



Environmental Assessment
National Petroleum Reserve-Alaska
NPR-A Permit Amendment
2012
DOI-BLM-LLAK010-2012-0025-EA
Dallas Museum of Nature and Science
And University of Alaska Museum
Preparing Office: Arctic Field Office

Project Title/Type of Action: **National Petroleum Reserve-Alaska (NPR-A) Permit**

Case File Number: **FF096405 and FF095351**

Land Use Plans: **Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) 2008**
Colville River Special Area Management Plan (CRSAMP) approved July 2008
The National Petroleum Reserves Production Act of 1976

Applicant(s): **Dallas Museum of Nature and Science / University of Alaska Museum**
Anthony Fiorillo, PhD **Patrick Druckenmiller, PhD**

Address: **P.O. Box 151469** **907 Yukon Dr.**
Dallas, Texas 78315 **Fairbanks, Alaska 99775**

Date: **June 22, 2012**

Lands Involved:

Land Description (BLM Managed Lands)

Legal Description (All Umiat Meridian)

Id #	Township	Range	Section	Latitude	Longitude
TXA	8 North	2 East	27	N70 00.959	W151 35.402
TXB	8 North	2 East	15	N70 02.751	W151 35.256
TXC	8 North	2 East	2	N70 05.034	W151 33.222
TXC	9 North	2 East	35	N70 05.034	W151 33.222

Id #	Township	Range	Section	Proposed Activity
UAF A	8 North	2 East	27	Pedionmys Pt. (Screening)
UAF B	8 North	2 East	11	Clam Beach (Prospecting)
UAF C	8 North	2 East	11	Sling point BB (potential bone bed)
UAF D	8 North	2 East	2	Poverty Bar – Campsite and landing site
UAF E	9 North	3 East	31	Megatarsal Bar (Prospecting)

UAM New Survey Area

Township	Range	Section
7 North	2 East	NPR-A Lands Only
6 North	2 East	NPR-A Lands Only
6 North	3 East	No BLM Managed Land
5 North	2 East	NPR-A Lands Only
5 North	3 East	No BLM Managed Land
4 North	2 East	NPR-A Lands Only
4 North	3 East	NPR-A Lands Only
3 North	3 East	NPR-A Lands Only
2 North	2 East	NPR-A Lands Only
2 North	3 East	Excluding Private Land
1 North	1 West	
1 North	1 East	Excluding Private Land
1 North	2 East	Excluding Private Land
1 North	3 East	No BLM Managed Land
1 South	1 West	Excluding Private Land
1 South	1 East	NPR-A Lands Only

Glossary/Acronyms

105C Study- A study conducted in 1977 & 1978 at the direction of the Secretary of the Interior under section 105C of the NPRPA of 1976

AAC.....Alaska Administrative Code

ACEC.....Area of Critical Environmental Concern

ADFG/ADF&GAlaska Department of Fish and Game

AFO.....Arctic Field Office

ANILCA- The Alaska National Interest Lands Conservation Act passed in 1980, modified and established designation of federal lands in Alaska for conservation and wilderness. These lands are managed by the National Park Service, US Fish and Wildlife Service, and US Forest Service.

BLM.....Bureau of Land Management

EA.....Environmental Assessment

EFH.....Essential Fish Habitat

EIS.....Environmental Impact Statement

EO.....Executive Order

ESA.....Endangered Species Act

FLPMA – The Federal Land Policy And Management Act of 1976 is a Public Law 94-579 passed by Congress October 21, 1976 that gave direction to the way in which the public lands administered by the [Bureau of Land Management](#) are managed.

IAP.....Integrated Activity Plan

NEPA- National Environmental Policy Act. This law, passed in 1969, went into effect on January 1, 1970. It requires all Federal Agencies to disclose the environmental effects of their actions.

NPR-A- National Petroleum Reserve Alaska, formally named The Naval Petroleum Reserve #4(NPR-4) is an area of more than 23 million acres in the northernmost part of Alaska, and was established by executive order on February 27, 1923.

NPRPA- The Naval Petroleum Reserves Production Act of 1976 (PL 94-258), dated April 5, 1976, transferred jurisdiction of NPR-4 to the Secretary of the Interior and renamed it the NPR-A. This act authorized the Secretary to begin further petroleum exploration and closed the NPR-A to all forms of appropriation under the public land laws, including mining and mineral leasing laws.

NPR-4- The Naval Petroleum Reserve No. 4 was established by Executive Order 3797, dated February 27, 1923.

USFWS (FWS)United States Fish & Wildlife Service

Environmental Assessment
for a NPR-A Permit Amendment
DOI-BLM-LLAK010-2012-0025-EA

This Environmental Assessment (EA) has been prepared to meet requirements of the National Environmental Policy Act (NEPA), and to support U.S. Department of Interior (USDO I) Bureau of Land Management (BLM) decision-making on permits required to construct and implement the proposed project. The scope of this EA includes analysis of the effects of the proposed activity and alternatives.

Impacts of this type of activity have been evaluated in the referenced planning documents.

Chapter 1 Introduction

Dr. Anthony Fiorillo of The Dallas Museum of Nature and Science (DMNS), Dallas, Texas has requested an authorization to utilize public lands for the purpose of conducting paleontological fieldwork. Dr. Fiorillo has a BLM Paleontological Resources Use Permit issued by the BLM Alaska state office.

Dr. Patrick Druckenmiller of The University of Alaska Museum (UAM), Fairbanks, Alaska has requested an authorization to utilize public lands for the purpose of conducting paleontological fieldwork. Dr. Druckenmiller will apply for a BLM Paleontological Resources Use Permit from the BLM Alaska state office.

The two projects are similar in nature on lands within close proximity to each other (Figure 1). The DMNS proposed areas of use are labeled TXA, TXB and TXC. The UAM proposed areas of use are labeled UAF A, UAF B, UAF C, UAF D and UAF E. UAM is also proposing to conduct a survey of lands along the Colville from Ocean Point to Umiat (figure 2).

