Osage Minerals Council
Osage Nation

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February 21, 2020

VIA EMAIL (osagecountyoilandgaseis@bia.gov)
Osage County Oil and Gas EIS
BIA Osage Agency
Attn: Superintendent
P.O. Box 1539
Pawhuska, OK 74056

Re: Osage Minerals Council Comments on Draft Environmental Impact Statement for Osage County Oil and Gas, Osage Reservation, Oklahoma
(Doc. No. AAK6006201 210A2100DD AOR3030.999900)

The Osage Minerals Council (OMC), an independent agency within Osage Nation government that is constitutionally empowered to administer and develop the Osage mineral estate, hereby submits these comments on the on Draft Environmental Impact Statement (DEIS) for Osage County Oil and Gas, Osage Reservation, Oklahoma, published on November 22, 2019. The outcome of the DEIS will have a significant and lasting impact on the development and management of the Osage mineral estate, an asset held in federal trust and the lifeblood of the Osage Reservation economy for over a century. These comments reflect our serious concerns with the manner in which the DEIS was developed and the overall substance of the DEIS. In sum, while the BIA has invited the OMC to be a "cooperating agency" under the provisions of 40 C.F.R. § 1501.6, the OMC has not been treated as such, and the comments we offer could have been resolved had the OMC been a full partner in the preparation of this DEIS. The OMC has special expertise, and in some cases jurisdiction by law, and it is clear that the White House Council on Environmental Quality intended that a cooperating agency be involved in every aspect of the NEPA process from scoping to the Record of Decision. A cooperating agency should not be one in name only, nor should a cooperating agency be relegated to merely commenting on a DEIS once the preparation is complete. Further, the content of the DEIS falls far short of the mandates of the 1906 Osage Allotment Act and subsequent amendments, as well as the BIA's own stated purpose of the DEIS, positing two alternatives—three and four—that would overtly violate federal statutes related to the Osage mineral estate. Specifically, the final EIS cannot limit any area of the Osage Reservation from minerals development, but rather, must carry out the statutory mandate Congress has handed to the Secretary of the Interior and Osage Nation, that is, to:

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> offer for lease for oil, gas, and other mining purposes *any* unleased portion of [the Osage Reservation] in such quantities and at such times as may be deemed for the best interest of the Osage Tribe of Indians . . . [in] *the highest percentage of ultimate recovery of both oil and gas [that] may be secured*.[1]

While the OMC does not approve of any of the alternatives as currently drafted in the DEIS, Alternative Two is the least objectionable, although it does not provide for efficient EA tiering and unlawfully prohibits leasing in certain Reservation areas.

The DEIS Violates Federal Laws Establishing the Osage Mineral Trust System

The Osage Reservation spans an area of approximately 1.47 million acres and is contiguous with Osage County, Oklahoma. Pawhuska is the seat of Osage Nation government and has been since the Osages purchased these lands from the Cherokee Nation in 1871 and moved from our last reservation in Kansas to the Indian Territory. The Osage people agreed to move to our current homeland only after our Osage leaders, led by Wah-Tian-Ka, advised that our new home would provide for our children and elders.

In 1906, the Congress enacted the Osage Allotment Act ("1906 Act")[2] for the primary purpose of allotting parcels of land to individual Osages and providing for Osage Reservation minerals leasing and management. The 1906 Act directed the Secretary to create a roll of Osages and their children for two purposes: one, to have the right to receive surface land allotments of the Osage Reservation, and two, to receive a "headright," or the right to receive proceeds from the Osage mineral estate, the Reservation subsurface. The 1906 Act also provided that the United States, as trustee, would hold the Osage mineral estate in beneficial trust for the Osage government. Oil and other minerals production companies could enter into leases with the Osage government, with approval of the Secretary through the Superintendent of the BIA Osage Agency. After the Superintendent approved a lease, the lessees would make payments to the BIA (now Office of Special Trustee) to be deposited, invested, and paid out to the Osage headright owners every three months.

Unlike most reservation allotment acts, the Osage Allotment Act did not open areas of the reservation for non-Indian settlement. Essentially all of the 1.47 million acres were allotted to Osage individuals, while the mineral estate was held in trust for the Tribe and not allotted. Only after demonstrating "competence" to the Superintendent of the Osage Agency could an individual Osage alienate his or her surface land to a non-Indian, a process that was rife with corruption and led to the murder of many Osages.

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[1] Act of June 24, 1938, § 3, 52 Stat. 1034; *see also* the Act of March 2, 1929, 45 Stat. 1478 ("That as to all lands hereafter leased, the regulations governing the same and the leases issued thereon shall contain appropriate provisions for the conservation of the natural gas for its economic use, to the end that the highest percentage of ultimate recovery, of both oil and gas may be secured . . ."); Act of October 21, 1978, 92 Stat. 1660.

[2] Act of June 28, 1906, Pub. L. No. 59-321, 34 Stat. 539 ("In order to conserve natural resources and provide for the greatest ultimate recovery of oil and gas underlying the Osage mineral estate . . .").

Historically, non-Osage surface landowners in the Osage Reservation have sought to end the federal trusteeship over the Osage mineral estate and acquire ownership of the minerals beneath their surface lands.

> Such swindles [of surface lands], bold-faced as they were, seem mild compared with the audacity of the Osage County Homeowners Association. This organization of white men who had purchased land from some of the Osages joined forces with certain oil operators working to seize personal control of the tribe's petroleum and gas resources. During the early 1920s the two groups lobbied hard in Washington against an extension of the twenty-five-year trust period that would end in 1931. They hoped to acquire the mineral rights that would accrue to the parcels of surface land they had bought; but Congress thwarted their plan by extending the mineral estate until April 1946.[3]

Through amendments to the 1906 Act in 1921, 1929, and 1940, Congress extended the federal trusteeship of the Osage mineral estate and exercised greater federal control over Osage minerals matters. In 1921, Congress "authorized and directed" the "Secretary of the Interior and the Osage Council . . . to offer for lease for oil and gas purposes all of the remaining portion of unleased Osage land."[4] In 1929, Congress lowered the minimum acreage required for minerals leasing to "not less than twenty-five thousand acres" annually in order to ensure maximum benefit from oil and gas development.[5] The Osage Nation is the only tribe in America with such a federal mandate. The 1921 Act also authorized the State of Oklahoma to collect gross production taxes from Osage oil and gas, and for Osage County to receive 1% of Osage minerals proceeds for the construction and maintenance of roads and bridges. This law specifically mandates that the Department of the Interior, "through the proper officers of the [BIA] Osage Agency[,]" pay the taxes to the State and County from Osage trust accounts.[6]

Although non-Osage surface landowners continue to seek greater control over Osage lands and resources, the Osage mineral estate is the dominant estate, and the Osage mineral trust system is still in place over a century later. Although Congress, in 2004, clarified that the Osage government has authority to determine its own membership and form of government, which it did and still does under Osage Nation law, the operation of federal control over Osage mineral leasing, mineral management, investment of proceeds from minerals, and payments to headright holders continues to the present. The BIA carries out many of these functions because of its federal trust duties and responsibilities owed to the Osage Nation and Osage headright holders. These specific trust duties arise from not just from federal statutes, but also treaties, Supreme Court precedent, and the U.S. Constitution. With regards to the unique trust duties the Secretary and BIA must effectuate on behalf of the Osage Nation, Congress has given the Secretary clear

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[3] Terry P. Wilson, *The Underground Reservation: Osage Oil* 137 (1985).
[4] 41 Stat. 1249.
[5] 45 Stat. 1479.
[6] *Id.*

instructions: the Secretary is to "provide for the greatest ultimate recovery of oil and gas underlying the Osage mineral estate."[7]

In recent years, Osage minerals production has dramatically slowed. This lack of production results in a human cost to our Osage headright holders, including elders who rely on income from Osage minerals. This decline in revenue is, in part, the result of federal systems and decisions related to the administration of the Osage mineral estate, including questionable interpretations related to the applicability of the National Environmental Policy Act (NEPA) to the Osage Reservation. Currently, the BIA, through the Osage Agency, is responsible for approving leases and issuing permits, which have been assumed to constitute "federal actions" that trigger NEPA, thus creating a bureaucratic stranglehold over the development and management of the Osage mineral estate. In the last five years, "the number of drilling permits issued by the Superintendent has dropped substantial[ly], [and] [m]any permit applications have been pending before [the] Superintendent for well over a year without any action."[8]

Due to a number of factors, including lack of resources within the Osage Agency and regulatory burdens, the development of the Osage mineral estate has stalled in an otherwise mineral-rich region.

The DEIS Wrongly Interprets NEPA to Displace the 1906 Osage Allotment Act and Subsequent Amendments that Require the BIA to Construe Federal Laws in the Best Interests of the Osage Nation

The BIA's assumption that NEPA trumps the Secretary's duties under the 1906 Act is undermined by the fact that federal courts have, continuously, concluded that questions regarding the Secretary's authority under the 1906 Act are to be "liberally" construed in favor of the Osage Nation and Osage headright holders. For instance, in *Logan v. Andrus*, the U.S. District Court for the Northern District of Oklahoma laid out a clear standard for interpreting the 1906 Act. The Act is to be interpreted using the canons of construction of Indian legislation, the most general being "that legislation affecting the Indians is to be liberally construed in their interest and doubtful expressions resolved in their favor." *Id*. at 1324. Further, while the Department's interpretation of Indian laws is entitled to "[g]reat weight," the regulatory power is "not the power to change the law." *Id*. (citing *United States v. Jackson*, 280 U.S. 183 (1930)). Finally, the Court concluded, that "[i]t is within the framework of the above rules of statutory construction that the Osage Allotment Act must be examined." *Id*.

Therefore, according to the Northern District, the 1906 Act obligates the Secretary to "provide for the greatest ultimate recovery of oil and gas underlying the Osage mineral estate." Pub. L. No. 95-496 § 4. This is consistent with the overarching canons of construction of Indian legislation, as affirmed by U.S. Supreme Court precedent.

Nowhere in the DEIS does the BIA actually consider whether NEPA's EIS process even applies to a lease issued pursuant to the 1906 Act, as amended. The failure to undertake this consideration, given the clear precedent stating that the 1906 Act imposes strict and enforceable

[7] Act of October 21, 1978, 92 Stat. 1660.
[8] *Osage Producers Ass'n v. Jewell*, 191 F. Supp. 3d 1243, 1247 (N.D. Okla. 2016).

trust duty obligations on the Secretary, constitutes a failure sufficient to preclude the BIA from moving forward with this current DEIS.

Even if the BIA had undertaken the requisite analysis to conclude that NEPA applies, it is within the Secretary's discretion to waive NEPA regulations because doing so would serve the best interest of the Osage Nation and Osage mineral estate, and federal law compels the Secretary to uphold his trust duties and obligations to the Osage Nation and headright holders. This is consistent with the congressional aims of the 1906 Act, namely, the goal of maximizing profits from the estate for the benefit of Osage Nation and Osage headright holders. The Secretary could do so in light of his capacity as fiduciary to the Osage mineral estate and the specific applicability of the Osage Acts.

Federal regulations compel the Secretary to forego the application of generic regulations where upholding non-Indian specific federal regulations would require the Secretary to abdicate his trust duties and responsibilities to Indian tribes and their citizens. Specifically, 25 C.F.R. § 1.2 states that "[t]he regulations in chapter I of title 25 of the Code of Federal Regulations are of general application. Notwithstanding any limitations contained in the regulations of this chapter, the Secretary retains the power to waive or make exceptions to his regulations as found in chapter I of title 25 CFR in all cases where permitted by law and *the Secretary finds that such waiver or exception is in the best interest of the Indians*." (emphasis added).

Federal courts have upheld the Secretary's use of this waiver in instances where enforcing a particular regulation would require the Secretary to act in a way that harms the interests of tribes and their citizens. *See, e.g., Langley v. Edwards*, 872 F. Supp. 1531, 1532 (W.D. La. 1995) ("the Secretary has retained the power to waive regulations in all cases where permitted by law and the Secretary finds that such waiver . . . is in the best interest of the Indians.") (internal quotation marks omitted). Other courts have also noted the validity of the waiver authority in a variety of contexts.[9]

The DEIS contains no discussion of the clear authority compelling the BIA to consider its assumed application of NEPA's regulations in the context of a framework of federal Indian law that commands strict adherence to fiduciary duties and trust obligations. Federal courts have repeatedly held that the federal government's trust duties and obligations to tribes trump the application of other generic federal laws. *See, e.g., Jicarilla Apache Tribe v. Supron Energy Corp.,* 728 F.2d 1555 (10th Cir. 1984) (concluding that the Secretary violated his fiduciary duties to the Jicarilla Apache Tribe where breaches of various gas leases were executed on tribal lands pursuant to the Indian Mineral Leasing Act of 1938 (IMLA)). In *Jicarilla Apache Tribe*, the Tenth Circuit held that the federal government "is obligated to act as a fiduciary[,] . . . [and accordingly, its] actions must not merely meet the minimal requirements of administrative law, but must also pass scrutiny under the more stringent standards demanded of a fiduciary." *Id*. at

[9] Courts have also cited to the waiver authority in the context of the Secretary's exclusive jurisdiction over estate and probate proceedings respecting des cent and distribution of assets of an Indian. *See Estate of Standing Bear v. Belcourt*, 631 P.2d 285 (Mont July 9, 1981); *Warfield v. Frank-Hill (in re Frank-Hill)*, 300 B.R. 25, 2003 Bankr. LEXIS 1248 (Bankr D Ariz Mar. 27, 2003). Courts have also examined and affirmed the waiver authority in the context of the Secretary's ability to take land into trust. *See State of Florida v. United States Dep't of Interior,* 768 F.2d 1248 at 1250 (11th Cir. 1985), *cert. denied,* 475 U.S. 1011 (1986).

