United States Department of the Interior
Office of the Secretary
Washington, D.C 20240

APR 2 9 2013

ER-13/0137

U.S. Department of State
Attention: Ms. Genevieve Walker, NEPA Coordinator
2201 C Street NW, Room 2726
Washington, D.C. 20520

Dear Ms. Walker:

The Department of the Interior (Department) has reviewed the Department of State's Draft Supplemental Environmental Impact Statement (DSEIS) for the Keystone XL Pipeline Presidential Permit. The Department offers the following comments and recommendations for your consideration.

The project has the potential to affect resources and values at seven units of the National Park System and one unit of the National Wildlife Refuge System. It would cross five trails in the National Trails System, including the Lewis and Clark National Historic Trail, Mormon Pioneer National Historic Trail, California National Historic Trail, Pony Express National Historic Trail, and Oregon National Historic Trail, and would come within 10 to 12 miles of the Niobrara National Scenic River (NSR) and 40 miles of Missouri National Recreational River (NRR). The proposed Keystone XL Pipeline alignment crosses an easement refuge (82 X) administered by the U. S. Fish and Wildlife Service (USFWS) located in the S1/2, Section 23, T37N, R32E in Phillips County, Montana. In addition, the project has the potential to impact the Hagen Site National Historic Landmark.

Hagen Site National Historic Landmark

The Hagen Site National Historic Landmark (NHL) in Dawson County, Montana, is located along the west bank of the Yellowstone River. This is an exemplary archaeological site associated with a circa 1550-1675 Crow village. The DSEIS does not provide specific enough information to determine the location of the proposed pipeline with its various proposed alignments in relation to this NHL, which leaves the possibility that the project may cause impacts to the NHL. The Department of State should determine the potential for impacts of this project on the NHL and consult with the National Park Service (NPS) if impacts are anticipated. The NPS can provide the NHL location to the Department of State if needed.

Missouri National Recreational River and Niobrara National Scenic River

These two rivers are components of the National Wild and Scenic River System that includes portions of the Niobrara River, Verdigre Creek, and Missouri River. Both of these river segments are managed by the NPS which has authority under the Wild and Scenic River Act (WSRA) to protect and preserve the river environments to support the values for which they were designated. The Department has concerns with the proposed pipeline's stream and wetland crossings especially near NPS managed waterways. The proposed pipeline route crosses land that may drain into the Niobrara NSR designated reaches; the Niobrara River; and approximately

22 tributary streams (and numerous smaller contributing drainages to those tributaries) to the Niobrara River upstream of the Missouri NRR designated reaches.

The DSEIS Section 3.4.4, Federal and State Regulatory Setting, identifies the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency (EPA) and the U.S. Department of Agriculture Natural Resource Conservation Service as the regulating authorities for wetlands. The DSEIS Section 4.3.3.2 identifies the need for permits under Section 404 of the Clean Water Act. The Missouri NRR and Niobrara NSR have regulatory authority over water resource projects within the bed and banks of designated segments, as well as above or below the designation and on tributaries to any designated segments, in accordance with section 7(a) of the WSRA (16 U.S.C. § 1278). Water resources projects on designated segments that are determined to have a direct and adverse effect on the free-flowing condition, water quality, or the values for which the rivers were established are prohibited unless impacts can be avoided or eliminated. Additionally, water resources projects above and below or on tributaries determined to invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values of the rivers are also prohibited. The NPS, acting for the Department, needs to be included in Section 3.4.4 as a regulating agency for federal activities (including permitting) that could affect the free-flowing condition or that may have an impact on the values for which such river was designated as part of the wild and scenic river system.

Water Resources

In comments previously provided on the earlier Draft EIS, we requested that horizontal directional drilling (HDD) occur at all perennial stream crossings and wetlands greater than one-quarter of an acre in size, and intermittent stream crossings should occur only during dry conditions. We also requested avoidance of wetlands during construction and operations. The Department requested a greater commitment than "availability of seed at the time of reclamation" for revegetation activities and use of seed from native short- and tall-grass prairie communities. Additionally, we requested elimination of mainline valves located in floodplains by substituting upland locations for the location of mainline valves to protect water quality. The DSEIS does not address these comments in any substantive manner.

The DSEIS Table 2.1-17 documents that Keystone has identified only 14 perennial streams for employing the HDD method. Table 3.3-3 identifies that there are 15 waterbodies with State Designated Aquatic Life Use for Montana; Table 3.3-5 identifies that there are 10 waterbodies with State Designated Aquatic Life Use for South Dakota; and Table 3.3-7 identifies that there are 40 waterbodies with State Designated Aquatic Life Use for Nebraska. These numbers given in Chapter 3 do not match the numbers found in Appendix D. The Final EIS should clarify why these numbers are not the same.

