at 32. Thus, the Crane Report observes that, “[d]espite more than 30 years of using markers on power lines...the probability of mortality caused by power line collisions remains high for crane species.” *Id.* at 33. As the science shows, diverters do not sufficiently minimize the collision risks posed by Keystone XL for the agencies to conclude that the project would have no adverse effects on cranes.

Indeed, the Service inexplicably failed to require the power companies to apply the Service’s guidance on this very issue. FWS00000002134 (“Region 6 Guidance for Minimizing Effects from Power Line Projects within the Whooping Crane Migration Corridor”). That guidance requires far more than simply installing diverters. It states that project proponents should avoid constructing power lines within five miles of documented “high use areas.” *Id.* It also requires proponents to bury all new power lines to the greatest extent possible, especially within one mile of potentially suitable habitat, unless burying lines is not “economically or technically feasible.” FWS00000002134. And it states that in addition to marking new power lines with diverters, project proponents should also mark an equal

amount of *existing* lines within a mile of suitable habitat. *Id.* The Service has not required—or even recommended—that the power providers implement these measures, in direct violation of the guidance.¹⁸

The Service’s blatant disregard for its own guidance renders its actions arbitrary and capricious. If an agency decides to depart from prior policy, it must provide a reasoned explanation for doing so; it cannot “casually ignore” earlier guidance whenever it proves convenient. *See Nw. Env’tl. Def. Ctr. v. Bonneville Power Admin.*, 477 F.3d 668, 687-88 (9th Cir. 2007) (stating that “an agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored” (internal quotation marks omitted)). Indeed, the Service’s own expert in this case explained that, “[b]ased on this Guidance, every project should evaluate on a case-by-case situation, the quality of habitat, the documented use and proximity of the proposed power lines, to determine the risk of adverse effects.” ECF No. 128, Ex. 4 at 10. It is readily apparent from the record that this analysis did not take place for Keystone XL.

In sum, the agencies’ unreasonable reliance on bird flight diverters to support their determinations, and the Service’s unexplained failure to implement its

¹⁸ *See* letters to power providers, *supra* note 17 (noting water-crossings where line marking should be implemented).

own guidance, is arbitrary and capricious. The best available science clearly indicates that this project is highly likely to adversely affect—indeed, even to jeopardize—this iconic and critically imperiled species, requiring *formal* ESA consultation.

D. The Department and the Service relied on outdated and invalid guidelines regarding the harm to terns and plovers from increased raptor predation

The Department and Service failed to adequately analyze the impacts to endangered interior least terns and threatened piping plovers from increased raptor (i.e., hawk and eagle) perching and predation attributable to the project. Keystone XL requires the construction of hundreds of miles of power lines within the central migratory flyway of these birds. In the Biological Assessment, the Department recognized that power lines increase opportunities for raptor perching, thereby increasing the potential for predation of protected species. FWS000000000660, 717-18.

Nonetheless, the Department found that the project is “not likely to adversely affect” terns and plovers. Neither the Department nor the Service proposed any conservation measures to address this harm to plovers and terns. FWS000000000661-62, 719-20, 2058-59, 2064-65. The agencies did, however, propose the use of pole-top raptor guards (called “perch discouragers”) to prevent raptor predation in general. FWS000000000654, 2069-70. The Department avers

that raptor perching would be “minimize[d]...in accordance with the Avian Power Line Interaction Committee (APLIC), Suggested Practices for Avian Protection on Power Lines (APLIC 1996).” FWS000000000654. The Service apparently agreed, concurring in the Department’s determination without further discussion of predation. FWS000000002044.

The 1996 APLIC Suggested Practices that the Department relied on has been replaced with a 2006 edition. Pls.’ Mot. to Admit and to Suppl. the Administrative Records, Ex. 1 (2006 APLIC). That edition was readily available at the time the Department and Service undertook their analysis in 2012 and 2013, but was clearly ignored by the agencies.¹⁹ Had the agencies relied on the 2006 edition—which represents the best available science on this issue—it would have been clear to them that perch discouragers “are intended to move birds from an unsafe location to a safe location and *do not prevent perching*.” *Id.* at 17 (emphasis added). In fact, the 2006 APLIC Suggested Practices specifically states that using perch discouragers to prevent raptors from preying on sensitive species “is not recommended.” *Id.* (Figure 2.5).

The best available science thus indicates that the agencies’ proposed mitigation measure will not appreciably reduce the risk of predation to terns and

¹⁹ The 2006 edition specifically states that it “represents a significant update from the 1996 edition,” and “supersedes the recommendations incorporated in the 1996 edition.” 2006 APLIC at *xiii*, 51.

plovers. The Department's and Service's assumptions that it would, in reliance on outdated guidance, is arbitrary and capricious, and violates their duty under the ESA to "use the best scientific and commercial data available" to determine whether listed species are likely to be adversely affected by the project. *See* 16 U.S.C. § 1536(a)(2).

IV. The Court should vacate the cross-border permit for Keystone XL

The Department and the Service violated NEPA and the ESA when they reviewed and approved Keystone XL. Vacatur is the standard remedy for unlawful agency action, 5 U.S.C. § 706(2), and a court need not conduct any specific analysis before vacating an agency decision premised on an unlawful NEPA or ESA analysis. *See, e.g., Humane Soc'y of U.S.*, 626 F.3d at 1058. Because the Department's and Service's actions were arbitrary and capricious, vacatur of the cross-border permit is the appropriate remedy here.

CONCLUSION

For the foregoing reasons, the Court should grant Plaintiffs' partial motion for summary judgment; declare that the Department and the Service violated NEPA, the ESA, and APA; and vacate the cross-border permit for Keystone XL.

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WORD COUNT CERTIFICATION

I certify that the foregoing brief contains 13,988 words, as counted with Microsoft Word's "word count" tool, and excluding material Local Civil Rule 7.1(d)(2)(E) omits from the word-count requirement.

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CERTIFICATE OF SERVICE

I certify that I served the foregoing brief on all counsel of record via the Court's CM/ECF system.

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