1563 (Seymour, J., concurring in part and dissenting in part), *adopted as majority opinion as modified* *11 *en banc*, 782 F.2d 855 (10th Cir. 1986)). The BIA is wrong, under applicable law, to assume that administrative/environmental law automatically takes priority to the agency's trust duties and responsibilities to a tribal nation.

Courts have also ruled against the federal government in other situations where the Secretary prioritized national or governmental interests over his fiduciary duty to tribal nations. For instance, in *Pyramid Lake Paiute Tribe v. Morton*, the U.S. District Court for the District of Columbia ruled that the Secretary was obligated to resolve conflicting water claims in a manner consistent with the trust obligation the federal government owes to the tribe. 354 F. Supp. 252 (D.D.C. 1972). There, the Secretary had "fail[ed] to demonstrate an adequate recognition of his fiduciary duty to the Tribe" because the agency did not ensure that adequate water was delivered to the reservation for preservation of Pyramid Lake and tribal fisheries. *Id*. Specifically, the Court rejected the argument that the Secretary could make a judgment call to reconcile tribal and public interests in the water in favor of generic public water laws. *Id*. Similarly, in *Navajo Tribe of Indians v. United States*, the U.S. Court of Claims examined DOI's approval of a lease between the Bureau of Mines and an oil and gas lessee on tribal lands without tribal consent, citing wartime need. 364 F.2d 320, 323 (Ct. Cl. 1966). The Court found the government's actions unlawfully violated its federal trust duty to tribes, and although the government's actions may have been of national interest and in compliance with generic federal laws outside of the Indian law context, that "[did] not excuse" DOI's "duty to the tribe." *Id*. at 322. Taken together, *Pyramid Lake* and *Navajo Tribe* demonstrate it is improper for the Secretary to prioritize public interest in environmental protection (as in NEPA) over his specific fiduciary obligations to tribes and their citizens.

Nor has the BIA adequately considered whether NEPA actually applies as a statute of general applicability. There are many authorities that counsel it does not, and the BIA's failure to undertake this analysis renders its DEIS erroneous, arbitrary, and capricious.

The congressional goals of NEPA demonstrate it is a statute of general applicability. Courts have phrased the standard for "general applicability" in a few ways. In *Reich v. Great Lakes Indian Fish & Wildlife Comm'n*, the Seventh Circuit Court of Appeals considered whether courts have construed the law "liberally, to apply to the furthest reaches consistent with congressional direction, recognizing that broad coverage is essential to accomplish its goals." 4 F.3d 490, 499 (7th Cir. 1993) (quoting *Tony & Susan Alamo Found. v. Sec'y of Labor*, 471 U.S. 290, 296 (1985)). The Eleventh Circuit Court of Appeals has characterized this inquiry as turning on whether the statute is one that "Congress intended to have broad applicability," as evidenced by the language of the law and the definitions it employs. *Fla. Paraplegic Ass'n, Inc. v. Miccosukee Tribe of Indians of Fla.,* 166 F.3d 1126, 1128 (11th Cir. 1999).

The congressional goals of NEPA indicate a "broad coverage" intent:

> *To declare a national policy* which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and *stimulate the health and welfare of man*; [and]

> to enrich the understanding of the ecological *systems and natural resources important to the Nation . . . .*

42 U.S.C. § 4321 (2020) (emphasis added).

By contrast, the Osage statutes are statutes of specific applicability, with clear and particular Secretarial duties.[10] The 1906 Act and subsequent amendments makes it clear the Secretary has a responsibility to make oil and gas production on the Osage mineral estate an utmost priority. In fact, the 1978 Act—an act passed eight years after Congress enacted NEPA—states: "In order to conserve natural resources and *provide for the greatest ultimate recovery of oil and gas underlying the Osage mineral estate*, the Secretary of the Interior is authorized to establish rules and regulations under which oil and gas leases producing from a common source of supply may be unitized." Pub. L. No. 95-496 § 4 (emphasis added).

Federal courts have provided clarity as to when statutes of specific applicability trump statutes of general applicability. In this case, strong authority exists to support the conclusion that the Secretary's duties under the 1906 Act create an exception to statutes of general applicability, such as NEPA. The BIA's failure to consider this undermines all of the specific conclusions in the agency's DEIS.

A significant amount of federal authority supports the conclusion that the 1906 Act constitutes an exception to NEPA's EIS process. *See, e.g.*, *Donovan v. Coeur d'Alene*, 751 F.2d 1113, 1116 (9th Cir. 1985) (supporting "the proposition that Indian tribes are subject only to those laws of the United States expressly made applicable to them."); *Donovan v. Navajo Forest Products Industries*, 692 F.2d 709 (10th Cir. 1982) (statutes of general applicability are not applicable to Indian Tribes if the law would "be in derogation of Indians' treaty rights."); *EEOC v. Cherokee Nation*, 871 F.2d 937, 939 (10th Cir. 1989) ("Supreme Court precedent dictates that in cases where ambiguity exists (such as that posed by the ADEA's silence with respect to Indians), and there is no clear indication of congressional intent to abrogate Indian sovereignty rights (as manifested, e.g., by the legislative history, or the existence of a comprehensive statutory plan), the court is to apply the special canons of construction to the benefit of Indian interests.").

Furthermore, in considering statutes of general applicability, where those statutes are "silent on the issue of applicability to Indian tribes" the general statutes "will not apply to them if: (1) the law touches 'exclusive rights of self-governance in purely intramural matters'; (2) the application of the law to the tribe would 'abrogate rights guaranteed by Indian treaties'; or (3) there is proof 'by legislative history or some other means that Congress intended [the law] not to apply to Indians on their reservations . . . ." *United States v. Farris*, 624 F.2d 890, 893-94 (9th Cir. 1980). In any of these three situations, "Congress must *expressly* apply a statute to Indians before [courts] will hold that it reaches them." *Id*. at 1116.[11]

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[10] There are multiple statutes which apply specifically to the Osage Nation, including, but not limited to the Act of Apr. 18, 1912, Pub. L. No. 62-125, 37 Stat. 86 ("1912 Act"), amended by Act of Oct. 21, 1978, Pub. L. No. 95-496, 92 Stat. 1660 ("1978 Act"), amended by Osage Tribe of Indians Technical Corrections Act of 1984, Pub. L. No. 98-605, 98 Stat. 3163 ("1984 Act").

[11] The OMC acknowledges that some courts have considered the applicability of NEPA in the context of creating conflicts with other federal trust duties and obligations and have concluded that NEPA does in fact control. *See,*

In this instance, all three exceptions apply. The specifically applicable 1906 Act demonstrates a Congressional directive for the Secretary to prioritize the highest return for oil and gas proceeds on the Osage mineral estate, in direct opposition to the proposals contained in the DEIS under the generally applicable statute, NEPA.

NEPA makes no mention of its application to Indian tribes, and given Congress' clear edict that the Secretary must "provide for the greatest ultimate recovery of oil and gas underlying the Osage mineral estate[,]"[12] the BIA's failure to consider whether its assumption that NEPA applies to the actions the Secretary as to the Osages renders the DEIS arbitrary and capricious.

The DEIS Purpose and Need Statement Does Not Match the DEIS Substantive Content.

ES.2 PURPOSE AND NEED FOR THE DEIS
"The purpose of the BIA's actions is to promote leasing and development of the Osage Mineral Estate in the best interest of the Osage nation pursuant to the 1906 Act, as amended, balancing resource conservation and maximization of oil and gas production in the long term."

While the DEIS says its purpose is to promote oil and gas leasing of the Osage mineral estate, it, as written, does not adequately match the alternatives. The purpose and need section is supposed to drive the reasonable range of alternatives. The alternatives do not meet the need to promote oil and gas leasing within a "reasonable range" as CEQ regulations require. The alternatives developed for this DEIS would not meet the requirements of the 1906 Act, subsequent amendments, nor the CEQ regulations. They appear to have been developed for alternative land use such as what BLM might consider in their decision-making. To meet the BIA's stated purpose and need, the DEIS alternatives should have been developed in concert with the OMC as a fully cooperating agency and should emphasize enhanced recovery, new technologies and other alternatives that would optimize the mineral rights of the Osage Nation.

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e.g., Davis v. Morton, 469 F.2d 593, 597 (10th Cir. 1972) ("The fact that Indian lands are held in trust does not take it out of NEPA's jurisdiction."). The Tenth Circuit's holding in *Davis*, however, is easily distinguishable from the present circumstances. In *Davis*, the Tenth Circuit considered whether NEPA applied to the Secretary's issuing of a lease under 25 U.S.C. § 415. That statute, however, in contrast to the 1906 Act, is a statute of broad and general applicability, just like NEPA. *See* 25 U.S.C. § 415)"Any restricted Indian lands, whether tribally, or individually owned, may be leased by the Indian owners, with the approval of the Secretary of the Interior. . . ."). In that regard, it is no surprise that the Tenth Circuit concluded that NEPA applied to 25 U.S.C. § 415 since it is not specific to the unique trust duties and obligations the federal government maintains with regards to any one specific tribe. In contrast here, the 1906 Act is an act Congress crafted to ensure the Secretary upholds trust duties and responsibilities that are unique to the Osage Nation and Osage headright holders. If Congress truly intended for NEPA's EIS process to impede the ability of the Secretary to fully and faithfully effectuate his trust duties and responsibilities under the 1906 Act, Congress would have since amended the 1906 Act to transfer the Secretary's specific trust duties to a broader, more general federal law context. In this particular DEIS, the BIA has failed to consider any of the governing law concerning NEPA's applicability to the 1906 Act, and ultimately, an EIS that fails to undertake this analysis remains arbitrary and capricious.

[12] An Act to amend certain laws relating to the Osage Tribe of Oklahoma, and for other purposes, Pub. L. 95–496, § 4, 92 Stat. 1660 (1978).

Further, the DEIS does not lend itself to be tiered with an EA for future oil and gas development. Just one example of this would be found in the Wetlands discussion in Section 3.7 and Section 4.7. In Section 3.7, the writer gives a broad overview of the various wetland types and the number of acres within the Planning Area for each type. There are no associated maps to illustrate where and what type the wetlands are located within the Planning Area.

In the effects analysis in Section 4.7, the writer makes broad statements such as "Where access roads cross wetlands or riparian areas, vegetation could be removed to facilitate construction." It is in violation of the Clean Water Act to destroy or disturb a wetland without proper permitting and mitigation (notwithstanding any listed COAs). The writer assumes this would occur. It is very difficult to tier a project specific EA to this DEIS when the analysis within the DEIS is broad and assumes violations of federal law.

An EA could be tiered more efficiently to an EIS if there were maps provided showing where Wetlands are located. Furthermore, there is a threshold of allowable disturbance based on the activity and the type of wetland being disturbed. This information should also be included in the analysis. Blanket statements with no specific analysis translate to a deficient EIS that precludes efficient EA tiering. Without major revisions and thorough analysis-approach to this DEIS, dense EAs as currently written for each project would remain unchanged.

The OMC had hoped that this broad DEIS would lend itself to tiering that would provide for efficient analysis of future oil and gas development. Instead the focus is overbroad and focuses on competing land activities, lacks specific analysis, and is constructed in a way that will make it difficult for efficient EA preparation.

Finally, the DEIS does not adequately consider the "best interests" of the Osage Nation and Osage mineral estate. First, the 1929 amendment authorizes and directs the "Secretary of the Interior *and* the Osage tribal council . . . to offer for lease for oil, gas, and other mining purposes *any* unleased portion of said land in such quantities and at such times as may be deemed for the best interest of the Osage Tribe of Indians."[13] Thus, the best interest of the Osage Nation (formerly the Osage Tribe of Indians) is not a decision the Department through the DEIS can make unilaterally, without the Osage Minerals Council, the Constitutional representative of the Osage Nation on minerals matters. The DEIS best interest determination does not represent the views of the Osage Minerals Council, as required by statute, and thus is fundamentally flawed.

Second, the 1929 amendment requires the Department to lease "not less than twenty-five thousand acres shall be offered for lease for oil and gas mining purposes during any one year."[14] This leasing requirement is not optional. No lands under which the Osage mineral estate exist are exempt from being leased for oil and gas production, a fact evidenced by this statute that requires minimum leasing standards every year, with no cap or caveats considered.

