

Determination of NEPA Adequacy (DNA)

U.S. Department of the Interior
Bureau of Land Management (BLM)

Office: Alaska State Office

Tracking Number: DOI-BLM-AK-9630-2012-0001-DNA

Casefile/Project Number: AA-92942

Proposed Action Title/Type: Oil and Gas Lease Sale in the National Petroleum Reserve-Alaska (NPR-A)

Location/Legal Description: National Petroleum Reserve-Alaska (NPR-A), in Alaska's North Slope

A. Description of the Proposed Action and any applicable mitigation measures

To implement the Northwest National Petroleum Reserve-Alaska Integrated Activity Plan (Northwest NPR-A IAP) Record of Decision (ROD, also referred to as the 2004 ROD) and the Northeast National Petroleum Reserve - Alaska Supplemental Integrated Activity Plan (Northeast NPR-A SIAP) ROD (also referred to as the 2008 ROD) and President Obama's direction in May, 2011 to conduct annual lease sales in the NPR-A, BLM proposes to hold an oil and gas lease sale in December 2011 for lands in the Northwest and Northeast NPR-A planning areas (see Map attached at the end of this DNA). Tracts to be offered in the lease sale are all within areas authorized for leasing by the Secretary of the Interior in the Northwest and Northeast NPR-A RODs (January 22, 2004 and July 16, 2008, respectively).

The proposed sale would offer for lease 283 tracts (approximately 3,060,176 acres), which comprise approximately 23 percent of the 13.4 million subsurface acres the BLM manages in these two NPR-A planning areas. (See Map 1.) The proposed sale lease tracts constitute approximately 27 percent of the unleased lands in the planning areas that the 2004 and 2008 RODs determined to be available and not deferred from leasing. Approximately 12 percent (1,361,105 acres) of the available and undeferred lands are under lease. Approximately 1.57 million acres (17 percent of the planning areas) in the far west of the Northwest NPR-A planning area were deferred from leasing until 2014 by the 2004 ROD. Approximately 425,000 acres (3 percent of the planning areas) north and east of Teshekpuk Lake were deferred from leasing until 2018 and 219,000 acres (1.6 percent of the planning areas) comprised of Teshekpuk Lake and its islands were classified as unavailable for leasing by the 2008 ROD.

BLM developed Required Operating Procedures (ROPs) and stipulations to ensure that oil and gas operations are conducted in a manner that minimizes adverse impacts to the land, resources, land uses, and users. ROPs and stipulations (see Appendix B of the 2004 ROD and Appendix A of the 2008 ROD) will be incorporated into lease terms associated with the proposed action. In addition, the RODs committed to studies and monitoring efforts to further protect surface resources.

B. Land Use Plan (LUP) Conformance

LUP Name:

- Northwest National Petroleum Reserve-Alaska Integrated Activity Plan/Environmental Impact Statement (2003) and Record of Decision (2004)
- Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/Environmental Impact Statement (2008) and Record of Decision (2008)
- Colville River Special Area Management Plan and associated Environmental Assessment, and Decision Record (July 2008)

(These documents are available online at: <https://www.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage¤tPageId=14708>)

Date Approved:

- November 2003 (Northwest NPR-A IAP) and January 22, 2004 (2004 ROD)
- May 2008 (Northeast NPR-A SIAP) and July 16, 2008 (2008 ROD)

The proposed action is in conformance with the applicable LUPs because it is provided for in the 2004 and 2008 RODs. The two RODs provide the basis for future management of the two NPR-A planning areas. Lands that the RODs made available for leasing are available indefinitely.

C. Identify applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

- Northwest NPR-A IAP/EIS (November 2003) and ROD (January 2004)
- Northeast NPR-A SIAP/EIS (May 2008) and ROD (July 2008)
- Colville River Special Area Management Plan and associated Environmental Assessment, and Decision Record (July 2008)
- Northern Planning Areas of the National Petroleum Reserve-Alaska Final Biological Assessment (May 2008) and Biological Opinion (July 2008)

D. NEPA Adequacy Criteria

1. a. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document?