Additionally, the DSEIS assigns a classification of minor, intermediate, and major to waterbodies the pipeline would cross if constructed, based on waterbody width "at the time of construction." This classification appears to be arbitrary, in that it does not address the ecological significance of a small perennial waterbody located in a landscape with little flowing water. It downplays the significance of effects from selected crossing methods under comparison, and waterbody widths can vary considerably during seasonal discharge levels.

While the DSEIS includes language that individual waterbody crossings would be "assessed by qualified personnel" there is no response to the request that the project employ HDD methods at all perennial stream crossings and wetlands greater than ¼-acre in size. At a minimum, the project should employ HDD at perennial and lake/pond waterbodies and intermittent waterbodies that have State Designated Aquatic Life Use. The DSEIS addresses the issue of scour and lateral migration at stream crossings through the use of "qualified personnel" to assess individual

waterbody crossings "in the design phase of the Project." This assessment allows the project to "address any hazards identified." There is no indication in the DSEIS of what constitutes "qualified personnel" and whether they are independent from the project or the contractor hired to perform the pipeline construction. We believe the assessment of waterbody crossings is one of the most important considerations in protection of water and ecological resources and suggest that the "qualified personnel" be independent of the project sponsors as much as possible.

Page 4.3.15 of the DSEIS identifies three pump station locations that "would be constructed over unnamed intermittent streams" although one of these was determined by field survey to be located in "tilled crop land" and not over an intermittent stream. But there is one pump station identified as being in proximity to the Loup River that will require an access plan addressing issues caused by flooding. Table 4.3-3 indicates the location of a mainline valve within the Yellowstone River floodplain. Our request for elimination of mainline valve floodplain locations should be augmented to include elimination of pump station locations within floodplains as well. Siting pump stations over intermittent streams is an invitation to degrade water quality if failure would occur. Pump stations should not be sited over an intermittent stream or located within a floodplain.

We had previously commented on Section 3.3.2.4, Potential Additional Mitigation Measures, where the project would require inspections of all intermediate valves and unmanned pumping stations during the first year of operation. We were concerned whether these would take place weekly, monthly or just once during the first year of operation. The DSEIS asserts that the project agrees to conduct inspections of valves and unmanned pump stations during the first year of operation, but there is no indication of the frequency of these inspections, and so does not address the previous NPS comment regarding frequency of inspections.

The Draft EIS disclosed that the existing Keystone Oil Pipeline had 14 leaks from fittings and seals that have occurred to date and that their "Supervisory Control and Data Acquisition leak detection system", along with "landowner reports", identified these leaks. Additionally, the Department of State, in consultation with Pipeline and Hazardous Materials Safety Administration and EPA, determined that the project should commission an engineering analysis by an independent consultant that would review the proposed Project risk assessment and proposed valve placement. The engineering analysis would, at a minimum, assess the advisability of additional valves and/or the deployment of external leak detection systems in areas of particularly sensitive environmental resources. The engineering analysis would determine the need for any additional mitigation measures. We believe this is a prudent undertaking to protect water resources in the rivers it manages.

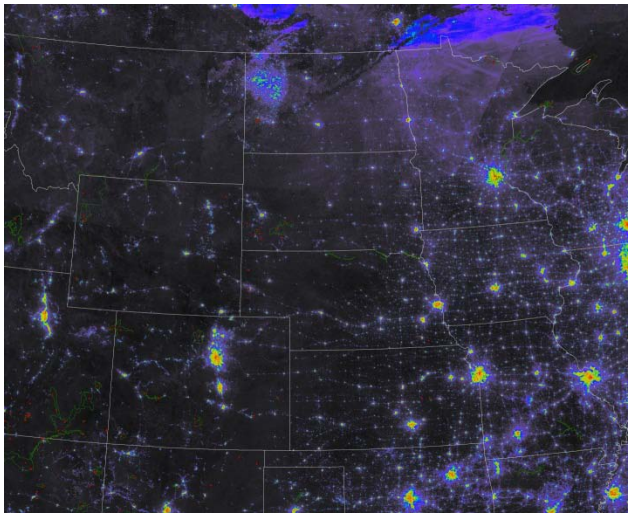
Natural Sounds and Night Skies

Light and noise from projects can often affect natural resources located many miles from their source. As a result, protecting the acoustic environment and night sky resources often involves assessing potential impacts from projects not located immediately adjacent to Department managed properties.