Third, the 1929 amendment requires "as to all lands hereafter leased, the regulations governing the same and the leases issued thereon shall contain appropriate provisions for the conservation of the natural gas for its economic use, to the end that the highest percentage of ultimate

[13] Act of March 2, 1929, § 1, 45 Stat. 1478 (emphasis added).
[14] Act of March 2, 1929, § 1, 45 Stat. 1478.

recovery, of both oil and gas may be secured."[15] To be clear, conservation, as discussed in this provision, is not for the purpose of ensuring there is always natural gas, but rather, to ensure that natural gas is not wasted in the production process. The intent of Congress in enacting this conservation provision was made clear in a hearing before the House Subcommittee on the Committee on Indian Affairs, where it was stated that:

> Congress by the action of 1921 continued ownership of the tribe in the minerals until 1946 and directed that all of the lands unleased should be offered for lease for minerals, oil, and gas by 1931 at the rate of one-tenth per year. . . . but we will not lease all of the land by 1931, and there is no provision in the act of 1921 authorizing the lease to be made after 1931.
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> The Secretary . . . has suggested to Congress, in the interest of conservation of oil and gas, that the law requiring him to offer 100,000 acres each year, independent of conditions of the oil industry, does not conserve the oil, and, therefore, he has recommended . . . that the law be changed to enable the Secretary to offer leases for oil at such times as the interest of the oil industry would warrant. Such being the case, if Congress so provided it would take care of leasing in the future . . . . That is the object of this provision.[16]

Nine years later, when Congress was considering—and ultimately passed—another amendment to the 1906 Act, it reaffirmed the conservation provisions related to oil and gas in the 1929 amendment. Again preserving the requirement that leasing and production be conducted in a manner that would see the Osage receive all the benefit from the development of the Osage mineral estate, ensuring that leasing and production was in line with market demand to ensure the maximum return to the Osage.

> The Osage Indians are very anxious that the trust period be extended at this time in order that their rights may be fixed and that they may be better able to cooperate with the Government in the conservation policies regarding oil and gas, this extension being necessary in order to follow such conservation practices in the exploration and extraction of the oil and gas from the Osage Reservation of 1,470,933 acres . . . .
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> By the year 1920 . . . . it was clearly seen that the mineral deposits could not be removed and sold by the expiration of the trust period then upon the mineral estate expiring April 8, 1931. . . . A further extension has been provided for, at the request of the Osage Tribal Council . . . .

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[15] Act of March 2, 1929, § 1, 45 Stat. 1478.

[16] *Osage Tribal and Individual Affairs: Hearing on H.R. 9294 Before the House Subcomm. of the Comm. on Indian Affairs*, 70th Cong. 7 (1928), https://babel.hathitrust.org/cgi/pt?id=umn.31951d035180515&view=1up&seq=13.

> Under the present methods of production it is estimated that from 25 to 35 percent of the oil only is recovered from the sands, the balance remaining in the natural formations. Improved methods have been found through experimentation in recent years to increase the production from small producing wells in old areas. More attention is being given to pressure maintenance and cooperative operations of adjoining lands under agreements for the use of secondary methods for the purpose of increasing production. . . .[17]

Again, in 1978, eight years *after* the passage of NEPA, Congress authorized the Secretary to establish regulations that allow for unitization of Osage oil and gas leases—or merger of leases producing from a common source of supply without regard to surface boundary issues—to "provide for the greatest ultimate recovery of oil and gas under lying the Osage mineral estate . . . .").[18] The 1979 amendment to the 1906 Act provided for unitization as a method to "conserve natural resources", in this case, oil and gas:

> The act of June 24, 1938 (52 Stat. 1034) provided that leases of Osage lands for has purposes would contain provisions for conservation has through maximum recovery. Since the passage of that act, a number of States have recognized the need for unitization of leasehold interests from common sources of supply. Section 4 [of the 1978] amendment would authorize the Secretary of the Interior *to publish and enforce appropriate regulations for conservation of oil and gas production from the Osage reservation through unitization*.[19]

The DEIS discusses maximized oil and gas production in broad, sweeping statements a total of seven times, while discussions on conservation-related provisions are mentioned no fewer than 200 times. At no point does the DEIS discuss conservation as it was intended in the 1906 Act, as amended, nor does it lawfully establish that it represents the best interest of the Osage.

The notion that the DEIS balances conservation of natural resources and the maximization of oil and gas resources within the meaning of the 1906 Act and subsequent amendments is ludicrous, as the DEIS implements conservation standards that create barriers to obtaining "the highest percentage of recovery, of both oil and gas," rather than promoting the highest percent of

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[17] *Osage Tribal and Individual Affairs: Hearing on S. 3980 and S. 4036 Before the Senate Comm. on Indian Affairs*, 75th Cong. 11 (1938). https://babel.hathitrust.org/cgi/pt?id=umn.31951d035051863&view=1up&seq=39

[18] Act of October 21, 1978, § 3, 92 Stat. 1660.

[19] S. Rep. 95-1157, at 7 (1978) (emphasis added) (The Senate Report for the 1978 amendment indicates that conservation of natural resources is consistent with the 1929 and 1938 amendments, referring to conservation only to the extent that the practices being used are those that will not waste oil and gas natural resources and ensure maximum recovery of both oil and gas.).

recovery.[20] Congress affirmed and reaffirmed—both before and after NEPA was enacted—that the only conservation measures that Congress considered in relation to the Osage mineral estate were those that would ensure oil and gas was not wasted, and more importantly, that production could continue on all acreage of the Osage Reservation.

"The BIA needs this EIS in order to fulfill its trust responsibility under the 1906 Act to administer leasing and development of the Osage Mineral Estate."

The trust responsibility is not the trigger that requires the EIS. The federal action of leasing and permitting to drill the mineral estate within the Osage Reservation does not constitute a "federal action" sufficient to trump the Secretary's trust duties and obligations under the 1906 Act, as amended.

"In addition, the BIA is required, under more generally applicable statutes, to include in the best interest calculation, protection of the environment in Osage County in order to enhance conservation of resources and protection of the health and safety of the Osage people."

As explained above, this stated requirement is contrary to law. The "best interest" in this context means "best interest of the Osage Tribe of Indians" that in turn means minerals leasing and production. Furthermore, the best interest determination is not one that can be made by the Secretary unliterally, as the law requires the Osage Minerals Council (formerly the Osage Tribal Council) to concur in the determination of what constitutes the best interest of the Osage.

> The *Secretary of the Interior and the Osage tribal council* are hereby authorized and directed to offer for lease for oil, gas, and other mining purposes any unleaded portion of said land in such quantities and at such times as may be deemed for the best interest of the Osage Tribe of Indians: Provided, That not less than twenty-five thousand acres shall be offered for lease for oil- and gas-mining purposes during any one years: Provided further, That as to all lands hereafter leased, the regulations governing same and the leases issued thereon shall contain appropriate provisions for the conservation of the natural gas for its economic use, to the end that the highest percentage of ultimate recovery of both oil and gas may be secured: Provided, however, That nothing herein contained shall be construed as affecting any valid existing lease for oil or gas or other minerals, but all such leases shall continue as long as gas, oil, or other minerals are found in paying quantities.[21]

The statutes specifically applying to the Osage Reservation apply.

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[20] DEIS, 3.7.3 Trends ("Other Considerations: Oil and gas development will continue throughout the planning area. As part of the BA, the BIA proposes conservation and mitigation measures to reduce or mitigate impacts of oil and gas development . . . .").

[21] Act of June 24, 1938, 52 Stat. 1034 (emphasis added).

ES.3 EIS DECISION FRAMEWORK

"Operators may prepare a site-specific EA for one individual well, a 'batched' group of wells that will be located within the same area, an entire lease, a quarter-section, a section, or any larger area that they so choose.

The Operators are not responsible for preparing an EA. NEPA requires that a federal agency prepares the NEPA documentation. Operators are in the business of drilling and operating oil and gas wells, not in the business of preparing EAs and other NEPA documentation.

ES.5 SUMMARY OF THE REASONABLY FORESEEABLE DEVELOPMENT SCENARIO AND DEVELOPMENT PROJECTIONS

"The RFD indicates that the number of annual wells drilled is expected to increase over the current rate during the next 20 years (2018–2037)."

This is based on IHS Enerdeq data. It is not clear that the writers checked the IHS data against BIA oil and gas well records. It cannot be that the number of annual wells drilled will fall because of this EIS.

ES.6 ALTERNATIVES

ES.6.2 ALTERNATIVE 2, EMPHASIZE OIL AND GAS DEVELOPMENT

"Alternative 2 emphasizes oil and gas development. Under this alternative, the BIA would publish a list of best management practices (BMPs) for all operations on leases in Osage County; however, it would not mandate compliance with BMPs or prescribe specific actions that lessees must take in order to comply with applicable laws and regulations (specific actions may still be required at the site-specific level). In addition, the BIA would waive many of the COAs for drilling and workover operations."

As mentioned above, Alternative 2 is the best option of the four, but requires changes before any finalization to show remove any limitations on areas of Reservation development.

ES.6.3 ALTERNATIVE 3, HYBRID DEVELOPMENT

"Alternative 3 represents a hybrid approach to the alternatives; it blends concepts of Alternatives 2 and 4. COAs would be applied based on the density of wells in a Public Land Survey System section. Under Alternative 3, fewer COAs would be applied in high-density sections where there is more historical oil and gas development; more COAs would be applied in low-density sections, where there is little historical oil and gas development. Regardless of the density of wells, the BIA would not approve permits for new ground-disturbing activities in specified sensitive areas (see Figure 2-2)."

Alternative 3 is in direct violation of the 1906 Act, as amended, treating the Osage mineral estate in a manner similar to public lands. Rules and regulations concerning the Osage mineral estate must be adopted by the Secretary as contemplated by the 1906 Act, as amended, not through an

EIS that makes almost no mention of the Secretary's requirements related to the Osage mineral estate, and improperly gives weight to the subservient surface estate.

Furthermore, the definition of High-density and low-density is arbitrary. There is no explanation as to why 17 or more total wells that have been drilled constitutes "High-density." A total of 16 wells in a section translates to an area that does not "have historic development and is not part of the setting," however, a total of 17 wells does? This is subjective rather than scientific.

Additionally, future drilling technology may lead to discoveries of efficient oil and gas extraction which could lead to drilling and exploration in what is now considered low-density areas, a fact that Congress has directly considered related to the Osage mineral estate, and addressed to ensure the Osage would always be able to obtain the maximum benefit from the Osage mineral estate.[22] There are many instances across the country where areas that had little or no drilling activity suddenly became high-profile drilling areas. An example of this would be Blaine and Canadian County, OK. The area was historically drilled, however, in the last 10 years, these two counties have seen a tremendous increase in drilling. An area that once may have been considered a low-density area has become a high-density area. This option assumes no expansion or future discoveries and directly conflicts with congressional intent established by the 1929 amendment to the 1906 Act.

Furthermore, denying an APD in a sensitive area could result in breach of contract according to the terms of the lease. If the areas that are determined to be sensitive are currently under lease, denying an application would be a breach of contract under the terms of the lease. This could be construed as a taking where regulations restrict the use of property. Designating a municipality as a sensitive area is overreaching.

The DEIS does not explain the rationale behind limiting COA's in areas of high-density areas as opposed to low-density areas. As stated previously, an area that once was a low-density area and becomes a high-density area would have a mixed bag of COA's through development stages. This could lead to confusion from operators as to what COA's apply.

ES.6.4 ALTERNATIVE 4, ENHANCED RESOURCE PROTECTION

"Alternative 4 emphasizes resource protection by adding additional COAs that could apply throughout the planning area, including in sensitive areas. The BIA would issue permits based on site-specific NEPA analysis tiered to the analysis in this EIS. Under this

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[22] *See Osage Tribal and Individual Affairs: Hearing on S. 3980 and S. 4036 Before the Senate Comm. on Indian Affairs*, 75th Cong. 11 (1938), https://babel.hathitrust.org/cgi/pt?id=umn.31951d035051863&view=1up&seq=39 (Congress passed the 1929 Amendment to ensure the greatest ultimate recovery of oil and gas from the Osage Mineral Estate at all times, based on testimony it received: "Under the present methods of production it is estimated that from 25 to 35 percent of the oil only is recovered from the sands, the balance remaining in the natural formations. Improved methods have been found through experimentation in recent years to increase the production from small producing wells in old areas. More attention is being given to pressure maintenance and cooperative operations of adjoining lands under agreements for the use of secondary methods for the purpose of increasing production.").

alternative, the BIA would not approve permits for new ground-disturbing activities in specified sensitive areas (see Figure 2-3)."