Yes. The current proposal is part of the preferred alternatives previously analyzed in the two NPR-A plans. The RODs authorized multiple oil and gas lease sales for the lands BLM is offering in the 2011 lease sale. This proposed lease sale would be the fourth within the Northwest NPR-A under the 2003 Northwest NPR-A IAP and 2004 ROD and the third within the Northeast NPR-A under the 2008 SIAP/EIS and ROD. The BLM held lease sales in the Northeast NPR-A in 1999, 2002, and 2004 based on a 1998 Northeast NPR-A IAP/EIS and ROD. (The 2004 lease sale only included Northeast NPR-A tracts that straddled the Ikpikpuk River.)

1.b. Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document? If there are any differences, can you explain why they are not substantial?

Yes. The project is within the same analysis area analyzed cumulatively in the Northwest NPR-A IAP and Northeast NPR-A SIAP/EIS.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the current proposed action, given current environmental concerns, interests, and resource values?

Yes. The Northwest NPR-A IAP/EIS analyzed a broad range of alternatives, from leasing no lands to leasing the entire Northwest NPR-A planning area. The Northeast NPR-A SIAP/EIS analyzed a broad range of alternatives, including leasing no more acres than had been authorized for leasing in the Northeast NPR-A ROD issued in 1998 to offering all lands in the planning area for leasing. Each alternative included a wide range of stipulations and ROPs to protect surface resources and address a wide variety of environmental concerns, interests, and resource values.

3. Is the existing analysis valid in light of any new information or circumstances (such as, rangeland health standard assessment, recent endangered species listings, updated lists of BLM-Sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?

Yes. The existing analysis and conclusions are adequate. New information and circumstances have arisen since the issuance of the Northwest NPR-A IAP/EIS in 2004 and the Northeast NPR-A SIAP/EIS in 2008 regarding the amount of technically and economically recoverable undiscovered oil and gas resources in the NPR-A, the designation of critical habitat for polar bears, a proposal for an in-state gas pipeline (in addition to a large-diameter pipeline, which was analyzed in the SIAP), and the State of Alaska's proposal for an all-season gravel road from the Dalton Highway to Umiat, but we can conclude that the new information and circumstances are insignificant to the analysis of this proposed action.

U.S. Geological Survey's Updated Assessment of Technically and Economically Recoverable Undiscovered Oil and Gas Resources in NPR-A

In October 2010, the U.S. Geological Survey updated its assessment of the technically recoverable undiscovered oil and gas in NPR-A and in 2011 the agency published an economic assessment of those resources (USGS Open-File Report 2011-1103). The technically recoverable oil was reduced by approximately 90 percent from the agency's 2002 analysis and technically recoverable gas was reduced by approximately 10 percent. Assuming an oil price of \$180/barrel, the highest price analyzed by the USGS, and a gas price of \$9.26/thousand cubic feet, the highest projected price estimate of the Energy Information Administration (U.S. Energy Information Administration, *Annual Energy Outlook 2011*), the USGS projects recovery of 604 million barrels of oil and 17.55 tcf of gas from all of NPR-A. (The USGS estimate is for \$9.33, the closest price to \$9.26 that they analyzed.) While these prices are very high compared to today's prices or prices projected to occur in the next decade, the BLM offers them for analysis to provide a high level of confidence that impacts analyzed on the basis of oil and gas production will not be understated. (Higher prices generally generate greater production which in turn has the potential for more impacts.)

The USGS also provided estimates of how much oil and gas could be produced from geographic economic zones of the NPR-A at various prices. Assuming \$180/barrel oil and

\$9.33/thousand cubic feet gas, the five economic zones that comprise nearly the entire Northeast and Northwest NPR-A planning areas would produce the following amount of oil and gas:

Economic Zone	Economically Recoverable Oil (million of barrels @ \$180/Barrel)	Economically Recoverable Gas (tcf @ \$9.33/thousand cubic feet)
110	126	1.5
120	133	3.1
130	42	0.0
210	78	1.9
220	102	3.4
Total	481	9.9

Note: All of economic zone 110 is in Northeast NPR-A, all but the southwest corner of economic zone 210 is in Northeast NPR-A (the remainder in Northwest NPR-A), and the vast majority of economic zones 120 and 220 are in Northwest NPR-A. Note that economic zones 110 and 120 include oil and gas in non-federal State subsurface within the State's coastal waters, and economic zone 110 includes non-federal subsurface in ANCSA lands in and near Nuiqsut. See Map 2, which depicts the economic zones of the NPR-A as defined by the USGS.