Overall, the document states that it "will not affect any national parks." We believe that the analysis fails to adequately assess noise impacts to all NPS lands, specifically, Niobrara NSR and the National Historic Trails that would be affected by the project. Scientific studies demonstrate that light pollution and noise can adversely affect natural and cultural resources, wildlife, and visitor experiences. This evidence warrants that noise and light pollution in the vicinity of NPS resources be avoided or mitigated similar to other sensitive areas identified in the DSEIS, such as human inhabitations, livestock populations, and sensitive wildlife. Anthropogenic light and

sounds from the project has the potential to impact the acoustic and photic environments of the NPS properties. In addition, cultural soundscapes and visitor experiences could be impacted.

Lighting needs, lighting types, light pollution and lighting impacts are not adequately addressed in the document. Site plans for aboveground installations (from previous planning documents) do not include lighting schematics. Further information and analysis regarding lighting along the pipeline and in the vicinity of national trails and the Niobrara NSR is recommended in order to assess the impacts to park resources.



This 2012 NASA Earth Observatory image of the central United States shows light sources in the central plains. Much of the proposed pipeline route has little anthropogenic light and, therefore, has high quality night skies. The cumulative effects of the project could adversely impact the quality of the night skies and the overall photic environment.

The Department recommends that: additional analysis of the direct and cumulative effects from lighting in this project be conducted; aboveground facilities be located as far away from park units as is feasible; mitigation measures such as shielded, full-cutoff lighting, timers, and motion sensitive switches should be used, where possible; and the minimum amount of illumination be used for tasks commonly carried out along the pipeline.

Similar to impacts from anthropogenic light in rural and natural areas, noise can greatly impact NPS resources and values such as cultural resources, visitor experience, wildlife interactions and ecological processes in these areas. While the document provides a basic level of analysis and describes general noise mitigation recommendations, additional analysis on the potential effects of noise on NPS resources and values may be warranted. The analysis should be similar to that conducted for other noise sensitive areas, and, at a minimum, should include predicted noise levels from pipeline activities that would occur on NPS lands in the vicinity of the pipeline and pumping stations.

Noise is discussed with regard to wildlife disruption as well as impacts on nearby dwellings. However, the primary mitigation strategies listed in section 4.12.4.3 only recommended minimization of noise impacts on "individuals, sensitive areas, and livestock." The Department recommends that "units of the National Park Service and National Historic Trails" be added to this list of noise-sensitive places where more aggressive noise mitigation is warranted.

The DSEIS recommends, "…to the extent practicable, Keystone would not site pump stations close to noise-sensitive receptors. For all pump stations, Keystone would observe the USEPA noise standard of 55 dBA L_{dn} for each pump station." The 55dBA standard (decibels, A weighted) cited in the analysis is based on the EPA standard for human health and annoyance and is more appropriate for community and residential environments. While there are no applicable EPA standards for the quiet environments often found in national parks, NPS is currently working with the American National Standards Committee and ISO to establish standards for noise in protected areas based on a general consensus within the Acoustic community including the Acoustical Society of America that community noise standards based on levels of "highly annoyed" or damage to human hearing are not appropriate standards for national parks where many people go to get away from the clamor of everyday life. Expected

noise levels on park lands should be compared to natural ambient sound levels, i.e., sound levels that would exist in the absence of other human caused sounds. Pump Station 24 – Fullerton, Nebraska, Pump Station 11 – Fort Peck, Montana and Pump Station 13 – Prairie, Montana, are relatively close to National Historic Trails. We recommend that the Final EIS consider noise levels appropriate for all the neighboring land uses as well as the resource management objectives of national park units.

Considerations of the cumulative effects of the project to the acoustic environment and to wildlife should be included in the DSEIS. We recommend further information and analysis of the cumulative effects of noise on visitors and natural resources be conducted with respect to NPS units. In addition, section 4.6 of the DSEIS mentions low-level helicopter or airplane overflights. We recommend that the Final EIS can provide additional information about the frequency and levels of noise generated from this activity.

The DSEIS states, "There are no noise sensitive areas, such as state and national parks or wilderness areas, present within one mile of the proposed Project pump stations." Distance should not be the primary gauge for how, if, and when noise could impact an area. Other factors such as existing ambient sounds levels, types of sounds present, frequency of sound waves, duration of sounds, timing of sounds, and cumulative effects of sounds should all be considered. Although one source of sounds could not be perceptible at a certain distance, the cumulative sounds from multiple sources (such as pump stations and pigging operations) could. Similarly, at the same distance sounds of varying frequencies will attenuate very differently. Construction and operation noise levels provided mention levels of 80 to 100 dBA at short distances. If multiple sources of these loud sounds are in operation at one time, noise impacts could be much more significant than outlined in the DSEIS.