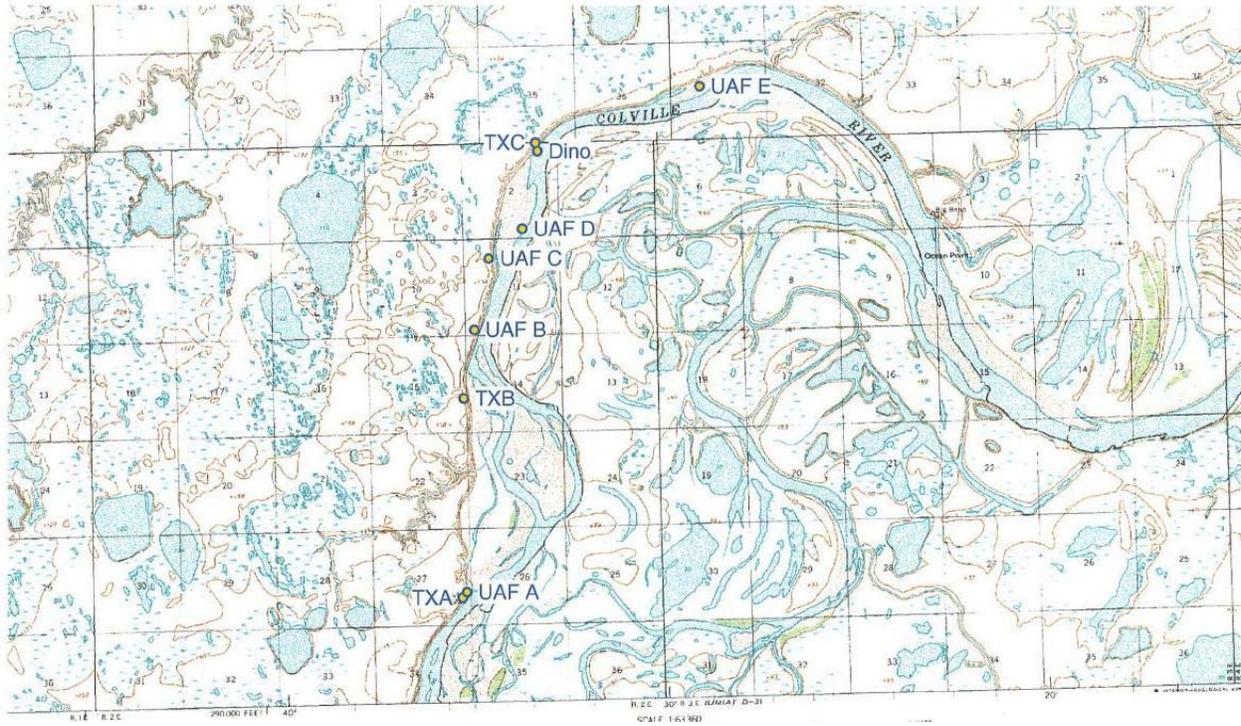


Figure 1: UAM & DMNS Site specific locations

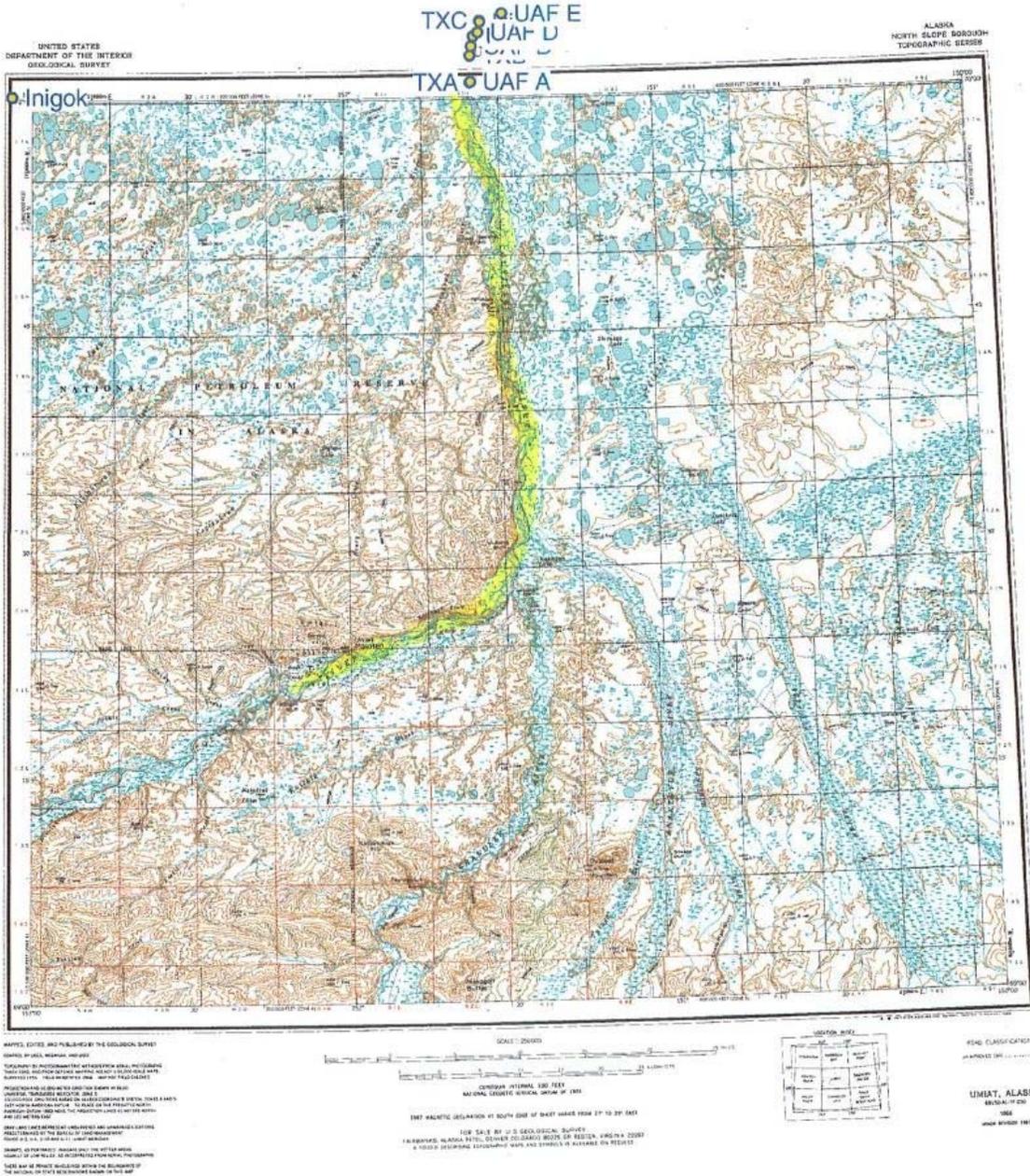


Figure 2: UAM additional survey lands

1.1 Purpose and Need

The BLM’s organic act, the Federal Land Policy and Management Act of 1976 (FLMPA) (43 USC 1701), requires that the agency provide for multiple uses of the public lands. A permit to each entity issued by the BLM is needed to provide guidelines to ensure that the resources on BLM managed lands are conserved and to minimize environmental impacts from the proposed action. The purpose of the proposed action is to allow DMNS and UAM to conduct

paleontological field work at sites along the Colville River in an area that has numerous paleontological resources and a history of research.

1.2 Laws, regulations, other EAs that influence this EA

This EA will be based on the findings, management controls, and protective measures of the Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) 2008, and the Colville River Special Area Management Plan (CRSAMP) approved July 2008

The action, as proposed, is consistent with the objectives outlined in these documents and not in conflict with other resources in the area. The proposed use is in conformance with current policy of the BLM Arctic Field Office. The proposed action is in conformance with the National Petroleum Reserve Product Act (NPRPA), FLPMA, Alaska National Interest Lands Conservation Act (ANILCA), Endangered Species Act, Executive Orders (EO) 11988, and EO 11990.

1.3 The Decision to be Made

The BLM must conduct a project-specific NEPA analysis and determine whether the proposed projects should be approved, rejected, or approved with modifications, and if additional mitigation is needed. This EA will be based on the findings, management controls, and protective measures of the Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) 2008 and the Colville River Special Area Management Plan (CRSAMP) approved July 2008 and RODs, as well as other laws and regulations. The scope of this EA includes analysis that enables the BLM to select among alternatives that meet the purpose and need, and are within the BLM's jurisdiction (40 Code of Federal Regulations 1506.1(a) (2)).

1.4 Scoping and Issues

The proposed action was announced on the BLM Arctic Field Office website NEPA register May 22, 2012. To date no comments have been received.