The Northwest NPR-A plan estimated that planning area contained 2.1 billion barrels of oil (p. IV-46) of which 1.26 billion barrels would be recoverable under its Preferred Alternative (Table IV-06). The Northeast NPR-A SEIS/IAP projected that the planning area held 4.3 billion barrels of oil of which 3.7 billion barrels would be recovered under its Preferred Alternative (Table 4.2-D). (The RODs for both plans adopted the Preferred Alternatives without revisions relevant to ultimate oil and gas recovery.) Thus, the combined economically recoverable oil in the two planning areas that was used for impact analysis in the two plans (6.4 billion barrels) was more than 10 times that projected for all of NPR-A by the USGS and more than 13 times that in the economic zones comprising nearly all of the two planning areas.

The Northwest NPR-A plan estimated the planning area contained 7.3 tcf of economically recoverable gas (p. IV-46). Of this 4.4 tcf would be recovered under the Preferred Alternative (Table IV-06). The Northeast NPR-A SIAP/EIS did not provide a specific projected amount of economically recoverable gas, but noted that more than 95 percent of technically recoverable gas occurs in geologic plays with technically recoverable oil and that the remaining gas-only plays were overlaid or underlaid by oil plays. Consequently, it was assumed that any gas recovery would be from oil-related infrastructure (pp. 4-45 and 4-46).

While it is reasonable to assume that the USGS's recent reductions in the amount of technically and economically recoverable oil would reduce the likelihood that gas could be developed from oil infrastructure, the far more robust level of development analyzed in the two IAP/EISs to produce approximately 13 times more oil than currently projected to be in the two planning areas more than compensates for the requirement to develop some infrastructure solely for gas to achieve the gas recovery projected by the USGS. Moreover, the BLM is not offering to lease all of the lands in the five economic zones. Of the two economic zones that the USGS projects could produce the most gas, the BLM is planning to offer (or there are current active leases on) about 50 percent of economic zone 220 and 4 percent of economic zone 120. It is also offering (or has current leases on) only about a third of economic zone 110. Assuming proportionate reductions in gas in the economic zones based on the amount of lands not being offered for lease, the total amount of gas underlying currently leased lands or lands being offered for lease would total approximately 4.2 tcf of gas. Because of the reduction in production, the impacts of the proposed 2011

lease sale are likely to be well within those analyzed in the Northwest and Northeast NPR-A plans.

Polar Bear Listing and Proposed Critical Habitat Designation under the Endangered Species Act

In May, 2008, polar bears were listed as threatened under the Endangered Species Act. In association with the Northeast NPR-A Supplemental IAP/EIS (2008), BLM prepared a Biological Assessment (BA) and the USFWS issued a Biological Opinion (BO) in July 2008, related to oil and gas actions in the Northeast and Northwest NPR-A areas. The BO covered oil and gas actions, including leasing associated with the proposed action, in the Northeast and Northwest NPR-A to determine potential effects to listed threatened and endangered species and species proposed to be listed. The BO found that oil and gas leasing, exploration, and development in the Northeast and Northwest NPR-A "is not likely to jeopardize the continued existence" of the polar bear. (BO, p. 65)

On November 24, 2010 the USFWS designated critical habitat for polar bears under the authority of the ESA. The USFWS designated terrestrial denning habitat up to five miles inland from the coast east from Barrow to the Kavik River, east of the NPR-A, and 20 miles inland between the Kavik and the Canadian border. There is no designated terrestrial denning polar bear habitat in NPR-A west of Barrow. The designated polar bear habitat also encompassed barrier islands, including approximately 80 islands at the northern extent of the two NPR-A planning areas, and an area within one mile of the islands, as well as sea-ice habitat that extends from the shoreline, including that of NPR-A, to the contour line that marks a depth of 300 meters.

The Northwest NPR-A IAP/EIS and the Northeast NPR-A Supplemental IAP/EIS analyzed the direct and indirect impacts of non-oil and gas and oil and gas activities on polar bears and their habitat (pp. V-98 to V-102 and pp. 4-458 to 4-460, respectively) and cumulative impacts (pp. IV-445 to IV-449 and pp. 4-807 to 4-814, respectively) both on land and in adjacent marine waters.