The DSEIS does acknowledge that construction and operation noise could potentially cause adverse impacts to wildlife. Additional mitigation for noise from pipeline construction, operation and maintenance activities should be addressed. Efforts to reduce noise from operation of the pumping stations and ancillary equipment (e.g. power tools, construction equipment, and other machinery associated with the facility) should be implemented and noise reducing treatments (barriers, curtains, enclosures, silencers, mufflers, etc.) should be used where appropriate.

Wildlife

Missouri NRR, which is situated approximately 40 miles downstream from the proposed Niobrara River crossing in Nebraska, also provides important refugia for least tern, piping plover and pallid sturgeon. Nest success for least terns and piping plover could be impacted by water fluctuations as well as human disturbance from impacts occurring in places like the Rainwater Basin important bird area (IBA), which the pipeline traverses. The proposed pipeline installation is not close enough for direct human disturbance to these species to be a likely threat; however, we are concerned that activities surrounding hydrostatic testing (changes in water level, turbidity, and sedimentation) and infrastructure development (primarily roads and power lines) could represent threats to these species. Bird strike mitigation devices/bird diverters are recommended for infrastructure adjacent to the Niobrara River, and all construction activities should avoid the most sensitive nesting season from April through August when possible.

The DSEIS states that, "Impacts to the pallid sturgeon from temporary water withdrawals during hydrostatic testing in the lower Platte River Basin would be avoided since the volume of water needed would be withdrawn at a rate less than 10 percent of the baseline daily flow and returned to its source within a 30-day period" (Section 4.8, p16). This statement seems unsupported and requires further documentation. In addition, while this section covers impacts on pallid sturgeon

include inhibiting respiration of adult fish and eggs, it does not address the long term impacts on larval sturgeon, potential impacts on reproductive development, or lifecycle disruption.

The Department supports the recommendations to prevent potential direct or indirect impacts to the black-footed ferret population in Montana from construction activities, should they occur close enough to the proposed Project. The following mitigation measures are recommended: restrict domestic pets from camps and worksites, educate construction workers about disease transmission and actions they can take to minimize such transmission, and report any sick or dead wildlife to the proper authorities. These recommendations should help minimize the potential spread of infectious and other diseases from people and their pets to black-footed ferrets and other wildlife. We suggest these measures also be included in the portions of South Dakota where black-footed ferrets have been re-introduced.

In order to conserve migratory species that occur on Department managed lands for at least part of their life cycle, their full life cycle habitat needs must be protected and conserved. The proposed Project route would cross through the North Valley Grasslands IBA in Montana and the Rainwater Basin IBA in Nebraska. An oil spill occurring in either of the areas could severely impact critical habitat for migratory birds that spend part of their life cycle on Department managed lands. For example, Sprague's pipit (*Anthus spraguei*), a grassland migrant and candidate species that breeds in the North Valley Grassland IBA also breeds in Theodore Roosevelt National Park and overwinters in Big Bend National Park and Chiricahua National Monument. Numerous waterfowl, shorebird and wading bird species that rely on the Rainwater Basin IBA in Nebraska as a migratory stopover site, breed or over-winter in NPS units. For example Ross' Goose (*Chen rossii*) overwinters in Chiricahua National Monument, sandhill cranes (*Grus canadensis*) breed in Katmai National Park and Preserve.

We recommend that the approach used in Chapter 3.6 to break wildlife into categories such as big game animals, small game and furbearers, waterfowl and game birds, etc., be replaced instead with taxonomic ordering. Major categories of taxa would be Invertebrates, Amphibians, Reptiles, Birds, and Mammals with further subdivisions under each of these. For example, for Birds the subdivisions could be waterfowl, waterbirds, shorebirds, raptors, passerines, and so forth.

Likewise, we recommend that sections 4.1 through 4.6.3.5 be revised and reorganized to address the direct and indirect impacts for individual major scientific taxa, and subdivisions of taxa. For example, provide separate sections that discuss environmental consequences of the project on invertebrates, birds, reptiles and amphibians, and large and small mammals. For birds, distinct subcategories might include waterfowl, waterbirds, passerines, raptors, etc. Explain the mitigation measures for each respective taxa, and for the subdivisions of taxa.

In Chapter 4, Environmental Consequences, the composition of subsections 4.6.1 through 4.6.3.5 addressing "Wildlife" contain some confusing analyses. Examples are:

- Statements in Section 4.6.3.2, "Small Game Species and Furbearers," incongruously discuss impacts to snakes, lizards, burrowing rodents and mice.
- The "Waterfowl and Game Birds" subsection incongruously refers to "burrow abandonment" and to ravens.
- The content of Table 4.6-4 does not match the title of the table. Buffer distances in the table conflict with information in the accompanying text.
- Miles of component habitat areas potentially impacted by electrical distribution lines do not equate to the total length of the distribution lines.