Alternative 4 is in direct violation of the 1906 Act, as amended, broadening the scope of resources that the Department is allowed to consider. Through at least three different amendments to the 1906 Act—enacted before and after NEPA was passed—Congress limited its conservation concerns to oil and gas practices that would ensure ultimate recovery of oil and gas for the benefit of the Osage.[23]

Denying an APD in a sensitive area could result in breach of contract. If the areas that are determined to be sensitive are currently under lease, denying an application would be a breach of contract under the terms of the lease. This could be construed as a taking where a subsequent EIS restricts the use of property.

This is an expansion of Alternative 3. Designating a municipality, state parks, state WMA's, and USACE lakes as sensitive areas is overreaching. State parks and WMA's currently have oil and gas development regulations. The Corps also has established oil and gas development rules and regulations as well.

ES.8.1 Topography, Geology, Paleontology, and Soils

"Under all alternatives, oil and gas development would continue to affect topography, geology, paleontology, and soils in the planning area. Under all alternatives, the risk of induced seismicity from injection of wastewater would continue, as would damage to soils due to spills. Alternatives that reduce surface disturbance and require post-disturbance reclamation would reduce some adverse impacts."

The writer wrongly and without evidence states that topography, geology, and paleontology have been adversely affected.

ES.8.2 Water Resources

"Under all alternatives, water resources, including surface water and Waters of the United States, groundwater, and aquatic environments, are susceptible to depletion or contamination by oil and gas development. Alternatives 3 and 4 would reduce the risk of spills or surface disposal of wastewater compared with Alternative 1 (No Action), by preventing new drilling in areas with sensitive waters and applying COAs designed to protect water resources."

Groundwater is not currently being used for oil and gas activities. Surface water that

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[23] *See Osage Tribal and Individual Affairs: Hearing on H.R. 9294 Before the House Subcomm. of the Comm. on Indian Affairs*, 70th Cong. 7 (1928), https://babel.hathitrust.org/cgi/pt?id=umn.31951d035180515&view=1up&seq=13; *Osage Tribal and Individual Affairs: Hearing on S. 3980 and S. 4036 Before the Senate Comm. on Indian Affairs*, 75th Cong. 11 (1938). https://babel.hathitrust.org/cgi/pt?id=umn.31951d035051863&view=1up&seq=39; S. Rep. 95-1157, at 7 (1978).

is used is minimal and is replaced by rainfall.

ES.8.3 Special Status Species

"Under all alternatives, special status species would continue to be affected by habitat loss and fragmentation and disruption from noise and traffic. Under all alternatives, requirements to comply with the ESA and USFWS guidelines would mitigate or reduce impacts. Alternatives 3 and 4 would reduce the risk of habitat loss and species takes compared with Alternative 1 (No Action), since they would prevent new drilling near some lakes and rivers, and apply COAs designed to minimize surface disturbance, which would incidentally protect species habitat."

The alternatives, especially 3 and 4, would violate the 1906 Act, as amended, which contemplates leasing of the entire Osage Reservation, without exception.

Furthermore, the writer presents no evidence of habitat loss and fragmentation and disruption from noise and traffic.

ES.8.4 Cultural Resources

"Under all alternatives, incidental loss of or damage could occur to cultural resources, including those of significance to the Osage Nation and interested Tribes. Required compliance with the provisions of the NHPA, specifically Section 106 (36 CFR Part 800), would minimize and mitigate impacts. The BIA would consult with the THPO, interested Tribes, and other interested parties."

Any protections related to cultural protection must be provided within the context of the 1906 Act, as amended. The NHPA does not exist in a vacuum, void of Osage-specific federal laws. To the extent these alternatives do not specifically address how they comply with the 1906 Act, as amended, or otherwise why they can operate outside of the 1906 Act, as amended, they are not in the best interest of the Osage.

Additionally, the DEIS uses the word "could" which is a much better term and should be considered in other sections. Even so, the DEIS again assumes damage or loss of cultural resources has occurred by oil and gas development with no evidence or examples to show this.

Chapter 2. Alternatives

2.3.4 Alternative 3—Hybrid Development of High- and Low-Density Development Sections

National Historic Preservation Act Compliance

"Under Alternative 3, in addition to standard NHPA procedures, the BIA would apply buffers around identified cultural sites in low-density sections. Table 2-2, Cultural Site Buffers, describes the distance that any surface disturbance on an oil and gas lease would have to be from cultural sites. In high-density sections, the BIA would determine buffers on a case-by-case basis, in consultation with the THPO, interested Tribes, and appropriate other parties. The BIA may apply additional COAs, if necessary, based on a site-specific

EA and otherwise would ensure compliance with Section 106 of the NHPA on a case-by-case basis."

As a matter of procedure, defined buffer zones around various cultural resources can be beneficial. There would be no interpretation or subjectivity associated with buffer zones and the protection of cultural resources. However, there should be a clause where discretion can be implemented in accordance with the THPO and the BIA archeologist consultation.

Condition of Approval (Source) (Pg 2-23)

"30. The lessee must not locate well sites or pits in areas subject to frequent flooding, according to the NRCS Soil Survey. Facilities in such areas—for example, storage tanks—may be subject to additional controls or conditions that the BIA deems necessary, in order to minimize or eliminate pollution (OCC 2014)."

Due to the fact that Osage County participates in the NFIP, each operator must obtain a floodplain permit and comply with the rules of the County as it relates to development in floodplains. This is regardless of any of the applicable alternatives or COAs.

The well-established benchmark for well locations and tank batteries located in areas prone to flooding is whether the action is located in a flood plain as established by FEMA for those counties that participate in the NFIP. Therefore, the applicable COA should be that well sites, pits, and facilities shall be subject to the rules and regulations of the Osage County Floodplain Manager.

"33. The lessee must avoid new road and pipeline crossings of aquatic environments and alterations to hydrology (the surface and subsurface flow of water), to the extent practicable. Where crossing cannot be avoided, such crossings must be designed and constructed to minimize impacts on riparian and aquatic habitat."

New pipeline installations across the country cross aquatic environments rather frequently. There are well established BMP's for this activity. This COA is not necessary. Notwithstanding, it should be established who approves the "designed and constructed to minimize impacts on riparian and aquatic habitat."

"34. The lessee must bury pipelines to protect important aquatic environments or sensitive areas, when appropriate (new requirement)."

There is no definition of "important aquatic environments" or who determines that burying pipelines for the reasons stated is appropriate. This should not be subjective.

Table 2-1 – Alternative 1 page 2-6

"For American Burying Beetle (ABB) compliance, the BIA has prepared a BA, and the USFWS has issued a BO describing the total amount of acreage in the county where incidental take of ABB can occur. The BIA would allow activities to proceed without a 45-

day wait period where the ABB survey is negative, as long as appropriate COAs are applied. For other threatened and endangered species, the BA and the concurrence letter issued by the USFWS establish parameters for improved efficiency of BIA consultation on other threatened and endangered species with preliminary."

This would be similar to the provisions in the Industry Conservation Plan for the American Burying Beetle. This provision would definitely streamline the permitting process. In the past operators had to wait 45 to 60 days for concurrence from the USFWS. Under this provision, a negative survey would allow BIA to make a no affect determination for the ABB.

CHAPTER 3. AFFECTED ENVIRONMENT

3.2 TOPOGRAPHY, GEOLOGY, PALEONTOLOGY, AND SOILS

"Paleontological resources are any fossilized remains or traces of organisms that are preserved in or on the earth's crust. They include invertebrate, plant, trace, or vertebrate fossils, which constitute a fragile and nonrenewable record of the history of life. The BLM may, on request, provide expertise to other federal agencies, such as the BIA, in managing paleontological resources and research."

This violates the 1906 Act, as amended. The BLM has no involvement whatsoever with the Osage mineral estate, and it is highly inappropriate to use a DEIS to try to effectuate this type of change. Furthermore, it is not clear that BLM offices have paleontologists. In the event there are paleontological issues associated with the Osage mineral estate, the BIA and the Osage Minerals Council should confer and concur about the experts that would be used to address these issues.

3.2.2 CURRENT CONDITIONS

Geology (pg 3-9)
"According to the OGS, it is very unlikely that this increase in seismicity is due to natural processes. The OGS considers it very likely that "the majority of recent earthquakes, particularly those in central and north-central Oklahoma, are triggered by the injection of produced water in disposal wells" (OGS 2015). This culminated in 2016, with a record-setting magnitude 5.8 earthquake, centered near the town of Pawnee, Oklahoma, a few miles from the border of Osage County (The Oklahoman 2016a). In response to the substantial increase in the seismicity of the area, the EPA, which oversees disposal wells in Osage County, ordered a standing shutdown of five produced water disposal wells in southwest Osage County. The agency also ordered volume reductions at 15 other wells in the county. The EPA indicated that it would continue to follow the guidance of the OCC, regarding restrictions on Osage County disposal wells in the Arbuckle Group (The Oklahoman 2016b)."

The OGS study is from 2015. Is there updated information regarding induced seismicity? Seismic activity has decreased since 2015. Is there documentation or studies on why this has occurred? Volume and pressure control? Limiting injection to certain areas?

Hydrogen Sulfide
"Oil and gas exploration and development can release H2S gas from geologic formations, which can be a public health and safety hazard. H2S is a colorless gas with the characteristic foul odor of rotten eggs. It is heavier than air, corrosive, flammable, explosive, and very poisonous. At low concentrations it can irritate the eyes and act as a depressant; at high concentrations it can irritate the upper respiratory tract and, during prolonged exposure, lead to pulmonary edema (USGS 2010). A 30-minute exposure to 500 ppm results in headache, dizziness, excitement, staggering gait, and diarrhea, followed sometimes by bronchitis or bronchopneumonia (USGS 2010). The Osage Nation warns that H2S may be present at oil and gas facilities in the county (Osage Nation 2017a). See Section 3.11, Public Health and Safety, for further discussion of H2S."

This is a very general statement and ignores the fact that producers have been mitigating HS2 issues with safety monitoring and treatments to protect human health and avoid corrosive issues with pipelines, and has been the subject of well connect negotiations in the local industry for years. This statement should be changed or eliminated altogether.

Soils
"Soils in the planning area have been affected by oil and gas leasing for the past 100 years. Impacts are as follows (USGS 2003b):

- **Surface disturbance and soil compaction related to the construction of oil and gas operations and ancillary facilities**
- **Salt scarring and soil salinization; elevated sodium concentrations in soil kill vegetation and break down cohesion of soil particles, both of which enhance soil erosion**
- **Tree kills**
- **Brine and oil contamination from improper disposal or accidental release of large volumes of saline water produced in association with oil and gas production**

Before federal laws and regulations were instituted in the 1970s, produced waters were often discharged into streams, creeks, and unlined evaporation ponds, causing salt scars and surface water and groundwater pollution (USGS 2003b). These waters are highly saline (total dissolved solids may exceed 350,000 milligrams per liter) and may contain toxic metals, organic and inorganic components, and radium-226/228 and other naturally occurring radioactive isotopes. Currently, contaminated water generally comes from accidental hydrocarbon and produced water releases and from incorrectly sealed abandoned wells (USGS 2003b). Areas with salt scarring or oil contamination are unable to support vegetation, leaving the soils susceptible to erosion. To gauge the potential success of restoration, the soil salt content, nutrients, organic matter, petroleum hydrocarbons, and bacterial activity at individual sites would need to be measured."

These are very broad statements. It is unclear to what degree (number of acres) soils have been affected by oil and gas production. The focus of this section is fundamentally flawed as it only considers issues related to oil and gas, making no mention of farming, agriculture, ranching, or wild horse care, and the baseline analysis of these industries on soils. No other land

uses are considered in this section (See Section 3.8.2), effectively undermining the purpose of any study on environmental impacts on the soil.

Furthermore, the USGS 2003b that the DEIS relies upon for the proposition that "contaminated water generally comes from accidental hydrocarbon and produced water releases and from incorrectly sealed abandoned wells" is 17 years old and makes no direct connection to contamination issues related to the Osage mineral estate. Instead of overly broad statements, the DEIS should confirm, at a minimum, that it is relying upon the most recent science available, and include the impacts of all industries on the soil—ranching (wild horses) included—along with information about whether there has been a decrease in soil contamination due to brine and oil contamination, and whether there are any plans to gauge the potential success of restoration, soil salt content, nutrients, etc.

3.3 WATER RESOURCES

3.3.2 CURRENT CONDITIONS

Water Use for Oil and Gas Extraction:
"The surface release of contaminated water or substances capable of contaminating water can affect the quality of surface water and groundwater; accordingly, such releases can affect potential uses of this water, such as for domestic consumption. The quantity of water used for well drilling, completion, and production varies by the type of well and drilling technique. Vertical well completion, or conventional drilling, uses an estimated 100,000 to 500,000 gallons per well, with an assumed average of 250,000 gallons per well completion. Coal bed methane wells require significantly less water than other shale gas and tight oil wells (Murray 2013): from 50,000 to 350,000 gallons, with an average of 150,000 gallons per well completion."