Several of the ROPs and stipulations developed as part of the Northwest IAP/EIS and the Northeast NPR-A SIAP/EIS and implemented by their respective RODs are meant to minimize adverse effects to polar bears (specifically ROPs A-8, C-1, and I-1(i)). In addition, other ROPs and stipulations (e.g., ROPs C-2 and C-3 and stipulation K-1) protect stream habitat, which includes stream banks that can accumulate drifted snow and provide denning habitat, and reduce the potential for an oil leak to migrate downstream to the marine environment (e.g., ROPs A-3 to A-7). All tracts are outside the critical habitat areas identified by the USFWS.

Because the Northwest NPR-A IAP/EIS and the Northeast NPR-A SIAP/EIS adequately analyzed impacts to polar bears throughout their range in the NPR-A, because the protection measures afforded in the Northwest and Northeast NPR-A RODs anticipated the need for protection of polar bears and their habitats, and because the lands offered in the proposed lease sale are not within the critical habitat for polar bears, the analysis and conclusions in the existing plans are valid and sufficient.

North Slope Gas Pipelines

There are two applications being considered by BLM and other relevant federal and state agencies for rights-of-way and other permits to construct natural gas pipelines from the North

Slope. TransCanada and ExxonMobil, also known as the Alaska Pipeline Project, proposes to build a large diameter (48 inches) pipeline from the North Slope to Alberta, Canada. The Alaska Gasline Development Corporation, a state agency, is planning construction of a 24-inch pipeline from Prudhoe Bay to southcentral Alaska. Both routes would roughly parallel the Trans-Alaska Pipeline System (TAPS) from the North Slope to a point south of the Yukon River. (For a useful summary of current Alaskan gas projects, see Bill White, "Guide to Alaska Natural Gas Projects," produced by the Alaska Natural Gas Transportation Projects Office of the Federal Coordinator, August 15, 2011 at www.arcticgas.gov.)

The Northwest NPR-A IAP/EIS (2003) considered the effects of gas development and a related gas pipeline in the NPR-A (IAP/EIS, p. IV-46-47). The Northeast NPR-A SIAP/EIS analyzed development of a gas pipeline from the North Slope similar to that under consideration by the Alaska Pipeline Project. Although the Northwest NPR-A and Northeast NPR-A plans did not explicitly analyze a proposal for a smaller-diameter pipeline such as proposed by Alaska Gasline Development Corporation, the impacts from the smaller pipeline would be essentially the same, though reduced, from the larger pipeline that was analyzed in those plans. The plans also analyzed gas development that may occur on the North Slope if a gas pipeline was constructed.

Gravel Road to Umiat

The State has proposed construction of an all-season gravel road from the Dalton Highway to Umiat. The U.S. Corps of Engineers is leading an environmental analysis of the proposal; the BLM is a cooperating agency on the EIS. The road is being considered to provide access to oil and gas resources. Several routes for such a road are being examined. The development, should it occur, would be consistent with the Northeast NPR-A SIAP/EIS's cumulative impact assumption of the creation of approximately 42 acres of new gravel footprint annually on lands outside of Northeast and Northwest NPR-A in association with oil and gas development. The Northwest NPR-A IAP/EIS analyzed the cumulative impacts of the construction of a road from the Dalton Highway near TAPS' Pump Station 2 to Nuiqsut, through the foothills in the general area of the currently contemplated road (See Section 4.F.). The construction of a bridge to Umiat would facilitate development in NPR-A and to the east along the road. However, both plans addressed potential cumulative effects of road construction east of NPR-A and, as noted above, the development scenarios in the Northwest IAP/EIS and the Northeast NPR-A SIAP/EIS assumed development of far more oil and gas than the USGS 2010 and 2011 technically and economically recoverable projections foresee. Construction of a bridge to Umiat may well facilitate additional development inside and outside NPR-A, but it would not exceed the level of development analyzed in the two NPR-A plans.

Chukchi Sea Lease Sale

The Minerals Management Service (MMS) (since reorganized as BOEM) held a lease sale in February 2008 for tracts in the Chukchi Sea, which lies to the northwest of the NPR-A. The tracts receiving bids were all more than 50 miles offshore. The MMS projected that in addition to development in the marine environment, related onshore activities would include a facility to receive oil from a subsea pipeline and an onshore pipeline across the NPR-A. The onshore pipeline would access existing oil development infrastructure east of the NPR-A.