- The subsection "Non-game Animals" consists of a confusing mix of descriptive impacts to insects, reptiles, bats, non-game birds, and small mammals.

- Text at page 4.6-12 indicates that construction timing restrictions and buffer zones, "*such as* those described in Table 4.6-4 would be developed" (emphasis added). This wording suggests actual parameters to be implemented by the project have not yet been determined.

- Table 4.6-4 contains multiple timing restrictions and multiple distance buffers for the same resources, with various agency designations. The text does not explain how these are to be interpreted and implemented.

In section 4.6 of Chapter 4, the scope of the action on which the project impacts are based should be clarified. Explain whether the analysis is based on the entire footprint of the project or just the pipeline right-of-way. We believe the scope of analysis of impacts to wildlife needs to be the entire footprint of the project with all its related components. (The pipeline right-of-way, temporary workspaces, pipe stockpile sites, rail sidings, contractor yards, construction camps, pump stations, delivery facilities, access roads, pigging facilities, densitometer facilities, mainline valves, fuel transfer stations, and the connected actions of Bakken Marketlink, Big Bend to Witten 230-kV Transmission Line, and electrical distribution lines and substations.)

Nesting Birds

At page 4.6-10, the DSEIS describes provisions under the Migratory Bird Treaty Act for conservation of migratory birds. At Page 4.6-9, the DSEIS text states that direct impacts to nesting migratory birds would be avoided by limiting construction to non-nesting periods during late summer through winter. Also, page 4.6-12 states cutting trees with active raptor nest trees during the nesting season would be prohibited.

However, other statements appear to be in conflict with these statements. For example, page 4.6-8 states that direct impacts of the project on small game bird species could include "loss of eggs or young, or death." At page 4.6-9, the text states that cutting trees would result in loss of nests, eggs, and young. Statements on page 4.6-13 appear to equivocate whatever limitations on construction will used by stating: "If construction would occur during the nesting season….[then certain practices to locate nests would be followed]."

It is unclear why measures specified for protecting ground-nesting birds in a single county, Phillips County, Montana, (page 4.6-13) should not apply throughout the project route. For these reasons, in addition to the other USFWS concerns identified above, we recommend that sections 4.6.1 through 4.6.3.5 of the DSEIS be revised and clarified.

Terrestrial Vegetation

Table 3.6-1 presents major vegetation types and the associated acres but it appears this Table only accounts for the actual pipeline right-of-way. Chapter 2.1 (Overview of the Proposed Project) indicates the proposed project consists of the pipeline right-of-way, temporary workspaces, pipe stockpile sites, rail sidings, contractor yards, construction camps, pump stations, delivery facilities, access roads, pigging facilities, densitometer facilities, mainline valves, fuel transfer stations, and the connected actions of Bakken Marketlink, Big Bend to Witten 230-kV Transmission Line, and electrical distribution lines and substations. These combined facilities will occur in MT, SD, NE, and KS. Given these facts, both Table 3.6-1 and the related discussion in Chapter 3.6 should be revised to reflect the full footprint of the project and account for all acres of wildlife habitat that will be impacted by the project, not just those that comprise the pipeline right-of-way. Some of the facilities that comprise the full footprint of

the project may already be constructed in which case these online facilities should not be included in this total footprint of impact.

The DSEIS assessment of plant re-growth is limited to State listed noxious weeds. The Department recommends that companies and their contractors consult with State Natural Heritage Programs, Native Plant Societies and/or Natural Area Managers to identify exotic species that threaten native ecosystems, including smooth brome (*Bromus inermis Leyss.*) and other species purposely seeded for agriculture. In addition, companies and/or their contractors should follow BMPs to ensure contractor equipment is checked and cleaned for non-native plants/seeds and provide for staging areas for such activities. Finally, as a mitigation action, companies should apply high rates of native annual forbs and grasses to conventional reclamation seed mixture in the pipeline corridor to minimize invasive species establishment. Fertilizers should not be used in disturbed areas as they promote undesirable species.

Mitigation

In Chapter 4, Environmental Consequences, several sections are prefaced by a qualifying statement that the following discussion of environmental impacts is based on potential mitigation measures (emphasis added) to avoid or minimize the potential impacts. (See the first sentence of section 4.4, Wetlands, at page 4.4-1, and the first sentence of section 4.6, Wildlife, at page 4.6-1.) However, the DSEIS does not clearly distinguish between "mitigation" and "potential mitigation," nor does it indicate the likelihood that mitigation measures will be adopted.