The first sentence does not fit the remainder of the paragraph. The writer seems to show bias against oil and gas development by repeating this theme. This is repeated several times in this section. It is also a conclusion, not a baseline. Conclusions and impacts analysis belong in Section 4 of the DEIS.

"Vertical well completion, or conventional drilling" is confusing. There is a distinction between drilling a well and completing a well. The writer seems to combine these. The writers water usage source seems to be broad with no specifics to actual average water usage in Osage County. Water usage is based on formation, depth, length of lateral etc.

Again, this section fails to mention agriculture practices or grazing practices and their baseline analysis on water consumption and possible contamination.

Finally, this assumes that wells in Osage County are all drilled with water. A common method of drilling wells in Osage County is the use of air drilling. This method uses a fraction of the water requirements of conventional rotary drilling. The writer does not address air drilling and its percentage of usage comparatively.

"In 2016, 116 spills resulted in saltwater being released; 20 of these spills resulted in more than 100 barrels worth of saltwater being released (BLM 2017)."

This information is from the BLM, but the BLM has no involvement in oil and gas production within the Osage Reservation. How is this information applicable to the Osage Reservation? Or, is it applying information that has no applicability to the Osage Reservation? If the DEIS is going to rely upon information from an agency that has no involvement with the Osage mineral estate, then it needs to identify the specific locations within "planning area[s]" on the Osage Reservation that have been impacted by these spills.

Furthermore, the quantitative analysis falls short here. The analysis fails to include relevant information, such as:

- The number of acres and to what extent the 20 spills had an environmental impact to the vegetation and soils 100 bbls;
- The impact of the other 96 spills and whether they affected vegetation, soils etc., as well as the extent of the impact.

This information needs to be fleshed out so that proper impacts analysis can be completed in Section 4. These are again, blanket statements that are biased against oil and gas development.

"Lands in the planning area have been affected by salt scarring, tree kills, soil salinization, and brine and oil contamination. These conditions are due to the leakage of produced water and associated hydrocarbons from brine pits and accidental releases from active and inactive pipes and tank batteries (USGS 2005)."

Again, this has been repeated with no quantitative analysis or facts. How many acres have been affected compared to the number of acres in the planning area? There needs to be more of a quantitative baseline analysis instead of blanket negative statements. How can the Affects analysis be done if there is no baseline analysis?

"The US Geological Survey analyzed groundwater quality in the planning area in 2014 (USGS 2014). The entire planning area is underlain by brines containing concentrations of sodium and chloride and total dissolved solids of greater than 1,500mg/L (D'Lugosz et al. 1986); therefore, all freshwater aquifers in the planning area are subject to contamination by brines from natural seepage or oil and gas development activity (USGS 2014)." (Pg 3-21 / 3-22)

Environmental baseline should be committed to the facts. Regarding the last sentence of this paragraph, what is the level of concern for oil and gas development activity to contribute to contamination of the groundwater. Has there been a study of level of contribution between natural seepage and oil and gas development? If not, it seems that this paragraph should be limited to D'Lugozs 1986 literature. This "entire planning area is underlain by brines" is false. USGS 2015-26 electro-magnetic aerial survey of Osage County disclosed many areas of low salinity, not brine, subsurface ground water.

"Local effects may cause the substantial variations in dissolved chloride concentration in groundwater in the planning area (USGS 2014). These effects can be caused by brines seeping into shallow groundwater or by leaks and spills from oil and natural gas extraction near the land surface. No general geographic patterns of dissolved chloride concentration are apparent in groundwater samples collected in the planning area (USGS 2013)." (pg 3-22)

This paragraph is an opinion with no real baseline quantitative analysis. Was there an independent study completed to validate analysis? Where is the agriculture and grazing baseline analysis regarding groundwater?

"As shown in Table 3-9, oil and natural gas activities are considered a probable source in 3 out of the 18 impaired waterbodies in the planning area: Hominy Creek, Bigheart Creek, and Harlow Creek. No total maximum daily load has been established for the pollutants that could be related to oil and natural gas activities on these waterbodies (EPA 2015d)." pg 3-23

What information is there to back up the statement "oil and natural gas activities are considered a probable source in 3 out of the 18 impaired waterbodies…"? The writer presents a biased view based on an EPA study.

"Chloride concentrations measured in surface water in 1999 at sites distributed throughout the planning area were generally greatest in the southern and eastern sections. This is also where the most oil and gas wells had been drilled. Chloride levels are particularly high in the Little Hominy Creek watershed in the Bird Creek basin (USGS 2014)." Pg3-24

The statement "This is also where the most oil and gas wells had been drilled" reflects a bias that leads the reader to deduce that oil and gas wells are the sole factor of heavier chloride concentrations.

"As oil and gas development and populations increase, the demand for water will likely increase. Injecting produced water is also expected to increase, with the continuation of hydraulic fracturing and conventional oil and gas development in the planning area." Pg 3-25

The continuation of drilling new oil and gas wells does not necessarily translate into an increase in produced water injection. It could very well be that the produced water injection rate stays the same even with the increase in drilling wells. The reason why would be due to depletion of the producing wells. The blanket statement that it is "expected to increase" is based on what? By how much?

3.6 Special Status Species

The DEIS provides a baseline for each Endangered Species and also provides an effects analysis within the environmental baseline. The effects analysis should be completed in Section 4.

The DEIS effects analysis does not meet the standards outlined in 50 CFR part 402 or the 1998 USFWS MNFS Endangered Species Consultation Handbook. Effects analysis for endangered species are required to have either of the following determinations: "No effect," "Not likely to adversely affect," Likely to adversely affect."

Candidates species determinations should be: "No affect," "Not likely to jeopardize proposed species or adversely modify proposed critical habitat," "Likely to jeopardize proposed species or adversely modify critical habitat."

3-48
"The ABB is present in the planning area and would be affected by oil and gas development. Most of Osage County is within the range of this species, and the northeastern part of the county is considered a Conservation Priority Area for ABB (USFWS 2014a; see Figure 3-10, American Burying Beetle [in Appendix E])."

This should be changed to may be affected by oil and gas development.

3.6.2 Current Conditions

"Bald Eagle (Haliaeetus leucocephalus), Bird of Conservation Concern The USFWS has identified the bald eagle as a Bird of Conservation Concern, meaning that it is a species that represents the agency's highest conservation priorities. In addition, the species is of cultural significance to the Osage Nation, as the feathers are highly valued.
The eagle has a distinctive white head and tail, bright yellow bill, and dark plumage; it occurs in Osage County throughout the year. It can be found along the Arkansas River, including Kaw and Keystone Lakes (ODWC 2017c). The species prefers areas near water for hunting fish or waterfowl. It also nests in tall trees or cliffs near water. Clutch size is one to three eggs. Defended territories are relatively small, from 27 to 279 acres, but feeding home ranges around active nests are larger, from 1,729 to 5,337 acres. Wintering eagles tend to avoid areas with high levels of nearby human activity and development (NatureServe 2015); as such, the species may be affected by oil and gas development."

Birds of Conservation Concern – published by the USFWS Division of Migratory Bird Management, refers to the list of migratory and non-migratory birds of the U.S. and its territories that are of conservation concern. The 1988 amendment to the Fish and Wildlife Conservation Act requires the identification of "species, subspecies, and populations of migratory non-game birds that, without further additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973." Bald Eagles were removed from the endangered species list in August 2007 because their populations recovered sufficiently. Bald and Golden eagles are protected under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Act (Eagle Act).

3.6.3 Trends

"For the ABB, threats described above are expected to continue to reduce its populations and to fragment habitat in Osage County. Oil and gas companies are expected to continue

to construct, operate, and reclaim well pads, pipelines, and accompanying facilities, including access roads, electric distribution lines and substations, and off-site impoundments.

Oil and gas development in some portions of Osage County are likely to result in take of ABBs or impacts on their habitat. Activities occurring during the ABB active season could reduce the species' foraging and reproduction efficiency for the duration of the active season. This would affect prey species and reproduction and their habitat in project areas. This likely would reduce the available food sources, decrease reproduction potential, and decrease ABB use of the area. Any permanent facilities, such as access roads, would remove ABB breeding, feeding, and sheltering habitat."

Ecosystems supporting ABB populations are diverse and include primary forest, scrub forest, forest edge, grassland prairie, riparian areas, mountain slopes, and maritime scrub communities (Ratcliffe 1996; USFWS 1991). The ABB readily moves between different habitats (Creighton and Schnell 1998, Lomolino et al. 1995) and are considered to be habitat generalists.

3.7.3 TRENDS PG 3-64

"Other Considerations Oil and gas development will continue throughout the planning area. As part of the BA, the BIA proposes conservation and mitigation measures to reduce or mitigate impacts of oil and gas development on ABB habitat (see Section 3.6). This habitat is widespread in the planning area and generally includes upland forests, shrublands, grasslands, and certain types of wetland and riparian areas. Measures developed by the BIA generally include reducing soil compaction, wildfire risk, and soil erosion, restoring habitat, and monitoring vegetation and noxious weeds (Appendix B). Such measures will ensure that impacts on vegetation from oil and gas development are minimized. In the event that the ABB is removed from the endangered species list, the Osage Superintendent could require site-specific protection measures."

This is another example of requirements created by the BIA and USFWS beyond their statutory authority.

3.8.3 TRENDS PG 3-67

"The planning area is projected to have increased levels of new oil and gas development and future gross land disturbance of approximately 8,454 acres (Appendix A). On receipt of an approved lease, lessees have the right to use as much surface land in the Osage Mineral Estate as may be reasonable for operations and marketing; however, except for surveying and staking a well, no operations of any kind may commence until the lessee meets with the surface owner."

This is approximately 53,160 acre tracts of mineral leases. Mineral lease development does not affect every acre held. The 8,454 acres listed is an exaggeration used by the prepares in the absence of factual data.

3.9.3 TRENDS CULTURAL RESOURCES

"Compliance activities have steadily increased the rate of site discoveries due to continued mineral and energy development and the use of block surveys to efficiently inventory the cultural resources. Although sites are generally avoided, additional information valuable to archaeological and historical research could be gained by compiling and synthesizing data from these studies."

What does the writer mean when he/she speaks of "compliance activities have steadily increased"? This is not baseline analysis but a general description. How many acres have been surveyed due to oil and gas activities? Other activities? Total Acres? What benefits to the BIA/OMC have been realized due to these surveys? The last sentence has no bearing on the Cultural baseline of the DEIS. Again, this is an opinion and not based on any cited facts.

"Continued oil and gas development near sites increases the potential for impacts on cultural resources from unintentional or inadvertent damage, unauthorized collection, vandalism, and erosion. Damage, intentional or otherwise, to historic properties is irreversible and may result in a loss of the site's significance, integrity, or both. These losses may adversely affect the site's eligibility for listing on the National Register of Historic Properties."

This paragraph contradicts the preceding paragraph. A cultural resources survey and report is required for any new well drill. This includes intense research and pedestrian surveys. This is an opinion and not a baseline analysis. There is no factual basis for the conclusion as written in the paragraph. Any factual assertions should include citations to the studies or documentation that lead to the conclusion made in the first sentence? In its current form, this statement is extremely biased.

"… Tight timelines, lack of staffing, and difficulties with mitigation enforcement can lead to cultural resources not being identified or affected."

This is, again, an opinion with no factual basis. What tight timelines and from whom? The Cultural resources survey report must go through a comment period per the NHPA. The reports are carefully reviewed by the THPO, BIA archeologist and state archeologist. In fact, the current landscape is such that the review of the archeology reports is a cause for delays in getting APD's approved due to the review process.

3.11 PUBLIC HEALTH AND SAFETY

3.11.2 CURRENT CONDITIONS

"Produced water from oil and gas operations typically contains elevated levels of sodium and other chemicals. In the event of a spill or improper disposal of produced water near a drinking water intake, there is a possibility that chemical concentrations in drinking water could exceed federal safe drinking water standards."

This is not a baseline analysis. The baseline analysis would be to determine how many wells, if any are near a "drinking water intake"? What is a "drinking water intake"? Risks and possibilities should be in the affects analysis, not in the baseline analysis.

"The number of spills will generally correlate with the level of oil and gas development in the county."

The DEIS provides no citation to data to support this conclusion, and thus, reflects an opinon rather than fact that should be relied upon for a DEIS. It seems that in earlier discussion in the DEIS, there was a decrease in the number of spills between 2015 and 2016. Is "oil and gas development" defined as the number of wells that are drilled? Operated? Or both? What bearing does this sentence have on the baseline analysis? CERCLA and RCRA are mentioned along with the descriptions of the effects of hazardous substances in an effort to point the reader to the worst possible scenario and consideration of factors not in play in oil and gas production on the Osage mineral estate. The DEIS opines the risk to the public water supply and has not provided facts, examples, or any other material that would support this type of conclusion.

3.11.3 TRENDS PG 392

"Oil and gas development will continue to introduce risks to public health and safety in Osage County. The risk level depends on such factors as the amount of development and nature and type of mitigation measures implemented."

This is a reckless statement not supported by facts stated in the DEIS.