The Northeast NPR-A SIAP/EIS included analysis of the impacts of such a development in its cumulative impact analysis (pp. 4-666 to 4-668). The Northwest NPR-A IAP/EIS did not specifically analyze impacts that may be associated with leasing in the Chukchi Sea.

However, the type of development that would occur within the NPR-A associated with Chukchi Sea development is similar to that analyzed within the Northwest NPR-A IAP/EIS for development within the planning area. Moreover, it is highly unlikely that any resources associated with the lands being offered in the proposed 2011 lease sale would be impacted by the Chukchi Sea activities. The proposed tracts to be offered are all at least 50 miles inland from the Chukchi Sea coast and more than 150 miles from the nearest Chukchi Sea leased tract. The most direct connection between offshore development in the Chukchi Sea and inland resources cited in the Northeast NPR-A SIAP/EIS (p. 4-760) referred to potential impacts to common and king eiders through collision with offshore infrastructure. However, it is unlikely that these predominantly coastal birds are present in the lands within the Northwest NPR-A planning area that would be offered for lease in the 2011 sale (Northwest NPR-A IAP/EIS, Maps 43 and 44).

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in existing NEPA documents?

Yes. The direct, indirect, and cumulative impacts of this proposed action are substantially unchanged from those identified in the multiple sale analysis in the Northwest NPR-A IAP/EIS and the Northeast NPR-A SIAP/EIS. BLM monitoring of activities in the Northwest and Northeast NPR-A since the initial lease sale indicate that impacts are less than or consistent with those anticipated and analyzed in the two plans. The Northwest NPR-A IAP/EIS and the Northeast NPR-A SIAP/EIS sufficiently analyzes both the type of impacts and the magnitude of impacts for the proposed lease sale.

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?

Yes. The Northwest NPR-A IAP/EIS and the Northeast NPR-A SIAP/EIS involved extensive public participation and specifically addressed multiple oil and gas lease sales, including the area proposed to be made available for leasing in the 2011 lease sale.

E. Persons/Agencies/BLM Staff Consulted

Name	Title	Resource Represented
Jolie Pollet	Chief, Renewable Resources	Renewable Resources, NEPA
Wayne Svejnoha	Chief, Energy and Minerals Branch	Oil and Gas
Carol Taylor	Chief, Mineral Law	Oil and Gas
Bill Diel	Geologist	Oil and Gas
Cara Staab	Wildlife Program Lead	Wildlife, T&E
Paul Krabacher	Vegetation Management Specialist	Vegetation

Note: Refer to the Northwest NPR-A IAP/EIS and the Northeast NPR-A SIAP/EIS for a complete list of the team members participating in the preparation of the original planning documents.

Conclusion

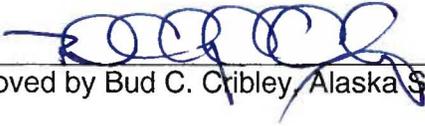
Based on the review documented above, I conclude that this proposal conforms to the applicable land use plans and that the NEPA documentation fully covers the proposed action and constitutes BLM’s compliance with the requirements of NEPA.