Not implementing the mitigation measures could result in levels of impacts on environmental resources substantially different from those that are represented in the DSEIS. Therefore, it is important that actual, intended, mitigation be clarified throughout Chapter 4. This would help reviewers understand whether all practical means to avoid or minimize environmental harm have in fact been adopted, and if not, why they were not.

"Additional Relevant Information"

At several locations in Chapter 4, Environmental Consequences, the DSEIS states, "Additional relevant information is pending and will be included in this review as part of the Final EIS." (See sections, 4.6.3; 4.6.5.1; 4.6.5.2; 4.6.5.3) The nature of the additional relevant information is not stated. However, these particular sections of the DSEIS in-part refer to USFWS administered lands or to wildlife resources within USFWS' legal jurisdiction.

Because USFWS is a NEPA Cooperating Agency, we recommend that the Department of State inform USFWS in advance of additional relevant material to be added, and provide USFWS with adequate time to review, and if necessary, recommend revisions to drafted text before it is finalized for the FSEIS.

Monitoring and Enforcement

The Council on Environmental Quality's NEPA regulations cite the requirement for a monitoring and enforcement program be adopted and summarized in the record of decision where applicable for any mitigation. (40 CFR 1505.2(c)) We were unable to locate a reference in the DSEIS or determine whether any such program has yet been developed.

We recommend a monitoring and enforcement program be developed to provide accountability and environmental oversight of mitigation implementation, which would be funded by the applicant but independent of the applicant's control. Monitoring should be done by independent party with qualifying credentials, involve on-the-ground inspectors for each area for pre-construction surveys and as construction occurs, with procedures for frequent reporting to regulatory authorities. (The FERC employs similar monitoring procedures for oversight of

environmental stipulations for pipeline construction.) The program should report on adherence to fish and wildlife environmental mitigation measures specified by Department of State. We suggest that a description of that monitoring and enforcement program be added to the FEIS.

Specific Comments by Section

Table 2.1-17 (page 2.1-58) documents that Keystone has identified 14 perennial streams for employing the HDD method. Table 3.3-3 (page 3.3-28) identifies that there are 15 waterbodies with State Designated Aquatic Life Use for Montana, Table 3.3-5 (page 3.3-32) identifies that there are 10 waterbodies with State Designated Aquatic Life Use for South Dakota, and Table 3.3-7 (page 3.3-35) identifies that there are 40 waterbodies with State Designated Aquatic Life Use for Nebraska. These numbers given in Chapter 3 do not match the numbers found in Appendix D. The Final EIS should clarify why these numbers are not the same.

Page 3.4-9. Federal and State Regulatory Setting, identifies the U.S. Army Corps of Engineers, EPA and the U.S. Department of Agriculture Natural Resource Conservation Service as the regulating authorities for wetlands. The DSEIS Section 4.3.3.2 identifies the need for permits under Section 404 of the Clean Water Act. The Missouri NRR and Niobrara NSR have regulatory authority over water resource projects within the bed and banks of designated segments, as well as above or below the designation and on tributaries to any designated segments, in accordance with section 7(a) of the WSRA (16 U.S.C. § 1278). Water resources projects on designated segments that are determined to have a direct and adverse effect on the free-flowing condition, water quality, or the values for which the rivers were established are prohibited unless impacts can be avoided or eliminated. Additionally, water resources projects above and below or on tributaries determined to invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values of the rivers are also prohibited. The NPS, acting for the Department, needs to be included in Section 3.4.4 as a regulating Agency for Federal activities (including permitting) that may affect the free-flowing condition or that may have an impact on the values for which such river was designated as part of the wild and scenic river system.

Table 3.6-1. We recommend that the "Grassland/Pasture" vegetation category be further divided and reported as those acres that are managed pastures (typically introduced grass species) vs. intact native grassland/prairie acres. The two cover types are distinctly different vegetation communities with different ecological attributes.

Table 3.6-4. We recommend that a table of the Birds of Conservation Concern that are known or likely to occur in the project area be added to this section. Birds of Conservation Concern are a distinct subset of migratory bird species that Executive Order 13186 directs federal agencies to take actions to protect. These species should also be addressed in the chapter on environmental consequences.