BLM guidelines define environmental issues as points of disagreement, debate, or dispute resulting from the proposed action (BLM NEPA Handbook, H-1790-1, 2008). Issues are identified through internal and external scoping through a process of considering environmental effects of the proposed action. Some elements are not present in the project area and are, therefore, not discussed further. A summary listing of related issues considered by AFO Field Staff is provided in **Table 1.1**.

Table 1.1 Issues Considered in Evaluating Impacts

Resources/Environmental Considerations for Issues and Analysis	Determination	Basis of Determination (See Note)
ACEC's	Not Present	
Air Quality	Minimally Impacted	Protection provided by: State of Alaska Air Non-Point and Mobile Program and regulations (18 AAC 50)
Cultural and Paleontological Resources	Minimally Impacted	Protection provided by: Section 106 of the National Historic Preservation Act, Non Oil and Gas Permit Stipulations VA, & VB.
Environmental Justice	Not Present	Protection provided by: EO 12898
Fish	Minimally Impacted	Protection provided by: Non Oil & Gas Permit Stipulations IIA, IIB, VIIC, VIIIA, and XIC. EFH finding "not likely to adversely affect".
Flood Plains/Wetlands and Riparian Zones	Minimally Impacted	Protections provided by: EO 11988 and EO 11990
Invasive, Non-native species	Not Present	Protections provided by: not applicable to this action
Native American Religious Concerns	Not Present	
Recreation	Not Present	
Socialcultural Systems	Not Present	
Subsistence	Minimally Impacted	Protection provided by: ANILCA
Threatened & Endangered Species Spectacled and Steller's eider	Not Present	Protection provided by Section 7 of the Endangered Species Act. (J),
Threatened & Endangered Species Polar Bear	Not Present	In accordance with Section 7 of the Endangered Species Act of 1973, as amended (ESA)
Non threatened and endangered birds	Potentially Affected	Protection provided Non Oil and Gas Permit Stipulations III.A, III.B, XII.C Project Specific Stipulations 1 – 4 and Raptor Code of Conduct
Non threatened and endangered mammals	Minimally Impacted	Protection provided by Non Oil and Gas Permit Stipulations III. A, III.E, XI.B.1, XII.A, XII.D
Vegetation	Minimally Impacted	Protections provided by: Non Oil and Gas Permit Stipulation X.A.
Visual Resource Management	Minimally Impacted	Protection provided by: VIIA, XIA,XIB, IV, VII.A
Water Resources	Minimally Impacted	Protections provided by: Non Oil and Gas Permit Stipulation II.
Waste (Hazardous/Solid)	Minimally Impacted	Protections provided by State of Alaska 18 AAC 30, 60, 62, 63, 72, and 75
Wild & Scenic Rivers	Not Present	
Wilderness	Minimally Impacted	Protection provided by: Non Oil & Gas Permit Stipulations IV.A. IVC. VIII A., X, XI.
Key to Table 1.1: BLM – Bureau of Land Management		