Prepared by James H. Ducker, Environmental Program Analyst

Nov. 3, 2011

Date



Approved by Bud C. Cibley, Alaska State Director

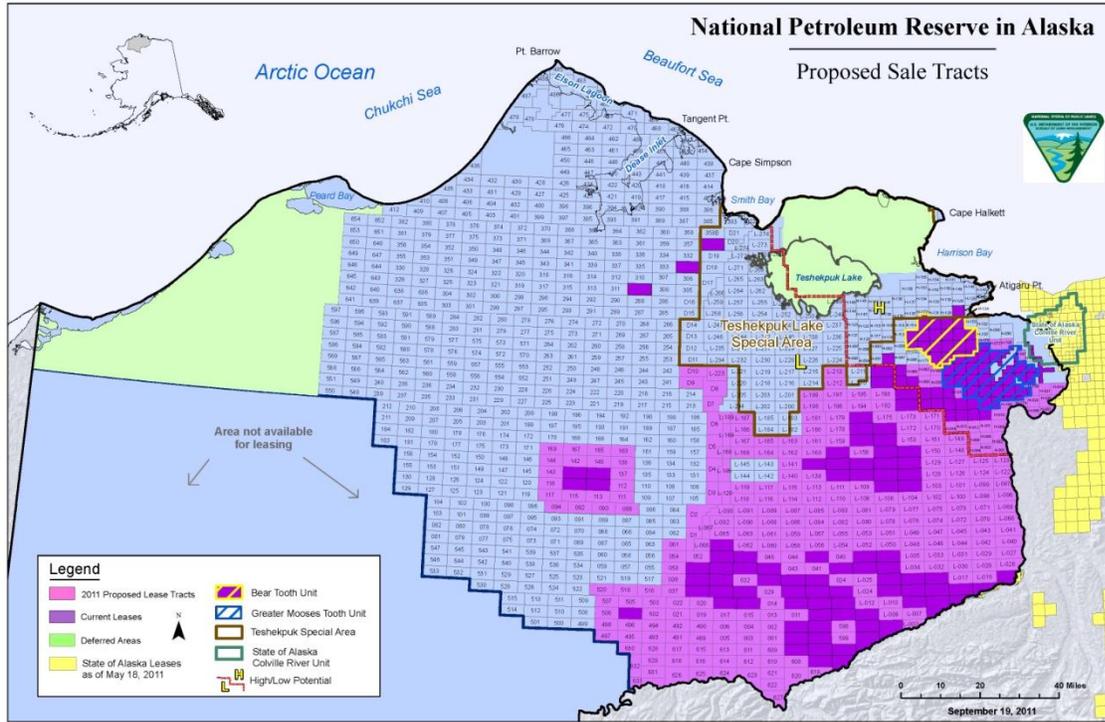
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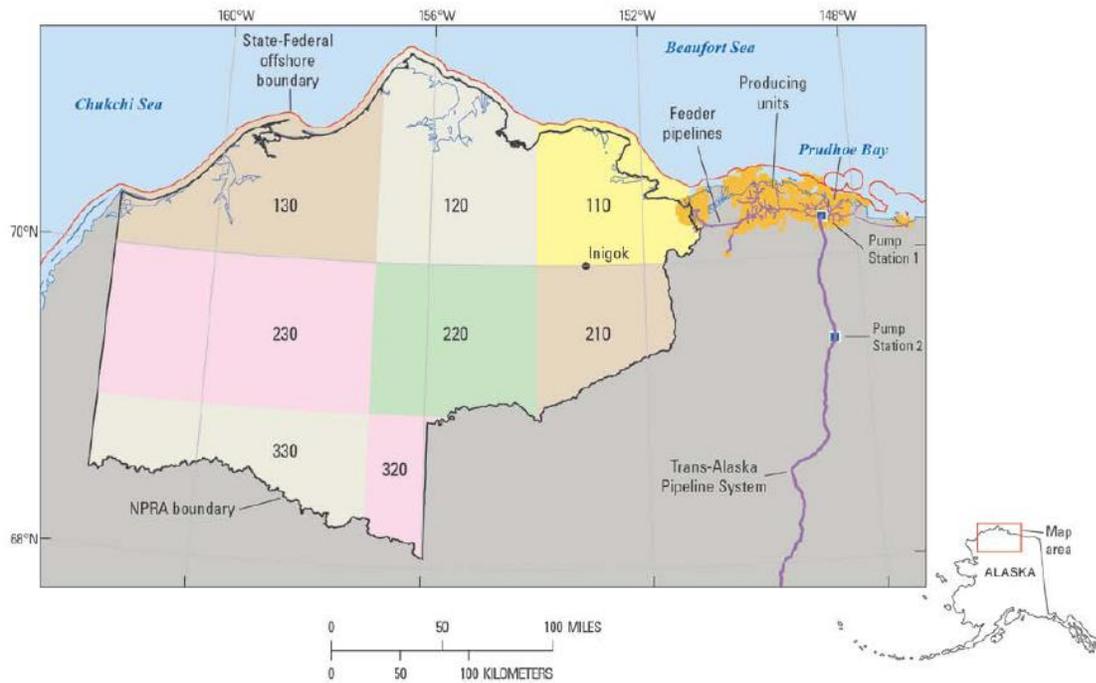
Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision.

Map 1: NPR-A Proposed Sale Lease Tracts

Exhibit A



Map 2: NPR-A Economic Zones (map produced by USGS)



Note: Map 2 depicts the NPR-A economic zones referred to in the table on page 4.