3.12 VISUAL RESOURCES

3.12.2 CURRENT CONDITIONS

"The most prominent human-made modifications to the visual landscape are the roads. Several major roadways bisect the county. Cities and towns in the county are characteristic of rural areas. Pump jacks and tank batteries are also frequently visible throughout the landscape."

The DEIS explains that pump jacks and tank batteries are part of the landscape. However, in Section 3.12.3, the writer says that oil and gas activity will increase visual changes.
To what extent? How? Again, this is a conclusion with little facts and should be in Section 4.
Furthermore, in section 3.12.2 "the oil and gas industry…is one of the most important economic industries in the county." Is oil and gas part of the landscape or not? The writer presents a biased and conflicting view.

3.12.3 TRENDS PG 3-95

"The landscape is experiencing some modification due to oil and gas development. As described in Section 3.16, 84 percent of the planning area has high or moderate-to-high oil

and gas potential. Based on this potential and predicted nationwide price increases (discussed further in Section 3.16), oil and gas development activity in the planning area is expected to increase over the next 20 years, accompanied by an increase in visual changes. Features with concentrated recreation, such as lakes and rivers, would be more sensitive to landscape changes, which could affect visual qualities."

More editorializing within the DEIS that appears to support a predetermined outcome from the DEIS. Osage County is the historic home of the Osage people who, as required by the United States government, purchased this as their reservation in 1871. Contemporary Osage people have embraced the pros and cons of petroleum production for over 120 years. The petroleum industry is a part of the Osage social and cultural fabric and a normal part of the landscape for Osages and others who are dependent upon the economic impacts of oil and gas production.

3.13 NOISE

Again, the writer makes a conclusion in several paragraphs. The last paragraph under Existing Sensitive Receptors makes a conclusion that "Surface owners next to oil and gas developments may be particularly sensitive to noises from this industry." First, the writer does not define "next to". Does "next to" mean 500 feet? 1,000 feet? 100 feet? Second, what data backs this conclusion up? These are opinions with no data. This again is an impacts analysis, and this should be explained in Section 4.

Also, one could also deduce that surface owners near oil and gas developments are less sensitive to the noise due to that fact that they are desensitized to that particular noise.

Finally, in Section 3.13.3, the writer says (and this is all throughout the DEIS) that "the number of oil land gas wells in the planning area is expected to increase over the next 20 years; therefore, noise associated with this industry is also expected to increase." The writer does not contemplate that although the number of wells drilled will increase, that does not take into account the number of wells that may be plugged and abandoned. Therefore, the number of producing wells over the next 20 years could remain the same as they are today. Therefore, the conclusion that noise with this industry is expected to increase is inaccurate. Furthermore, what does "increase" mean? Does the writer mean that there will be an increase in decibel levels? An increase in noise in a wider range of area? Or both?

Chapter 4. Environmental Consequences

4.1 INTRODUCTION

"The baseline used for the impact analysis is the current condition or situation of the resources in the planning area, as described in Chapter 3, Affected Environment."

This sentence is true, however, the reader makes conclusions and impact analysis throughout Section 3 where the impact analysis should be in Section 4 as stated.

4.2 TOPOGRAPHY, GEOLOGY, PALEONTOLOGY, AND SOILS

"Assumptions Direct impacts on topography, geology, paleontology, and soils would result from surface-disturbing activities that would occur during the construction phase of oil and gas development and from spills during operation, abandonment, and reclamation. Oil and gas development activities expected to affect geology, soils, paleontology and topography include construction and operation of the following:"

The DEIS assumes all oil and gas development have spills, therefore, affecting geology, soils, paleontology and topography. Spills are not common occurrences, however, the DEIS assumes that spills are widespread and occur on a daily basis.

"Direct impacts at the project-specific level could alter topography, damage paleontological resources, compact soils, or accelerate erosion rates of soil resources."

a) Regarding the direct impacts to paleontological resources, the writer does not take into consideration that:
    1) The cultural resources pedestrian survey can lead to paleontological findings, thus preserving these resources.
    2) Construction of well pads, lease roads, etc. can lead to paleo discoveries. Although there is not a COA that addresses this, operators who discover paleo resources most often stop construction and allow for preservation.
    3) Paleontological resources are more prevalent buried much deeper than what construction activities would disturb.
b) Compact soils and accelerate erosion:
    1) Construction of well pads, lease roads etc. does to a certain extent require soil compaction to stabilize the surface. However, the well pads, lease road etc. are then covered with gravel and rock to mitigate erosion.
    2) Compacting soils and rocking does not accelerate erosion rates. The writer does not quantify how erosion is accelerated.

4.2.2 IMPACTS COMMON TO ALL ALTERNATIVES

"Toxic H2S is considered a geologic hazard that may be released during drilling and completion, as leakage or as incomplete combustion during flaring. Under all alternatives, flaring would be prohibited without permission of the BIA Osage Agency Superintendent. This requirement would reduce the release of H2S during flaring by ensuring tighter control and monitoring of flaring. Further impacts of H2S are discussed in Section 4.11, Public Health and Safety."

Unless permitted by the BIA, flaring would be prohibited. "This requirement would reduce the release of H2S during flaring by ensuring tighter control and monitoring of flaring." The writer assumes that if the BIA permits flaring there will be some sort of control and monitoring to ensure H2S is being burned off. There is nothing that prescribes "tighter control and monitoring"? What specifically would be implemented to ensure "tighter control and monitoring"?

"Disposal of produced water in the Arbuckle formation using injection wells has been shown to stimulate earthquakes (i.e., induced seismicity) in Oklahoma… The risk of induced seismicity would likely increase as the volume of wastewater grows due to an increase in well spuds projected under all alternatives."

The DEIS assumes that no other formation could be utilized for accepting disposal water. There is a recent trend where operators are drilling to the Wilcox formation and or plugging back existing wells to the Wilcox formation. This has shown to mitigate induced seismicity.

Again, the DEIS assumes that there will be an increase in disposal water with the increase in drilling wells. The writer does not contemplate current producing wells depleting, therefore producing less water. Depletion of wells could result in uneconomic wells, therefore, requiring plugging. A more likely scenario would be that produced water injection would remain the same when there is a balance between new well drills and plugging existing depleted wells.

Finally, in Appendix E – Figures, the map showing seismic activity in Osage County concludes that only a couple of earthquakes have occurred in Osage County. The writer does not overlay this to show seismic activity with respect to oil and gas activity and SWD wells.

"Increased amounts of produced water could result in a greater number of spills or in larger spills and increased volume of wastewater injection which could result in increased levels of seismicity."

The DEIS assumes a correlation between the amount of produced water and the number of spills? Where is the science and studies that proves this? The writer also assumes increased volumes of injection water will lead to increased levels of seismicity. The EPA regulates injection wells in Osage County and often defers to the OCC. The OCC has implemented a program where necessary to reduce daily volume injection rates as a mitigation measure for induced seismicity. To a great degree this has curtailed induced seismicity. Furthermore, the writer does not contemplate other injection formations.

"Enhanced oil recovery methods, including water flooding and hydraulic fracturing, have the potential to force oil and contaminated water out of nearby wells that have been improperly abandoned, contaminating soils and groundwater."

A permit for an injection well requires an area of review (AOR) of 1-mile around the proposed location. Within the AOR, all types of wells are plotted on a map and the integrity of the wells are reviewed. For example, if a well that is plugged shows up on the AOR, then that well file is pulled to ensure the plugging of the well was adequately performed. If it is not, then the plugged well would require attention and proper plugging to ensure no communication between the well and injection fluids will occur. This review mitigates contamination of water coming up the hole of the plugged well.

The writer fails to discuss this in the DEIS.

"Under all alternatives, the BIA would apply COAs to oil and gas permits to ensure compliance with applicable laws and regulations, such as the ESA, Section 106 of the NHPA, and the Soil and Water Resources Conservation Act, and to prevent environmental degradation."

Applying COA's does not ensure compliance with applicable laws etc. Applying or issuing COA's is a vehicle used to notify operators of specific requirements. Simply issuing the COA does not guarantee that the operator will abide by those COAs. There has to be inspection and enforcement by the BIA to ensure compliance.

"Reducing surface-disturbance levels during oil and gas exploration and production would reduce the potential for compaction or erosion impacts on soils and damage to paleontological resources."

See discussion above regarding soil compaction and paleo resources.

4.2.3 ALTERNATIVE 1 – NO ACTION

"Under Alternative 1 (No Action), none of the COAs that would be applied are specific to paleontological resources, topography or geologic hazards; however, soil COAs would continue to limit surface disturbance by enforcing the confinement of work vehicles to existing roads."

COA number 4 addresses topography.

"A requirement to return the area to the original contour would reduce long-term impacts on topography."

COA 16 addresses this.

"To minimize the risk of induced seismicity related to underground injection, approval must be obtained from the EPA prior to the commencement of workover operations related to underground injection, construction, or conversion of saltwater injection/disposal wells."

This is a current requirement. This needs to be in Section 3 as a baseline analysis not in the affects analysis.

4.2.4 ALTERNATIVE 2

"Lessees would still be required to comply with all applicable laws and regulations but would have latitude to determine how best to comply."

Most of the COAs that would apply here do not contain specific instructions or procedures on how to comply. Furthermore, for all alternatives, the lessee would be required to comply with all

applicable laws and regulations. This is written in a way where the reader could conclude that not all alternatives require this.

"Removing requirements that waste and old equipment be removed from sites would increase the risk of soil contamination and salt scarring, compared with Alternative 1 (No Action)."

This requirement is contained in 25 C.F.R. §226.19(a), regardless of applying the COA.

"Waiving COAs that limit surface disturbance would also increase soil compaction and increase the risk of damage to paleontological resources compared with Alternative 1 (No Action)."

Regardless of issuing a COA that limits the surface disturbance (COA 3), 25 C.F.R. § 226.37 authorizes the right to use so much of the surface of the land within the…as may be necessary. Surface damages are paid to the surface owner based on footprint size. The operator has an incentive to keep surface disturbance to minimum because they do not want to use and pay more than they have to.

4.2.5 ALTERNATIVE 3

"This alternative would provide some additional protection of soil resources in low-density sections and sensitive areas, compared with Alternative 1 (No Action). Well spacing and density might shift under this alternative with lessees choosing to locate wells in high-density sections or choosing to locate multiple directional wells on a single well pad to reduce overall surface disturbance in low density sections and sensitive areas."

The COAs that would be issued under Alternative 1 are not so burdensome so that the operator would defer to the actions described above. Spacing wells and drilling multiple directional wells from a single well pad are a function of geology and maximizing recovery and not nearly as driven by COAs.

4.3 WATER RESOURCES

4.3.1 METHODS AND ASSUMPTIONS

Indicators
"Indicators of impacts on surface water and groundwater resources are the following:

- **Miles of roads constructed**
- **Number of spills of hazardous or other harmful materials"**

How does the number of miles of road construction affect surface water/groundwater? There are so many more contributing factors that could affect SW/GW. This is another example of biased towards the oil and gas industry. Furthermore, the DEIS focuses on the number of spills. It is not so much the number of spills, but rather the quantity and substance of the spill.

4.3.2 IMPACTS COMMON TO ALL ALTERNATIVES

"Oil and gas development may affect water resources in several ways, as follows:

- **Surface disturbance (e.g., road, power line, pipeline, and well pad construction) can increase runoff or change the physical characteristics of waterbodies."**

The way this is written is that surface disturbance can change the physical characteristics of waterbodies. Does the writer mean that …increase runoff can result in the physical characteristics of waterbodies?

"Applying certain COAs could reduce impacts on water resources by reducing surface disturbance, which would restrict discharge of dredge and fill materials into waterways."

Dredge and fill material into waterways? What is this? The writer has been discussing erosion, not dredge and fill material.

4.3.7 CUMULATIVE IMPACTS

"Freshwater resources would be depleted for by oil and gas development in combination with agricultural and industrial use in Osage County (Scanlon et al. 2014a, 2014b; Nicot et al. 2012; Murray 2013). FracFocus 1.0 disclosures indicate that annual water use for oil and gas development was 10 percent, or greater, of total annual water use in 6.5 percent of the counties reporting (EPA 2015h)."

This paragraph needs to be deleted. It does not make sense as to the point of cumulative impacts. It seems to be just added in here.

4.6.1 ASSUMPTIONS

"Under all alternatives, regulations prohibit lessees from locating any well or tank within 200 feet of any established watering place, except with written permission of the Superintendent (25 CFR Section 226.33)."

How is "watering place" defined?

4.6.2 IMPACTS COMMON TO ALL ALTERNATIVES

"Under all alternatives, existing leases would remain valid. Lessees would be required to comply with all applicable laws and regulations, such as the ESA, and to prevent environmental degradation. Section 7 of the ESA (16 USC 1531 et seq.) requires federal agencies, in consultation with the USFWS, to ensure that their actions are not likely to jeopardize the continued existence of any listed species or to result in adverse effects on designated critical habitat of such species."