Table 1.1 Issues Considered in Evaluating Impacts

Resources/Environmental Considerations for Issues and Analysis	Determination	Basis of Determination (See Note)
<p>AAC- Alaska Administrative Code ACEC- Area of Critical Environmental Concern ADFG- Alaska Department of Fish and Game ANILCA- Alaska National Interest Lands Conservation Act BLM – Bureau of Land Management</p> <p>EFH – Essential Fish Habitat</p> <p>Potentially Affected: The proposed action or alternative could result in potential impacts to resource or issues to the level that additional mitigation may be required, or there is a need to evaluate potentially significant issues.</p> <p>Minimally Impacted: Resources or issues would not be affected to a degree requiring further analysis because either the expected impacts from the proposed action and alternative would be minimal, or standard protections (e.g., ROPs and Stipulations from overriding BLM plans or other legal protections) would reduce impacts. Minimally impacted resources or issues will not be analyzed further in this EA.</p> <p>Not Present: Resources or issues are not expected to be affected by the proposed action or alternatives because activities would occur at a different time or place. Resource or issues not present will not be analyzed further in the EA.</p> <p>No Impact</p>		<p>EO- Executive Order EPA- Environmental Protection Agency ESA- Endangered Species Act NPDES- National Pollutant Discharge Elimination System ROP- Required Operating Procedure</p> <p>SPCC- Spill Prevention Control and Countermeasures</p>

In summary, BLM resource specialists have identified the following issue for further evaluation in this EA: Non-T&E Birds.

1.5 Public Involvement

Public notification of the Environmental analysis was announced in the NEPA register on file at the Arctic Field Office Environmental Assessment web site beginning May 22, 2012. No public comments or inquiries were received.

Chapter 2 Alternatives Including the Proposed Action

2.1 Introduction

This section describes the alternatives considered, including the no action and proposed action.

2.2 Description of Alternatives

2.2.1 Alternative A: No Action

Under no action, the BLM would not grant an authorization to DMNS or UAM to use public lands for the purpose of conducting paleontological work on lands in the northeast NPR-A. Current land management situation and activities would continue but access and activities related to those requested by the proponents would not occur. Such activities include research and

monitoring, recreation, subsistence, and travel.

2.2.2 Alternative B: Proposed Action

2.2.2.1 Dallas Museum of Nature and Science Dr. Anthony Fiorillo

The objective of the proposed action is for two separate entities to conduct paleontological work at various locations along the Colville River. The first entity is the Dallas Museum of Nature and Science who propose sampling at Pediomys Pt., North Slope, Alaska to aid in understanding the paleobiology of Arctic dinosaurs. The DMNS researchers believe that the sampling would help determine the presence of a nesting colony. They would intensively paleontologically sample the locality and conduct a detailed taphonomic, sedimentologic, stratigraphic and paleopedological investigation to provide the proper context for the important fossil locality.

The Methodologies that would be implemented are:

1. Paleontological specimens would be obtained through standard screenwashing techniques. These specimens would provide taxonomic and taphonomic information. In addition, standard sedimentological samples would be gathered for analysis.
2. Collect new fossil material from the study site.
3. Conduct a detailed taphonomic excavation (1 meter \times 1 meter in size) of the study site (two at each site).
4. Execute a detailed sedimentologic and stratigraphic study of the bluff containing the fossil site.
5. Collect samples from paleosol-bearing intervals that reflect the range and degree of paleosol development in the study area in order to provide a detailed qualitative and quantitative characterization of the depositional environment, soils, vegetation characteristics and paleotemperature recorded at this particular site. Individual sample sizes will be approximately 3 cm \times 3 cm \times 3 cm.

Dr. Fiorillo has three locations where he is interested in conducting work. TXA is the primary point of interest while TXB and TXC are secondary. Work at TXB and TXC would begin on or after August 1, 2012 and TXA on or after August 5, 2012 and continue until August 21, 2012. The dates of the project were determined after consultation between Dr. Fiorillo and personal from the Arctic Field Office with the intent of allowing young peregrine falcons enough time to fledge without disturbance. Activity at TXB and TXC would not exceed one day in duration and a camp would not be established prior to August 5th.

There would be three people on site, including Dr. Fiorillo, Dr. Paul McCarthy (UAF) and a student. The group would be flown via a fixed wing airplane to a river bar on state land. From there they would access the work sites by daily boat trips of approximately five river miles from a camp set up on a river bar away from the bluffs to avoid disturbance to falcons and other cliff nesting raptors. UAF would be obtaining the permit from the state for the camp. Dr. Fiorillo has contacted the Barrow Arctic Science Consortium to act as a liaison with local communities. Fuel

would not be stored on BLM managed lands, as the only fuel use would be boat fuel and camp stove.

2.2.2.2 University of Alaska Museum – Dr. Patrick Druckenmiller

This would be Dr. Druckenmiller's fourth year of performing this type of activity in the area. He proposes to conduct a paleontological survey of the Cretaceous Prince Creek Formation where it outcrops along the lower Colville River upstream of Ocean Point. UAM proposes to prospect for new fossil material, conduct small scale screening operations, and begin excavation at one bonebed. They would access the outcrops with motorized inflatable rafts and then by foot. They would examine several gravel bars and beaches for small scale surface collecting between Ocean Point and slightly upriver of Pediomys Point. UAM would conduct excavation activities of no more than 1 cubic meter of rock from each of three possible sites. They would also conduct on-site, coarse wet screening of one, and possibly two microvertebrate fossil localities, including Pediomys Point. Prospecting for other microvertebrate sites would involve bulk sediment removal from an ancient stream channel bed and then screening for teeth and small bones on site. Subsequent screening would be conducted in the museum lab. UAM would collect sediment out of a face of bluff that is actively falling into the river. They anticipate removing approximately 2 cubic meters of material and possibly some sediment that has already fallen out of the bluff.