Page 4.6-2. The DSEIS text states that, "Construction of the proposed Project would result in disturbance of about 12,696 acres…" However, section 2.1.2 of Chapter 2 states, "Approximately 15,493 acres of land would be disturbed during construction." These statements are not in agreement. A correct estimate of the project area needs to be provided in this section and it should reflect the entire footprint of the project. Also, at page 4.6-2 in the second paragraph there is a partial listing of components of the project. However, this excludes many other project components discussed in Chapter 2.1. Since all project components will impact wildlife in some manner there should be a complete listing of these in this section and the impacts of all components should be evaluated in the FEIS.

Page 4.6-2. Other, additional ways this project will impact wildlife include species displacement, barrier effects, increased predation rates and predator travel lanes, increased nest

parasitism, vehicle collisions with wildlife, fugitive dust, invasive plant species, increased wildfire risk, lower wildlife density, increase in collisions with power lines and electrocutions on power poles, increase in off road vehicle use (quads, dirt bikes, etc.), increase in trash/human waste, and increase in poaching. The list should be expanded to cover the full extent of impacts (both direct and indirect) to wildlife associated with the project and all these impacts should be evaluated in this chapter. If pipeline leaks or spills or other catastrophic events occurred, these would also impact wildlife. Pipeline operation, maintenance, and inspection actions after construction will also likely impact wildlife species so these activities should be listed in the FEIS and their related impacts on wildlife should be evaluated in this chapter.

Table 4.6-2, Habitat Types and Related Fragmentation Issues. For several habitat types under the "Nest Parasitism", "Facilitated Predator Movements", and "Disturbance-Construction Maintenance" columns the current Table version has some habitat types as "unchecked" indicating that the impact type does not apply to that habitat type. It is unclear why these impact types would not apply to all wildlife habitats. Also the "Habitat Types" in Table 4.6-2 should match the "Vegetation Community Classification" categories used in Table 3.6-1.

Page 4.6-6. The statement on the top of the page in the first sentence is unsupported: No data is presented on estimated habitat acres lost so how does the reader know that it "would likely be small." Also, in the second paragraph on this page there could also be noise impacts to wildlife as part of pipeline operations and maintenance after construction.

Page 4.6-10. The second paragraph discusses Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. We recommend that the discussion of specific Federal wildlife laws be up front at the beginning of Chapter 4.6 and that the discussion for each wildlife law be broken out and separated under its own header.

Page 4.6-10 in the last paragraph. The DSEIS references nest and rookery surveys conducted in 2008, 2009, 2010, 2011, and 2012. The FEIS should be revised to include descriptions of all wildlife surveys conducted for the project and results from all these surveys should be at least summarized in the EIS.

Page 4.6-10. Birds of Conservation Concern. Somewhere in this chapter expected impacts to Birds of Conservation Concern should be acknowledged and an evaluation of these impacts should be presented.

Table 4.6-3. This table is apparently based on Whittington and Allen (2008) Guideline for Raptor Conservation in the Western United States. However Whittington and Allen (2008) was strictly a draft product that has yet to be finalized. Thus citing that document and using it as a basis for this Table is not appropriate. The USFWS can provide appropriate sources for nest buffer recommendations.

Page 4.6-13. First bullet point at top of the page. Why does this mitigation measure only apply to one county in Montana?

Page 4.6-15 under 4.6.5.3 "Electrical Distribution Lines and Substations." Other ways power line and substation construction will impact wildlife include species displacement, barrier effects, increased predation rates and predator travel lanes, increased nest parasitism, invasive plant species, increased wildfire risk, lower wildlife density, increase in trash/human waste, and increase in off road vehicle use (quads, dirt bikes, etc.). The list should be expanded to cover the full extent of impacts (both direct and indirect) to wildlife associated with power lines and substations and all these impacts should be evaluated in this chapter. Also in addition to concerns listed for increased perches for raptors and the related predation on ground nesting birds the same concern applies to Corvids as well.

Page 4.6-16 at bottom of page. Another bullet item should be added to the FEIS indicating that avian-safe designs and methods are described in APLIC's *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* document (APLIC 2012).

Page 4.8-5. We support and applaud the recommendations to prevent potential direct or indirect impacts to the black-footed ferret population in Montana from construction activities, should they occur close enough to the proposed project. The following mitigation measures should be adopted and implemented by Keystone: restrict domestic pets from camps and worksites, educate construction workers about disease transmission and actions they can take to minimize such transmission, and report any sick or dead wildlife to the proper authorities. These recommendations should help minimize the potential spread of infectious and other diseases from people and their pets to black-footed ferrets and other wildlife. We suggest these measures be included in the portions of South Dakota where black-footed ferrets have been re-introduced.