This states that all leases would remain valid under all alternatives. However, if areas are designated as sensitive with no surface occupancy stipulations this may make certain leases

unable to be developed.

"Construction and operation of this infrastructure would result in direct habitat loss, degradation, and fragmentation; displacement; potential death of individuals; and nest abandonment."

In lieu of "would," it is better written as "could" or "may." It is possible for infrastructure to be collocated with existing infrastructure to reduce direct habitat loss, degradation and fragmentation. Furthermore, the species listed in 3.6.2 address the following with the below affect determinations:

American burying beetle – should be "may affect"
Whooping Crane – "unlikely to be affected"
Red Knot – "unlikely to be affected"
Interior Least Tern – "may be affected"
Piping Plover – "unlikely to be affected"
Northern Long-Eared Bat – "unlikely to be affected"
Neosho Mucket Mussel – "the likelihood of a threat from oil and gas development in Osage County is low"

Based on these determinations it is not conclusive that all oil and gas development will result in habitat loss, degradation and fragmentation; displacement; potential death of individuals; and nest abandonment.

"Specific activities expected to result in take of the ABB are human, vehicle, and equipment movement and surface disturbance from construction and installation of well pads, pipelines, access roads, transmission lines, and substations and operation and maintenance. This is due to the beetle's small size and the difficulty of avoiding them when working in habitat areas (USFWS 2014a). For the same reason, human, vehicle, and equipment movement and ground disturbance from construction and installation of well pads, pipelines, and access roads, as well as operation and maintenance, are also expected to result in take of ABB. Oil and gas development would remove vegetation or alter soil moisture. It also may degrade habitat, reduce habitat connectivity, and cause the loss of breeding, foraging, and sheltering habitat. Additionally, these activities may increase the potential for introducing nonnative, invasive species (USFWS 2014a)."

The use of the term "reduce habitat connectivity" is unsubstantiated. The ABB is a habitat generalist and prefers edge habitats. There is no evidence that the ABB requires habitat connectivity.

4.6.3 ALTERNATIVE I - NO ACTION

American Burying Beetle
"For ABB compliance, the BIA prepared a BA, and the USFWS would issue a BO describing the total amount of acreage in the county where incidental take of ABB can occur. Minimization and mitigation measures from the Oil and Gas Industry Conservation

Plan Associated with Issuance of ESA Section 10(a)(1)(B) Permits for the ABB in Oklahoma (USFWS 2014a) are proposed in the BA and would be concurred with and accepted in the BO or alternative minimization and mitigation measures would be proposed by the USFWS. Requiring lessees to follow USFWS-established protocol regarding areas where the ABB is known or expected to exist would reduce impacts on the ABB from surface-disturbing activities associated with workovers, cover drilling, or plugging. This would improve the likelihood of survival and reproduction of the species (USFWS 2014a)."

The Oil and Gas Industry Conservation Plan Associated with Issuance of ESA Section 10(a)(1)(B) Permits for the ABB in Oklahoma (USFWS 2014a) is already in place with minimization and mitigation measures in place. Will participants in this plan be required to purchase mitigation credits and follow all mitigation measures in the plan? Furthermore, enrollment in the plan can take at least 60 days with an additional 45 days for approval of individual projects that have a positive survey or assume take. There is no mention of whether this process will be streamlined for Osage County.

Migratory Birds
"In addition to the requirement to follow USFWS Impact Avoidance (USFWS 2014b) guidance, described in Section 4.7.2, other COAs would protect migratory birds by requiring screening or netting open-top tanks and pits. These measures would help protect prairie-nesting birds from disturbance and death; however, birds would continue to be disturbed by habitat fragmentation and degradation. The whooping crane may face increased energy expenditures from loss of migratory stopover habitat."

In section 3.6.2 it was stated that the Whooping Crane was "unlikely to be affected" but in this section there appears to be new affects analysis for the Whooping Crane. Osage County should have the standard Bureau of Land Management Conditions of Approval implemented. NTL-96-01

4.6.4 ALTERNATIVE 2

American Burying Beetle
"American Burying Beetle Like Alternative 1 (No Action), under Alternative 2, lessees would be required to protect the federally endangered ABB; however, without key BMPs and COAs, the BIA would likely need to revise the BA and reinitiate formal consultation under ESA Section 7 for ABB compliance. Until the USFWS issues the new BO, lessees would be solely responsible for documenting compliance under ESA Section 10. Because ESA compliance would still be required under this alternative, impacts on the ABB would be the same as those described under Alternative 1 (No Action)."

It is unclear why the BA would need to be revised for Alternative 2.

"Impacts of oil and gas development on raptors under Alternative 2 would increase, compared with Alternative 1 (No Action). Specific COAs that minimize surface disturbance, noise, excessive traffic, dust, or other impacts associated with oil and gas

operations would be waived. USFWS Impact Avoidance (USFWS 2014b) guidance, described in Section 4.7.2, would mitigate some impacts by reducing the mortality risk."

If Operators are following the same USFWS guidance under Alternative 1 and 2, it does not stand to reason that "Impacts of oil and gas development on raptors under Alternative 2 would increase, compared with Alternative 1 (No Action)."

"Rattlesnake Master Borer Moth No COAs would require identifying or avoiding the rattlesnake master plant before disturbing its habitat under Alternative 2. The rattlesnake master borer moth would continue to be affected by oil and gas development, as described in Section 4.7.2."

The Rattlesnake Master Borer Moth would still be protected by the ESA which prevents take of habitat.

American Burying Beetle
"Like Alternative 1 (No Action), under Alternative 3, lessees would be required to follow the provisions of Oil and Gas Industry Conservation Plan Associated with Issuance of ESA Section 10(a)(1)(B) Permits for the ABB in Oklahoma (USFWS 2014a) to protect the ABB. In addition, in low-density sections under Alternative 3, the BIA would apply a buffer around culturally sensitive areas, such as historic sites, sacred sites, and grave sites. These buffers would preserve vegetation and habitat for the ABB and other special status species found in these areas by reducing surface disturbance. Under Alternative 3, new oil and gas related ground-disturbing activities would not be permitted in 209,100 acres of potential ABB range, including 53,600 acres (11 percent) of conservation priority area (BIA GIS 2017)."

Lessees are only required to follow the provisions in the Oil and Gas Industry Conservation Plan if they are enrolled in the plan. If they are not enrolled in the plan they must comply with ESA. Adding buffers to culturally sensitive areas does not pertain to the American burying beetle. The ABB is a habitat generalist and these buffers would have minimal impact on the ABB. Removing 11 percent of the land in Osage County from oil and gas development could result in a "taking" from the oil and gas lessees in the area.

4.6.5 ALTERNATIVE 3

"In high-density sections, the BIA would apply the COAs described in Alternative 1 (No Action); thus, protections in high-density sections would be the same as under Alternative 1 (No Action) and greater than those in Alternative 2; however, additional COAs applied under Alternative 3 in low-density sections would make these sections more protective of special status species than Alternatives 1 (No Action) and 2. Alternative 3 would add more COAs in specific areas, based on information about where sensitive resources need to be protected. The BIA may choose to apply additional COAs to protect resources based on site-specific determinations. The BIA would also no longer approve permits for ground-disturbing activities in certain sensitive areas, totaling approximately 17 percent of the county. These sensitive areas are important habitats for special status species in the

planning area. Species in these areas would be protected from the impacts of new oil and gas development activities."

Past areas of high-density oil and gas development does not predict future areas of oil and gas develop due to the discovery of new fields and formation. Therefore, Alternative 3 may deter new development of oil and gas in other areas of Osage County. Furthermore, designating sensitive areas may result in take from current lessees if they are not allowed to drill. Osage Nation maybe required to refund bonuses for areas that can no longer be developed. If Alternative 3 is adopted the BIA should consider utilizing drilling islands that are pre-approved areas within the sensitive areas that can be used for drilling.

American Burying Beetle
"Like Alternative 1 (No Action), under Alternative 3, lessees would be required to follow the provisions of Oil and Gas Industry Conservation Plan Associated with Issuance of ESA Section 10(a)(1)(B) Permits for the ABB in Oklahoma (USFWS 2014a) to protect the ABB. In addition, in low-density sections under Alternative 3, the BIA would apply a buffer around culturally sensitive areas, such as historic sites, sacred sites, and grave sites. These buffers would preserve vegetation and habitat for the ABB and other special status species found in these areas by reducing surface disturbance. Under Alternative 3, new oil and gas related ground-disturbing activities would not be permitted in 209,100 acres of potential ABB range, including 53,600 acres (11 percent) of conservation priority area (BIA GIS 2017)."

Lessees are only required to follow the provisions in the Oil and Gas Industry Conservation Plan if they are enrolled in the plan. If they are not enrolled in the plan they must comply with ESA. Adding buffers to culturally sensitive areas does not pertain to the American burying beetle. The ABB is a habitat generalist and these buffers would have minimal impact on the ABB. Removing 11 percent of the land in Osage County from oil and gas development could result in a "taking" from the oil and gas lessees in the area.

4.6.6 ALTERNATIVE 4

"The BIA would also no longer approve permits for ground disturbing activities in certain areas, totaling approximately 36 percent of the county. Species in these areas would be protected from the impacts of new oil and gas development activities."

Removing 36 percent of the county from oil and gas development violates the 1906 Act, as amended, and could drastically affect tribal income and negatively affect Environmental Justice. This could also result in a taking of private property from current lessees of the 36 percent area.

American Burying Beetle
"Under Alternative 4, the ABB would be provided a high level of protections in the same way as in low-density sections under Alternative 3. For example, the 4. Environmental Consequences (Special Status Species) November 2019 Osage County Oil and Gas Draft Environmental Impact Statement 4-49 BIA would apply a buffer around culturally sensitive areas, such as historic sites, sacred sites, and grave sites. These buffers would

preserve vegetation and habitat for the ABB and other special status species found in these areas by reducing surface disturbance. As a result, impacts of oil and gas development on the ABB would be reduced, compared with Alternative 1 (No Action). Under Alternative 4, new oil and gas-related ground-disturbing activities would not be permitted in 484,700 acres of potential ABB range, including 141,500 acres (29 percent) of conservation priority area (BIA GIS 2017).”

It is unclear how this provision will change if the ABB is delisted. There could be a scenario where the ABB is delisted but still afforded “high level of protections” in Osage County. These protections may not be required under the ESA.

4.6.7 CUMULATIVE IMPACTS

This cumulative impact analysis does not appear to be specific to any of the Alternatives. This appears to be cumulative impacts based on worst case scenario.

“Oil and gas leasing and development, in combination with converting tallgrass prairie habitat to agricultural use, is likely to continue to affect ABB and special status bird species that use prairie habitat for nesting, foraging, and protection from predators. As discussed, the ABB’s small size makes them difficult to avoid. The proliferation of oil and gas projects across ABB habitat means an indeterminate but potentially vast number of individuals will be taken during project construction.”

This paragraph is conclusionary with no data to back any of the statements. It is unclear what information the author is using to make the following statement: “indeterminate but potentially vast number of individuals will be taken during project construction.” The DEIS tends to be vague and conclusionary without background data. This will make the DEIS very difficult to tier any future site-specific Environmental Assessments to and therefore will most likely not speed up the permitting process.

“Under all alternatives, the rattlesnake master borer moth also would cumulatively lose an indeterminate but potentially large number of individuals from loss of its host plant and sole food source, the rattlesnake master plant. Losses would occur during construction of oil and gas and infrastructure projects across the region.”

The Rattlesnake Master Borer Moth is currently not a listed species on the ESA. Once it is listed it will be afforded protections by USFWS that would put forth mitigation protocols.

“Alternatives Analysis Under Alternative 1 (No Action), Alternative 2, and Alternative 3 (high-density sections), trends toward habitat loss, fragmentation, and degradation from agricultural conversion and development for special status species described in Section 3.7.3 are likely to continue. The cumulative impacts of oil and gas development, agricultural and livestock grazing, and other infrastructure projects would be greatest under Alternatives 2 and 3 (high-density sections). For the ABB, trends of death and injury and habitat loss and fragmentation would continue. Implementing measures from the Oil and Gas Industry Conservation Plan Associated with Issuance of ESA Section 10(a)(1)(B)

Permits for the ABB in Oklahoma (USFWS 2014a) may reduce, but not eliminate, the affects of oil and gas development on ABB and species that share ABB habitat."

Lessees are only required to follow the provisions in the Oil and Gas Industry Conservation Plan if they are enrolled in the plan. If they are not enrolled in the plan they must comply with ESA.

4.7 VEGETATION, WETLANDS, AND NOXIOUS WEEDS

4.7.2 IMPACTS COMMON TO ALL ALTERNATIVES

"Temporary and permanent vegetation removal associated with construction, drilling, and workover operations directly impacts vegetation and wetland resources. Vegetation could be removed by surface-disturbing activities, such as constructing new or expanding existing access roads or well pads. Where access roads cross wetlands or riparian areas, vegetation could be removed to facilitate construction. Wetlands could be directly affected by filling, draining, or otherwise altering surface or subsurface hydrology. Where disturbed areas are reclaimed and revegetated, impacts would be temporary, lasting less than 5 years. If disturbed areas are not reclaimed and revegetated, for example where a permanent access road or monitoring well was installed, impacts would be permanent."