This year the work would start approximately August 23 and be ongoing until August 31, 2012. The field crew would include up to six people. The camp site (Poverty Bar on state land) would be accessed by fixed wing aircraft from Happy Valley. There would be approximately three round trip flights to get all of their personnel and gear to the site and three to remove them. Boat fuel would be stored in approved fuel containers with the use of secondary containment on state land.

UAM has requested access to additional lands (Figure 2) to conduct a surface search for areas that they may want to investigate further in subsequent years, and is asking for a multiple year permit through September 15, 2016. They would provide BLM with information each spring about their proposed activity for the summer. The BLM at that time may require additional stipulations.

Chapter 3 Affected Environment

The affected environment for the area of the Proposed Action is discussed in the following documents: (1) Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) 2008 and (2) Colville River Special Area.

Based on the proposed project and the issues analysis in Section 1.5, the following discussion of the affected environment covers Non Threatened and Endangered Birds.

3.1.1 Non Threatened and Endangered Birds

The activity proposed in this EA is to take place within the Colville River Special Area (CRSA). This area was given special status in the National Petroleum Reserve Production Act of 1976 in order to protect the arctic peregrine falcon (which was a federally listed species at that time). The Colville River is known as a world class nesting area for peregrine falcons and BLM has demonstrated and continues to demonstrate an attitude of protection for this species by placing it on the BLM Alaska Special Status Species List after it was de-listed from the Federal Endangered Species List.

The arctic peregrine falcon (*Falco peregrinus tundrius*) is one of three subspecies of peregrine falcons that occur in Alaska. Arctic peregrine falcons migrate into Alaska each year and breed north of the Brooks Range and on the Seward Peninsula. Arctic peregrine falcons are highly migratory and winter from the southern United States south to Argentina. Approximately 250 pairs of arctic peregrine falcons nest in Alaska each year.

The CRSA provides the North Slope's single most important raptor nesting habitat area with high proportions of the region's populations of arctic peregrine falcon, as well as other raptors such as gyrfalcon (*Falco rusticolus*) and rough-legged hawk (*Buteo lagopus*). The birds occupy bluffs and cliffs within its boundaries.

The arctic peregrine falcon population in the Colville River drainage has been monitored since the early 1950s and the initial surveys documented the widespread distribution and abundance of these birds. Subsequent monitoring efforts were sporadic until 1978, after which surveys were conducted yearly through 2003 and then again in 2005. This valuable dataset has documented the decline and recovery of this species along the Colville River, from a low of 14 pairs detected in 1973 and a high of 62 pairs in 1998. Population trends, in terms of occupancy (number of pairs attempting to breed each year), for arctic peregrine falcons along the Colville River have been increasing or stable since 1980.

Peregrine falcons in the CRSA are typically found on cliffs adjacent to rivers where they use ledges and platforms on rocky outcroppings, brinks of cliffs, or on the nose of a steep earth bluff, and occasionally in old nests built by rough-legged hawks. Data from 80 arctic peregrine falcon nests in the CRSA from 1967 – 1969, indicated the birds selected nest sites that averaged 116 feet above the river (range 30 – 400 feet), 33 feet (range 0 – 150 feet) below the cliff brink, and 54 feet (range 0 – 300 feet) above the cliff base.

The BLM's objective to maintain that population into the future and the agency issues permits to a variety of agencies, universities, and organizations to conduct scientific studies in the CRSA, including on cliffs occupied by arctic peregrine falcons. The arctic peregrine falcon can be susceptible to disturbance by humans on foot.

Chapter 4 Environmental Impacts

Because the proposed activities are not substantially different from those previously evaluated, and because no significant new scientific information or analyses have been developed since the most recent related evaluation (i.e., May 2008), this NEPA analysis will focus on impacts due to the project-specific/site-specific differences of the proposed action.

4.1 Direct and Indirect Effects

Analysis of impacts from the proposed action and no action alternative is based on observations and scientific information gained from decades of similar operations on the North Slope and other Arctic regions. The proposed activities are not substantially different from those previously evaluated in the Final Environmental Impact Statement on Oil and Gas Leasing in The National Petroleum Reserve in Alaska (Section IV), the CRSAMP (Chapter 4) and analyses from these documents are incorporated by reference.

Issues specifically identified in Section 1.4 for further analysis in this EA are discussed below.

4.1.1 Non Threatened and Endangered Birds

4.1.1.1 No Action Alternative

The potential for impact to non threatened and endangered birds would be minimal under the no action alternative; there would be no change from the current management situation in which no human visits to cliff faces is allowed.

4.1.1.2 Proposed Action

The potential for impact to non threatened and endangered birds would be increased under the Proposed Action compared to the No Action Alternative. The proposed action requires researchers to work on cliff faces that may contain raptor nests. Raptors are known to be sensitive to the presence of human near their nests while they are rearing young.

A study conducted in 1985 and 1986 (Ritchie, R.J. 1987) demonstrated that response of nesting peregrine falcons to humans varied with distance between the human and the falcon. The most severe reactions occurred when activities were near or above the nest, such as could be expected from recreational activities, subsistence hunting, falconry, geological, paleontological, archeological, and fish and wildlife fieldwork. In addition, a study of peregrine falcons on the Tanana River documented that nesting success during incubation and chick brooding could be disproportionately affected by factors like disturbance. The authors also showed that disturbance may shift activities away for thermoregulation of eggs and young chicks and towards territorial

defense. These two studies clearly show that human presence in the vicinity of a peregrine nest site elicits severe reactions from the birds and may lead to decreased nest success.

The proposed action could affect cliff nesting raptors through disturbance, resulting in loss of chicks due to adult preoccupation with disturbance events thus causing neglect of chicks. Nevertheless, because of the timing of the combined proposed actions (August 1 – 31), combined with implementation of General Stipulations, Project Specific Stipulations, and the Raptor Code of Conduct, impacts to Peregrine Falcons and other raptors are expected to be minor.