Page 4.8-16. "Impacts to the pallid sturgeon from temporary water withdrawals during hydrostatic testing in the lower Platte River Basin would be avoided since the volume of water needed would be withdrawn at a rate less than 10 percent of the baseline daily flow and returned to its source within a 30-day period." This statement is scientifically unsupported in the SDEIS. Before a decision is made as to scope of effect, consideration should be given, based on all available scientific information, as to how a 10 percent drop in daily flow may affect this species. Also not considered is how the process of water intake and return may affect turbidity and sedimentation and whether these processes are likely to have negative impacts to this endangered fish species.

Page 4.8-16. - In the discussion of frac-out, impacts on pallid sturgeon include inhibiting respiration of adult fish and eggs, but do not address the long term impacts on larval sturgeon, potential impacts on reproductive development, or lifecycle disruption.

Chapter 4.15, Cumulative Effects Assessment. Summary statements about wildlife impacts should all be properly qualified as *expected* to be negligible. The chapter should provide some assessment of how the cumulative impacts, including climate change, may affect fish, wildlife and plant resources.

Page 4.15-46 stating that, "The anticipated overall absence of permanent impacts to wildlife resources from the propose Project…" Constructing an 875-mile pipeline with related infrastructure such as roads, pump stations, power lines, and substations will result in some permanent impacts to wildlife resources. These will include at least some permanent alteration or loss of habitat, habitat fragmentation, species displacements, barrier effects, etc. This statement and all other related statements in this chapter should be revised to acknowledge that some permanent impacts that will result from this project.

Page 4.15-46, under 4.15.3.6 Wildlife, second paragraph, first sentence. The text states that, "The majority of the potential effects to wildlife resources are indirect, short term or negligible, limited in geographic extent, and associated with the construction phase of the proposed Project only." This statement is inaccurate and should be revised. Given that the project includes not only constructing a pipeline but also related infrastructure, access roads, and power lines and substations, impacts to wildlife are not just related to project construction. Impacts to wildlife from this infrastructure will occur throughout the life of the project (i.e. operation and maintenance phases). Also some of these project impacts will be direct such as wildlife collisions and electrocutions from power lines and vehicle collisions with wildlife on project access roads.

Page 4.15-47, first paragraph, second sentence. The statement that, "The duration of impacts are all temporary and short term with negligible effects on wildlife resources" is inaccurate and

should be revised. This project includes construction of 378 miles of power lines in four states (Table 2.1-19 in Chapter 2.1). Impacts to wildlife that are associated with power line and substation construction will be permanent for the life of these facilities. This will not be a temporary or short term impact on wildlife.

Page 4.15-48, third paragraph, first sentence. The statement "In summary with respect to wildlife, permanent impacts are not expected" is not accurate. There will be several types of permanent impacts to wildlife that will result from this project. This statement should be revised to reflect actual permanent impacts associated with this project.

Pages 4.15-108 and 109. This section acknowledges potential impacts to fish and aquatic invertebrates in the event of fuel spills or leaks. Yet there is no acknowledgement of the potential impacts to wildlife in the event of spills or leaks. Impacts to wildlife could occur in both aquatic and terrestrial habitats should a spill occur and these should be acknowledged in the FEIS.

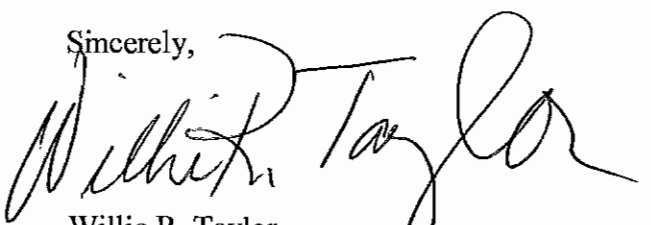
Chapter 4.16, Summary of Impacts. The first sentence on this page should be revised. Data or literature citations presented are not adequate to support the statement that "...there would be no significant impacts..." The statement should at least be properly qualified to indicate that significant impacts to most resources are not expected.

Page 4.16-3 for Wildlife. The construction of this project will result in impacts to wildlife. Hence the first sentence under the "Construction" column here is not accurate. It refers only to potential impacts when in fact if this project is built there will be a number of impacts to wildlife that will occur including permanent long-term impacts. We recommend replacing "Potential" with "Expected."

The Department has a continuing interest in working with the Department of State to ensure impacts to resources of concern to the Department are adequately addressed. For issues concerning NPS resources, please contact Regional Environmental Coordinator Nick Chevance, Midwest Regional Office, National Park Service, at telephone 402-661-1844. For issues concerning USFWS resources, please contact Dave Carlson, Regional Environmental Review Coordinator, at telephone (303) 236-4254.

We appreciate the opportunity to provide these comments.

Sincerely,



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

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