

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Arctic Field Office
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In reply refer to:
FF095844
2984.01 (AK012)

PLAN CONFORMANCE / NEPA COMPLIANCE RECORD

DOI-BLM-LLAKF012-2011-0023-CX

Arctic Field Office, Bureau of Land Management

Applicant: Feng Sheng Hu
Professor & Head, Plant Biology
265 Morrill Hall
505 S Goodwin Ave
Urbana, Illinois 61801

Proposed Action Title/Type: Potential impacts of climate change on tundra fire regimes research

Description of Proposed Action: The applicant, Feng Sheng Hu of the University of Illinois, has requested authorization for field activity and access to conduct climate change research. The proposed research relies on sediment cores from tundra lakes located in 1) watersheds with carbonate substrates in order to reconstruct climate via oxygen isotopes (preserved in carbonate shells, etc.) and 2) lakes from north-slope tundra that has burned over the historical record (i.e., near Atqasuk). Several lakes within lands managed by the Bureau of Land Management (BLM) are promising based on maps of geology and subsurface chemistry as well as in relation to documented fires. The proposed activity would take place on lands within the National Petroleum Reserve-Alaska (NPR-A).

The paleofire reconstructions would target lakes near the 1993 Atqasuk fire (figure 1). Reconnaissance would occur on July 8 – 9, 2011. The researchers would only land at lakes that look deep enough from the air. Upon landing they would pump up a small raft to measure lake depth. The fuel cache and helicopter would be housed at Barrow. A field crew of three people would core two lakes in this region from the July 10-July 15th. The estimated take off and landings by helicopter are 29 for the Atqasuk project.

The camp would consist of three backpacking tents and a cook-tent or tarp. All field equipment would be placed and assembled on gravelly/sandy beach surfaces near camp. They would have satellite phones and first aid kits in the field as well as Ursacks for food and food-waste storage. Human waste would be buried ≥ 6 inches deep, and toilet paper would be packed out. Helicopter support is being coordinated through Polar Field Services. Fuel for this project would be stored at Barrow and not on BLM managed lands. The applicant has been in contact with the North Slope Borough and the Ukpeagvik Inupiat Corporation.