4.2 Cumulative Effects

Cumulative impacts result from the incremental addition of past, present, and reasonably foreseeable actions. Each action may be individually minor by itself, but when added to others could become significant over a period of time.

The time frame for the proposed action for the NPR-A portion of the project area is 1977 (designation of NPR-A) to 10 years into the future, assuming that the relatively low level of activity and management would remain at about the same level as present. Due to the limited scope and intensity of the proposed action the geographic area would be limited within 10 miles of the proposed river travel corridor, camps, and staging areas.

Due to the remoteness of the areas, the activity levels are limited by available transportation. Additional activities include other research and monitoring projects, recreationist (including aircraft and float trips), subsistence, and other activities from non oil and gas as well as oil and gas.

4.2.1 Non Threatened and Endangered Birds

Considering the size of the area under consideration the level activity from recreation, research, subsistence, and other actions in the area is minimal. The proposed action is anticipated to have very little if any impact as all the applicants will be adhering to protective measures.

The proposed action is not anticipated to result in cumulative impacts due to the remoteness of the portion of the NPR-A where the activity would occur (and low levels of disturbance), the short-term time frame of the proposed action, the timing of the activities, in addition to mitigating stipulations imposed on the project. Disturbance rates from the proposed action would be slightly higher than the no action alternative, but not enough to cause a discernable effect to the raptor population along the Colville River.

4.3 RESIDUAL EFFECTS

Even with compliance with the required protections, the proposed action could result in minor impacts to individual peregrine falcon or raptor nests but impacts are not likely result in population-level effects.

4.4 MITIGATION AND MONITORING

The stipulations for the proposed action (Attachment A) are a subset of: The *Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/ Final Environmental Impact Statement Record of Decision Required Operating Procedures*, the *Northwest National Petroleum Reserve-Alaska Integrated Activity Plan/ Final Environmental Impact Statement Record of Decision Required Operating Procedures*, *Utility Corridor Resource Management Plan/Final Environmental Impact Statement*, *The Colville River Special Area Management Plan*, and the *Final Environmental Impact Statement on Oil and Gas Leasing in The National Petroleum Reserve in Alaska and Record of Decision approved 5/1983*, and project specific stipulations developed in the NEPA process:

1. Access to cliff faces is allowed only for prospecting on outcrops for vertebrate or other fossil remains. The cliffs may be accessed by foot from river level up to the top of the outcrops, while being limited by the following stipulations:
 - 1a. No more than 3 visits shall be made to any cliff over the entire period of the field work (see exception in Stipulation 1e).
 - 1b. For intensive, multi-day work at individual sites within 500 m of raptor nests, plan each work day to be broken into two segments with a few hours break in the middle.
 - 1c. Raptor eggs, or nestlings too young to thermoregulate, are sensitive to temperature extremes when left unattended by adults. Eggs are especially sensitive to heat, and incubating adults should not be kept from the nest on hot days. Nestlings unable to thermoregulate are sensitive to both temperature extremes, especially cold. During cold, wet weather at any time of the summer, adults should not be kept off nests; leave an area if your presence has that effect
 - 1d. Researchers shall approach cliffs from the most visible avenue, beginning up to one mile (1.6 kilometers), so that raptors may see and hear the approach at a distance. Except where access from the bottom is impossible, the researchers shall approach cliffs from the base and work upwards on rock exposures.
 - 1e. Where raptor nests are detected, work shall be limited to within 500m of nests and to a single visit. The applicant should maintain a flexible schedule, visiting occupied cliffs only on good weather days.
 - 1f. If a nest is located, the site shall not be visited.
 - 1g. No camp sites shall be established on cliffs, camps must be at river level and must be located greater than 500 meters from any active raptor nest site.

2. Project lead must contact BLM at least 60 days prior to accessing the project area in order to be updated on raptor nests in the project area. If active nests are present in the area limitations on distances between camp sites and raptor nests may be imposed.
3. No activity shall commence at these sites until the dates specified above, during each year of the permit.
4. Attached Raptor Code of Conduct shall be adhered to.

4.5 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

The potential issues that were identified in the evaluation of the proposed action for this EA were Non threatened and endangered Birds. The analysis found that impacts would be short term and localized and that mitigation measures would adequately reduce any adverse effects to identified issues in the area. Likewise, the analysis also found that mitigation measures would adequately reduce any adverse effects to non threatened and endangered birds, which would also be short term and localized. The proposed action would not contribute to significant cumulative effects to non threatened and endangered birds.

Chapter 5 Consultation and Coordination

5.1 Agencies, Organization, Persons Consulted

Public notification of the Environmental analysis will be on file at the Arctic Field Office and available on the Arctic Field Office Environmental Assessment web site.

5.3 List of Preparers

BLM

Arctic Field Office:

Dave Yokel, Wildlife Biologist
Michael Kunz, Archaeologist
Susan Flora, Environmental Scientist
Richard Kemnitz, Hydrologist
Donna Wixon, Natural Resource Specialist
Debbie Nigro, Wildlife Biologist
Matthew Whitman, Fish Biologist
Stacey Fritz, Anthropologist/Subsistence Specialist
Roger Sayre, NEPA Specialist

Bibliography

Ritchie, R.J. 1987. Response of Adult Peregrine Falcons to Experimental and Other Disturbances along the Trans-Alaska Pipeline System, Sagavanirktok River, Alaska 1985, 1986. Report to Alyeska Pipeline Service Company, Anchorage, Alaska.

Appendix A

ARCTIC FIELD OFFICE NON OIL AND GAS PERMIT STIPULATIONS

[This is a subset of the Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/ Final Environmental Impact Statement Record of Decision Required Operating Procedures, the Northwest National Petroleum Reserve-Alaska Integrated Activity Plan/ Final Environmental Impact Statement Record of Decision Required Operating Procedures, Utility Corridor Resource Management Plan/Final Environmental Impact Statement, The Colville River Special Area Management Plan, and the Final Environmental Impact Statement on Oil and Gas Leasing in The National Petroleum Reserve in Alaska and Record of Decision approved 5/1983. Special Recreation Permit holders meet most requirements by following the guidelines in Leave No Trace, Alaskan Tundra.]