In the first sentence, the writer proposes that all construction of well pads etc. would have a direct impact on vegetation and wetland resources. This is simply not true. Wetlands are sensitive areas found in certain areas with particular habitat.

4.8 AGRICULTURE

4.8.4 ALTERNATIVE 2

"If topsoil excavation and soils compaction were to increase as a result, disturbance of farmland, described in Section 4.8.2, would increase, compared with Alternative 1 (No Action). Standard fencing for excluding livestock from production areas would not be a COA, but the lessees would be responsible for determining the need for and sufficiency of fencing to avoid the risk of livestock injury or mortality."

25 C.F.R. part 226 dictates fencing requirements.

4.9 CULTURAL RESOURCES

It seems all alternatives would be equal in the affects analysis with respect to cultural resources and the potential impacts. This is due to the fact that Section 106 under the NHPA would have to be complied with. COA's would not have any impact on complying with Section 106.

The preservation of cultural resources in Osage County can be primarily attributed to the oil and gas industry and the requirement to comply with the NHPA. The writer fails to analyze and describe to the public how many acres in Osage County have been surveyed for cultural resources and what industry those surveys were related to. The writer fails to definitely conclude

that these surveys related to oil and gas development have had a positive outcome for the preservation of cultural resources.

4.10 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

4.10.2 IMPACTS COMMON TO ALL ALTERNATIVES

"While proposed COAs may affect operations, they are not expected to result in development becoming economically unfeasible. Application of the COAs is therefore not anticipated to have a significant impact on the level of oil and gas development in the county under any of the four alternatives analyzed. Further, the BIA Osage Agency Superintendent may approve a modification or waiver of a COA, so long as such modification or waiver does not violate applicable laws and regulations."

"Application of the COAs is therefore not anticipated to have a significant impact on the level of oil and gas development in the county under any of the four alternatives analyzed." This flies in the face of the writer's entire analysis in this DEIS. If this is true, then why have a distinction between the 4 alternatives and their respective COAs?

"Construction associated with oil and gas development has the potential to result in short-term impacts on local residents' quality of life due to increased potential for erosion, dust, traffic, and noise. Long-term impacts on local air, water quantity and quality, and visual setting also may occur. The level of impacts would be affected by the location of development, mitigation measures employed, and drilling technology. Impacts are detailed in Sections 4.3, Water Resources; 4.4, Air Quality and Climate; 4.11, Public Health and Safety; and 4.13, Noise.

In addition, disposal of produced water in underground injection wells has been linked with increased seismicity in Osage County. Under all alternatives, new wells are projected to increase, which is anticipated to increase the amount of wastewater requiring disposal (see Section 4.2). Property value has the potential to be affected by induced seismicity in high-risk areas (for example, see Metz et al 2017).

Hydraulic fracturing may represent unique impacts on local communities' quality of life through impacts on water quantity and quality (see Section 4.3). As discussed in the Osage RFD (Appendix A), the majority of new wells during the life of this EIS are anticipated to be conventional wells, drilled and completed without the use of hydraulic fracturing.

Oil and gas development may conflict with other land uses, including agriculture, timber, and wind development. The degree to which conflict may occur depends on the degree of surface disturbance and would vary by alternative. Conflicts with other land uses could reduce the economic contributions from these resources.

Under all alternatives, oil and gas development may affect nonmarket values in the planning area. Nonmarket values are the benefits derived by society from the uses or

experiences that are not dispensed through markets and do not require payment. This can include the preservation of scenic views, plant and animal 4. Environmental Consequences (Socioeconomics and Environmental Justice) November 2019 Osage County Oil and Gas Draft Environmental Impact Statement 4-71 habitat, clean air and water, and important cultural sites for use and enjoyment by future generations. As detailed in other resource sections, oil and gas development could alter viewscapes and affect wildlife habitat, air, and water. This may result in changes to the associated nonmarket values and social setting."

These paragraphs do not belong in this section. Why is the writer including discussion of produced water, hydraulic fracturing etc. in the Socioeconomics portion of the DEIS? Those issues have been discussed.

There is a positive socioeconomic impact for all alternatives that the writer fails to point out distinctly. That is the money generated by royalties to the headright owners. The writer downplays this by adding the above paragraphs.

4.10.3 – ALTERNATIVE 1 – NO ACTION

Environmental Justice
"Continued oil and gas development could benefit all populations, including identified minority and Tribal populations, by creating job opportunities and stimulating local economic growth. Royalties would continue to be paid out to headright owners, primarily Tribal citizens; however, disturbance from construction activities could have continued adverse affects on specific traditional Tribal lifeways and religious and cultural sites due to the presence of Tribal populations in the planning area."

The writer again tries to overshadow the positive impact of oil gas development with shaky accusations that development "could have continued adverse effects on specific traditional tribal lifeways and religious and cultural sites due to the presence of tribal populations in the planning area." Does the mere presence of tribal populations within the planning have potential impacts to tribal lifeways etc.? Where are the facts that this has occurred? By what standards has adverse effects had on tribal lifeways and religious and cultural sites? This is filler language that is unfounded with facts.

4.10.4 ALTERNATIVE 2

"Environmental Justice Compared with Alternative 1 (No Action), there is potential for increased economic output to all populations under Alternative 2, due to the increased flexibility in complying with regulations. Potential impacts from construction activities and to quality of life, including impacts on Tribal populations as discussed under Alternative 1 (No Action), may be increased under Alternative 2. Because impacts would be spread throughout the planning area and the region, proposed oil and gas development is not anticipated to result in disproportionate adverse impacts on identified minority or Tribal populations."

This is a conclusion with no factual basis and no comparative analysis. How many more wells would be drilled and where if alternative 2 was the chosen alternative? What factual basis is there to support that "impacts would be spread throughout the planning area and the region"?

4.16 MINERAL EXTRACTION
4.16.4 ALTERNATIVE 2
"With the removal of some COAs, the BIA would need to submit a revised BA and reinitiate formal consultation on a new BO. Until a new BO is issued, lessees would be solely responsible for documenting compliance under ESA Section 10. Oil and gas operations could not proceed until a 45-day wait period has elapsed, 4. Environmental Consequences (Mineral Extraction) 4- 102 Osage County Oil and Gas Draft Environmental Impact Statement November 2019 unless there is no suitable habitat and the BIA is willing to make a "no affect" determination for the ABB. This could delay oil and gas development in the planning area, compared with Alternative 1 (No Action)."

The writer needs to explain this in more detail. It is unclear as to why a revised BA would be needed with a new BO.

Appendix A
Reasonably Foreseeable Development Scenario
C. Drilling Activity by Well Type
Page 9

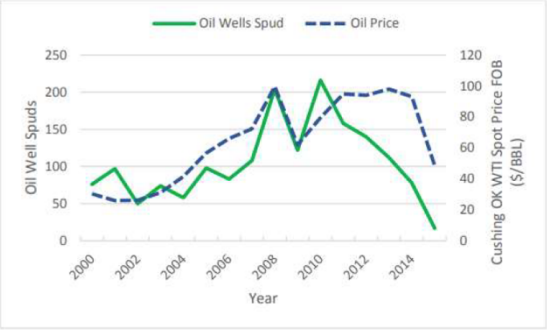

Figure 3. Oil Well Spuds compared to WTI Oil Price from 2000 through 2015.

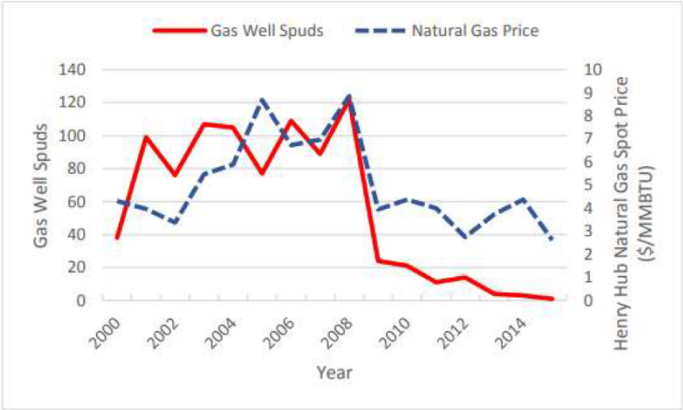

Figure 4. Gas Well Spuds compared to Henry Hub Natural Gas Price from 2000 through 2015.

This data does not support the expected number of wells to be drilled. Clearly, the trend is that new well spuds is declining and has declined since 2010. This is inconsistent with the writers' conclusion that well spuds will continue to increase and that there is a correlation between oil prices and new well spuds. The prices of oil were at an all-time high through those years, above $100/bbl. This needs to be reconciled throughout the DEIS.

Figure 6. Oil Well Spuds versus WTI Oil Price from 2000 through 2010.

This is an inconsistent representation with other benchmarks. It fails to show 2008 –2014 where well spuds decreased and oil prices remained above $100/bbl.

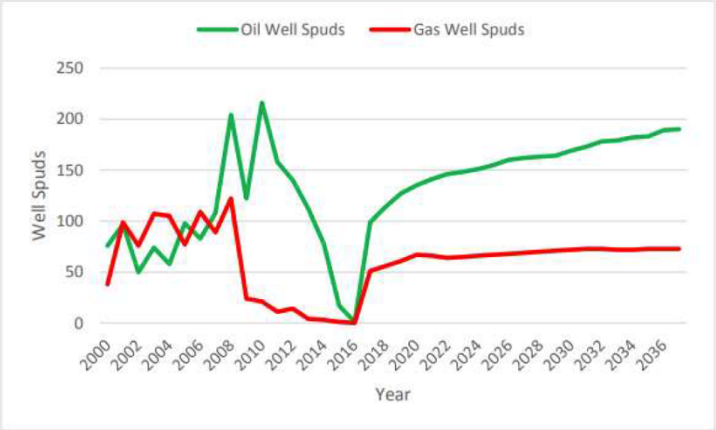

Figure 8. Actual Past and Potential Future Oil and Gas Well Spuds.

What is the justification for an increase in rig activity?

VIII. Surface Disturbance Due to Oil and Gas Activity

"The agency estimates, based on field observation, that an average of 1.25 acres are reclaimed per well. Subtracting the reclaimed acreage from the gross disturbance provides a net long term surface disturbance of approximately 3,571 acres. Table 2 summarizes the results for potential gross and net surface disturbance."

This is an overestimation of disturbed land due to the fact that the number of anticipated new wells is overstated.

Shortcomings Related to Osage Minerals Council Status as Cooperating Agency

The current draft of the DEIS provides a number of provisions that conflict with the 1906 Act and subsequent amendments to the 1906 Act. These conflicts could have been resolved had the Osage Minerals Council been treated as a cooperating agency in more than name alone, as represented by the BIA Notice of Availability published on November 22, 2019.[24]

On July 7, 2016, Everett Waller, Chairman of the Osage Minerals Council, signed the Memorandum of Understanding Between Department of the Interior, Bureau of Indian Affairs, Eastern Oklahoma Region, and Osage Minerals Council as a Cooperating Agency/Entity (MOU). Eddie Streater, Regional Director for the BIA's Eastern Oklahoma Region had signed the MOU on June 30, 2016. The MOU presented a number of requirements that have yet to be fulfilled, and thus, the Osage Minerals Council should not be deemed a cooperating agency that participated in the development of the DEIS. Among other things, the MOU permits the OMC, as cooperating agency:

> to participate in activities including, but not limited to, those identified in Attachment A. These activities include: identifying

[24] 84 Fed. Reg. 64556.

> data needs, identifying alternatives, identifying effects of alternatives, suggesting design features, and providing written comments on working drafts of the EIS and supporting documents.[25]

Additionally, the MOU provides:

> The OMC will review the draft EIS and offer comments and edits for BIA's consideration for incorporation into the draft EIS before it is released for public review. Upon the EIS becoming final, the OMC will have the opportunity to approve the final EIS by resolution before the record of decision is published.[26]

Since entering the MOU, the OMC has not been privy to any working drafts of the DEIS or other supporting documents, nor was OMC permitted to review the DEIS prior to its released for public review. The OMC initially agreed to be a cooperating agency, as the BIA seemingly acknowledged the benefit of including the OMC in the EIS development process, due to the OMC's "jurisdiction by law and special expertise applicable to the EIS effort."[27] This special expertise has not, however, been utilized, and as a result, the DEIS is rife with problematic provisions.

Sincerely,

Chairman Everett Waller

[25] Memorandum of Understanding Between Department of the Interior, Bureau of Indian Affairs, Eastern Oklahoma Region, and Osage Minerals Council as a Cooperating Agency/Entity IV(B)(5).
[26] *Id.* at IV(B)(6).
[27] *Id.* at I.