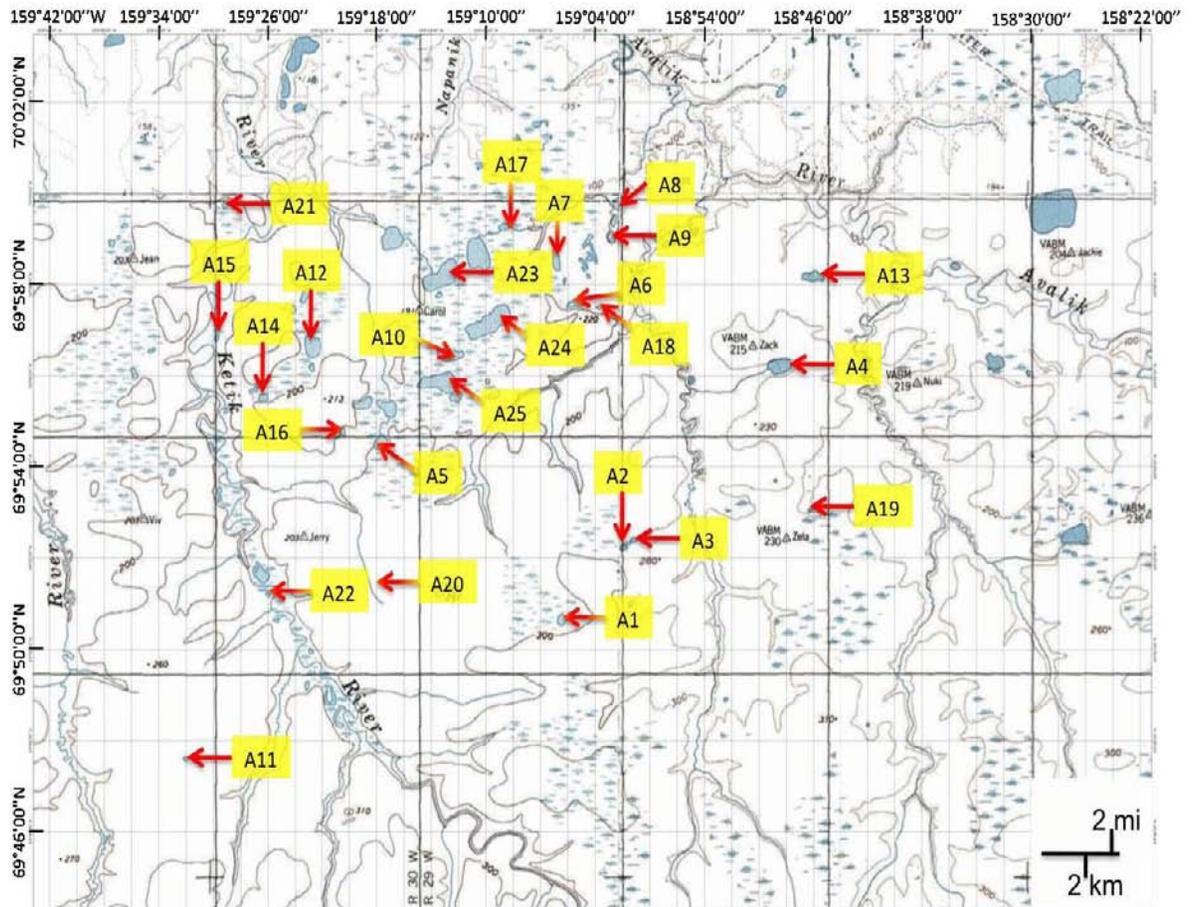


Figure 1 Applicant Supplied Map – Atkasuk Sites (Fire Reconstruction)

HU Climate Research Sites MTRS				
Applicant Site #s	Township	Range	Section	
Atqasuk Sites (Fire Reconstruction) (Figure 1)				
A-1	6 North	29 West	26	NPR-A
A-2,A-3,A-19	6 North	28 West	12, 18	NPR-A
A-4,A-13	7 North	28 West	12, 26	NPR-A
A-5,A-20,A-22	6 North	30 West	2,14,20	NPR-A
A-6,A-7,A-8,A-9,A-10,A-17,A-18,A-23,A-24,A-25	7 North	29 West	1, 4, 11, 13, 14, 18, 19, 21, 30	NPR-A
A-11	5 North	31 West	13	NPR-A
A-12,A-14,A-15,A-16,A-21	7 North	30 West	6, 19, 21, 32, 3421	NPR-A
Non BLM Sites				
25,27,28,29	8 South	13 East	23	No BLM Managed Lands
53,58	8 South	11 East	10	No BLM Managed Lands
54,56	7 South	12 East	32	No BLM Managed Lands
55,57	8 South	12 East	28	No BLM Managed Lands
59	7 South	13 East	21	No BLM Managed Lands
62,63	11 South	6 East	23, 35	No BLM Managed Lands
1	2 South	20 East	35	No BLM Managed Lands, ANWR
2	3 South	20 East	2,	No BLM Managed Lands, ANWR
3	3 South	22 East	33	No BLM Managed Lands, ANWR
4,5,10,11	4 South	22 East	9, 10,18, 19, 30	No BLM Managed Lands, ANWR
6,8	4 South	21 East	16,24	No BLM Managed Lands, ANWR
7,9,12	5 South	22 East	2	No BLM Managed Lands, ANWR
13	5 South	23 East	4	No BLM Managed Lands, ANWR
14	7 South	23 East	32	No BLM Managed Lands, ANWR
15	7 South	24 East	32	No BLM Managed Lands, ANWR
16	8 South	25 East	17	No BLM Managed Lands, ANWR
17,18,19	7 South	16 East	14, 23, 24	No BLM Managed Lands, ANWR
20	10 South	16 East	20	No BLM Managed Lands, ANWR
21	11 South	16 East	4	No BLM Managed Lands, ANWR

Part I: Plan Conformance Review

The proposed action is subject to the following planning document: Northeast National Petroleum Reserve-Alaska Supplemental Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) dated July 2008 and Northwest National Petroleum Reserve-Alaska (IAP/EIS) 2004. The proposed action is not inconsistent with the purposes of the Naval Petroleum Reserves Production Act of 1976. The applicant will be provided with stipulations entitled “FF095844 University of Illinois Research Permit Stipulations 2011.”

 /s/Donna L. Wixon
 Natural Resource Specialist, Arctic Field Office

Part II: NEPA Review and Decision

Categorical Exclusion Review

This proposed action meets the criteria for a Categorical Exclusion in accordance with 516 DM 11.9, D.10,

This proposed action qualifies as a Categorical Exclusion 1.6 under 43 CFR 46.210 and 46.215

“Nondestructive data collection, inventory (including field, aerial, and satellite surveying and mapping), study, research, and monitoring activities.”

The proposed action has been reviewed to determine if any of the exceptions described in 43 CFR 46.210 and 46.215, apply.

The proposed action will not meet any of the extraordinary circumstances listed below.

Extraordinary Circumstances	Yes	No
2.1 Have significant impacts on public health or safety.		X
2.2 Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.		
2.3 Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)].		X
2.4 Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.		X
2.5 Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.		X
2.6 Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.		X
2.7 Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office.		X
2.8 Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.		X

2.9 Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.		X
2.10 Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).		X
2.11 Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).		X
2.12 Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).		X

Date June 27, 2011

/s/Donna L. Wixon
Natural Resource Specialist, Arctic Field Office