I. AUTHORIZED OFFICER

The Authorized Officer (AO) is the Manager, Arctic Field Office.

II. AIR & WATER

- A. All operations shall comply with applicable Air and Water Quality Standards of the State of Alaska.
- B. Grey wash water and kitchen waste water may be filtered to remove the solids and the liquid discharged to the land surface, provided the disposal area is a minimum of 100 feet from any water body or stream.

III. AIRCRAFT

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- A. Hazing of wildlife by aircraft is prohibited. Pursuit of running wildlife is hazing. If wildlife begin to run as an aircraft approaches, the aircraft is too close and must break away.
- B. Aircraft shall maintain an altitude of at least 1,500 above ground level (AGL) when within ½ mile of cliffs identified as raptor nesting sites from April 15 through August 15 and within ½ mile of known gyrfalcon nest sites from March 15 to August 15, unless doing so would endanger human life or violate safe flying practices. Permittees shall obtain information from BLM necessary to plan flight routes when routes may go near falcon nests.
- D. Use of aircraft, especially rotary wing aircraft, near known subsistence camps and cabins or during sensitive subsistence hunting periods (spring goose hunting and fall caribou and moose hunting) should be kept to a minimum.

E. NORTHEAST SPECIFIC

Aircraft used for permitted activities shall maintain an altitude of at least 2,000 feet AGL (except for takeoffs and landings) over the Teshekpuk Lake Caribou Habitat Area (Map 1) from May 20 through August 20, unless doing so would endanger human life or violate safe flying practices. Aircraft use (including fixed wing and helicopter) in the Goose Molting Area (Map 2) should be minimized from May 20 through August 20, unless doing so would endanger human life or violate safe flying practices.

IV. CAMPS

- A. The Permittee accepts responsibility for their campsite conditions and will be liable for identified rehabilitation activities.
- B. Provide BLM with a detailed map of all camp locations, trails used, and location and species harvested located accurately on a USGS quadrangle map of the 1:63,360 scale. Please include the dates of the trip, the number of people camped at each site, and GPS location (with datum noted).

V. CULTURAL/PALEONTOLOGICAL RESOURCES

- A. In accordance with the Archaeological Resources Protection Act (16 U.S.C. 470aa), the removal or disturbance of archeological or historic artifacts is prohibited. The excavation, disturbance, collection, or purchase of historical, recent, ethnological, or archaeological specimens or artifacts is prohibited.. Such items include both prehistoric stone tools and sites, as well as historic log cabins, remnants of such structures, refuse dumps, and other such features. The disturbance, excavation and collection of vertebrate paleontological (fossil) remains is also prohibited.

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- B. Any cultural or Paleontological resource discovered by the holder, or any person working on his behalf, situated on lands owned or controlled by the United States shall be promptly reported to the AO. Discoveries must be left in place allowing an examination by BLM cultural or paleontological specialists.
 - C. Prior to any ground-disturbing activity the permittee shall conduct a cultural and paleontological resources survey.

VI. FIRE

- A. The BLM, through the AO, reserves the right to impose closure of any area to operators in periods when fire danger or other dangers to natural resources are severe.
- B. The authorized user shall be financially responsible for any damage done by a wildfire caused by its operations. Costs associated with wildfires include but are not limited to; Damage to natural resources and costs associated with any suppression action taken on the fire.

VII. OPERATIONS

- A. It is the responsibility of the authorized user to ensure that all individuals brought to the project area under its auspices adhere to these stipulations. Authorized users of the planning area shall provide all employees, contractors, subcontractors, and clients with a briefing regarding stipulations applicable to the lease and/or permit.
- B. A copy of applicable stipulations will be posted in a conspicuous place in each work site and campsite.
- C. The provisions of this permit do not relieve the Permittee of any responsibilities or obligations required by the laws or regulations of the State of Alaska Department of Fish and Game or the U.S. Fish and Wildlife Service, or other applicable regulations related to this permit
- D. The authorized user shall protect all survey monuments and be responsible for survey costs if remonumentation is required as a result of the user's actions.
- E. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coast and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments.
- F. In the event of obliteration or disturbance of any of the above, the Permittee shall promptly report the incident, in writing, to the Authorized Officer and the respective installing agency, if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the Permittee shall secure the services of a registered land surveyor or a Bureau Cadastral surveyor to restore the disturbed

monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of Public Lands of the United States, latest edition. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monuments, the Permittee shall be responsible for survey costs.

- G. Removal of greater than 100 cubic yards of sand and/or gravel from cliffs shall be prohibited.

VIII. STREAMS

- A. All operations shall be conducted with due regard for good resource management and in such a manner as not to block any stream, or drainage system, or change the character or course of a stream, or cause the pollution or siltation of any stream or lake.

IX. SUBSISTENCE

- A. The permittee will take no action that interferes with subsistence activities of rural users or restricts the reasonable access of subsistence users to public lands. This may include but is not limited to disturbance of wildlife and their movements near subsistence hunters, and damage to cabins, trails, traditional campsites or caches used by subsistence users.
- B. Permittee shall fill out and return to BLM the Community Notice flyer template at least three weeks prior to the start of their activity in order for BLM to notify potentially affected local communities about the nature and extent of proposed activities. Permittee will respond to questions and any reasonable requests for consultation that the community may have.

X. VEGETATION

- A. All activities shall be conducted to avoid or minimize disturbance to vegetation. The clearing of vegetation for camps or aircraft landing areas is prohibited.

XI. WASTE

A. HUMAN WASTES

1. Toilet paper: Toilet paper must be packed out or a natural alternative used. Natural options for toilet paper include snow, smooth stones or sticks, leaves and moss. Natural TP options should be disposed of the same as the human waste. Feminine hygiene products and diapers must also be packed out.
2. Urine: Urine can attract animals seeking salt: avoid urinating on plants that can be defoliated by animals attracted to the salt residue. Urinate 200 feet away from camps and trails on rock or bare ground.
3. Recommended human excreta disposal in riparian areas: Packing out human wastes is the most eco-friendly means of disposal and the toilet can be located wherever is most

appropriate. This method helps areas that receive high-levels of use retain their naturalness, and preserves pristine areas. Disadvantages include: it incurs cost and requires logistical considerations. The WAG (Waste Alleviation and Gelling) Bag has become the overall term for any pack-it-out bag system. It generally involves one bag with which holds the excrement and another sturdier, sealable bag. Commercial vendors of waste bag kits, powders and supplies include ReStop, Biffy Bags, and Cleanwaste.

B. GARBAGE

1. Attracting wildlife to food and garbage is prohibited.
2. Burial of garbage is prohibited. Burial of human waste is prohibited except as authorized by the AO. [*Special Recreation Permit holders meet all requirements by following the guidelines in Leave No Trace, Alaska Tundra.*]
3. Areas of operation shall be left clean of all debris.

C. FUEL

1. Notice of any spill shall be given to the AO as soon as possible or to the BLM Arctic Field Office Hazmat Coordinator, Susan Flora (work/message 907-474-2303). Other Federal, State, and NSB entities shall be notified as required by law.
2. All spills shall be cleaned up immediately and to the satisfaction of the AO and all agencies with regulatory authority over spills, including the Alaska Department of Environmental Concerns (ADEC),(1800-478-9300) (Alaska Statute Title 18, Chapter 75, Article 2).
3. State and Federal safety standards for fuel handling will be followed.

D. PESTICIDES

Use of pesticides without the specific authority of the AO is prohibited.

XII. WILDLIFE

- A. The feeding of wildlife is prohibited.
- B. Camp sites shall be located at least 500 meters from any known arctic peregrine falcon nest site.
- C. The cumulative number of authorized visits (defined as each day in which work is done within 500 meters of a nest site) to any cliff per nesting season (April 15 through August 15) by all authorized users shall be limited to three.
- D. With the exception of authorized guide hunting trips, hunting and trapping by permittees is prohibited.

Finding of No Significant Impact

Type of Action: NPR-A Permits

Serial Number: FF096405 & FF095351

Environmental Assessment Number: DOI-BLM-LLAKF010-2012-0025-EA

Applicant(s): Dallas Museum of Nature and Science / University of Alaska Museum
Anthony Fiorillo, PhD Patrick Druckenmiller, PhD

Address: P.O. Box 151469 907 Yukon Dr.
Dallas, Texas 78315 Fairbanks, Alaska 99775

District: Arctic Field Office

Planning Units: Northeast National Petroleum Reserve-Alaska Supplemental
Integrated Activity Plan/Environmental Impact Statement (IAP/EIS)
2008
Colville River Special Area Management Plan (CRSAMP) approved
July 2008

Lands Involved:

Id #	Township	Range	Section	Latitude	Longitude
TXA	8 North	2 East	27	N70 00.959	W151 35.402
TXB	8 North	2 East	15	N70 02.751	W151 35.256
TXC	8 North	2 East	2	N70 05.034	W151 33.222
TXC	9 North	2 East	35	N70 05.034	W151 33.222

Id #	Township	Range	Section	Proposed Activity
UAF A	8 North	2 East	27	Pedionmys Pt. (Screening)
UAF B	8 North	2 East	11	Clam Beach (Prospecting)
UAF C	8 North	2 East	11	Sling point BB (potential bone bed)
UAF D	8 North	2 East	2	Poverty Bar – Campsite and landing site
UAF E	9 North	3 East	31	Megatarsal Bar (Prospecting)

Township	Range	Section
7 North	2 East	NPR-A Lands Only
6 North	2 East	NPR-A Lands Only
6 North	3 East	No BLM Managed Land
5 North	2 East	NPR-A Lands Only

5 North	3 East	No BLM Managed Land
4 North	2 East	NPR-A Lands Only
4 North	3 East	NPR-A Lands Only
3 North	3 East	NPR-A Lands Only
2 North	2 East	NPR-A Lands Only
2 North	3 East	Excluding Private Land
1 North	1 West	
1 North	1 East	Excluding Private Land
1 North	2 East	Excluding Private Land
1 North	3 East	No BLM Managed Land
1 South	1 West	Excluding Private Land
1 South	1 East	NPR-A Lands Only

Context and Intensity of Environmental Impacts

Based upon a review of the EA prepared by the Arctic Field Office and the supporting documents, I have determined that the proposed action will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance as defined at 40 CFR 1508.27. Therefore, an environmental impact statement is not required. We reviewed the context of the proposed action and found that it would not result in any significant effects to resources and values in NPR-A. The mitigation measures and environmental protections would ensure that the Proposed Action would not add significantly to incremental impacts.

The following factors were considered in the EA to evaluate the significance of this proposal (40 CFR 1508.27): Beneficial and adverse impacts; effects on public health and safety; unique cultural or ecological areas within or near the project area; potentially controversial or uncertain effects; whether the action may establish a precedent for future actions with significant effect; cumulative effects; adverse impacts to important scientific, cultural or historical resources; effects to endangered or threatened species or habitat; or whether the action threatens a violation of federal, state, local or tribal law, regulation or policy imposed for the protection of the environment, where non-federal requirements are consistent with federal requirements:

Monitoring and Mitigation

BLM will monitor on the ground activities periodically. Mitigation measures will be implemented as described in the attached authorization stipulations.

APPROVED:

June 22, 2012

/s/Lon Kelly
Arctic Field Office Manager

Date