

Finding of No Significant Impact

Environmental Assessment EA-DOI-BLM-AK-F000-2014-EA

Based on the analysis of potential environmental impacts in EA-DOI-BLM-AK-F000-2014-0001-EA, I have determined that the proposed action with the mitigation measures described below will not have any significant impacts on the environment and an environmental impact statement is not required.

Signatures:

Recommended by:

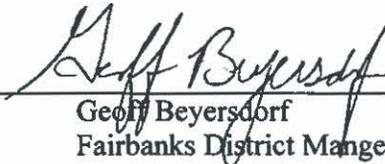


July 23, 2015

Thomas St. Clair
Fire Management Specialist

[Date]

Approved by:



July 27, 2015

Geoff Beyersdorf
Fairbanks District Manger

[Date]

Introduction

Identifying Information:

Title, EA number, and type of project:

Programmatic Fuel Reduction for Fairbanks District Office

DOI-BLM-AK-F000-2014-0001-EA

Small low complexity pile burns not to exceed 40 acres of vegetation per year

Location of Proposed Action:

The Proposed action will occur on lands managed by the Central Yukon and Eastern Interior BLM Field Offices.

Name and Location of Preparing Office:

Lead Office - Fairbanks District Office, AKF000

Fairbanks District Office, 1150 University Avenue, Fairbanks, Alaska 99709

Identify the subject function code, lease, serial, or case file number:

Not Applicable

Applicant Name:

Bureau of Land Management

Purpose and Need for Action:

The purpose of the BLM's action is to dispose of woody debris piles from sources on BLM managed land. The need for the action is from the biomass accumulation of wind thrown trees; campground, facility, and trail maintenance; and previous small scale fuels reduction efforts.

Decision to be Made

The BLM will decide whether to authorize pile burns on BLM managed lands, and if so, under what terms and conditions.

Scoping, Public Involvement and Issues:

Public notification of the Environmental Assessment was published to the NEPA Register available through the Fairbanks District Office website on July 10, 2014. No comments have been received as of January 26, 2015.

Proposed Action and Alternatives

Description of the Proposed Action:

The proposed action is to conduct prescribed burns to dispose of debris piles comprised of woody vegetation from up to 40-acres of forest annually for the five year period between August 1, 2015 and August 1, 2020.

The project areas would be closed to recreational activities during the burning phase.

Each prescribed fire would be conducted in compliance with an approved programmatic low complexity prescribed plan specific to the Fairbanks District Office. Only trained and qualified personnel may be used to execute each prescribed burn plan. The number of resources required to safely achieve prescribed fire objectives will be based on the size and complexity of these projects. Minimum staffing will be specified appropriate for the size and complexity of this type of burn. The prescription will allow for burning piles only during relatively benign conditions including snow covered ground, saturated ground, or mineral soil underneath the piles and surrounding the piles by at least 10 feet (such as when piles are constructed in a gravel pit).

This action does not describe the cutting of the vegetation, it only provides a mechanism for disposing of the vegetation from clearing, or thinning projects. This action does not cover broadcast burning, burning of debris piles composed of vegetation cut from more than 40 acres, burning of debris piles during times of high fire danger, burning debris piles with a large complex organization, burning of garbage, or the burning of buildings. This action also does not cover burns for a military purpose on withdrawn lands; those are covered under a Department of Defense NEPA process.

The Bureau of Land Management Fairbanks District Office in conjunction with the Bureau of Land Management Alaska Fire Service would prepare the burn plan and implement prescribed fires.

Project Design Features:

BLM prescribed fire policy requires NEPA analysis and subsequently an operational prescribed burn plan in order to implement a prescribed fire on BLM managed land. Policy allows for a programmatic burn plan to encompass similar small scale low complexity burns across a District. Certain pieces of information such as location, funding source, actual timing, and the actual personnel implementing the prescribed burn will be added to the plan without the need for an amendment prior to burning.

When the burn prescription window opens, personnel would assemble at the burn unit. The piles would be lit using hand lighting techniques. Personnel would then monitor the piles and push unburned ends of woody material into the piles to complete combustion. The piles would likely smolder for multiple days and one or two personnel would be assigned to check the piles daily until they are declared out. The Burn Boss and the Field Office Manager would have the discretion to mop-up the piles rather than waiting for them to burn out on their own if this was determined to be more efficient (such as when the piles are in a remote location). Mop-up consists of extinguishing all hot spots within a specified distance from the burn perimeter.

The following stipulations would be adhered to regarding air quality issues:

1. Pile burns would be conducted only when environmental conditions are favorable for dispersion of smoke from the initial burn as well as extended smoke production from burn-piles that may smolder for several days.
2. Winter pile-burns would not be conducted within a 25 mile radius of the Fairbanks non-attainment area when predominant wind direction is such that smoke generated from pile-burns would likely impact the air quality of the Fairbanks non-attainment area.

The following stipulations would be adhered to regarding the transport of Hazardous materials such as gasoline, drip torch mix (gasoline and diesel), and chainsaw bar oil:

1. Transportation and storage of petroleum, oil and lubricants (POLs) shall be handled in a manner to ensure the products minimize the effects to the environment and human health. Gasoline, diesel, oils, greases and hydraulic fluids are a few of the most common POLs. Containers that are transferred to remote locations for everyday operations are to be stored within secondary containment. The containment area should be lined with a compatible impermeable liner material which is free of cracks or gaps and sufficiently impervious to contain leaks or spills. The containment area must be large enough to store the capacity of the largest container stored, plus water from a 24 hour storm event.
2. Transfer of POLs to equipment shall be completed in a secure manner to minimize the possibility of contamination to the surrounding environment. At a minimum, secondary containment shall be placed under the location to catch overflow or assist the operator in containing a spill, if one occurs. Equipment that has been identified as having a fluid leak should have a drip basin under the leak area to ensure no release to the surrounding environment. Refueling areas shall be at least 100 feet from any water body.
3. Equipment repair is allowed on the basis of the necessity to operate equipment on the site. Equipment repair that has the potential to release fluids should be completed over an impermeable liner to ensure fluid migration to the environment does not occur.
4. Sorbant pads would be stored and used at all fueling points and maintenance areas.
5. All spills would be contained and cleaned up as soon as the release has been identified. The release of POLs to any land or water body is to be reported (Alaska Statute Title 18, Chapter 75, Article 2) to a BLM HAZMAT Specialist as soon as the person has knowledge of the release. HAZMAT Specialists are available at 907-356-5867 or 907-474-2371.
6. All hazardous materials storage containers must be labeled with the following information: BLM, contents of the container (name of the product that you put in the container, if not in the original container from the manufacturer), date the product was purchased/put in the container. (e.g. BLM, Drip torch fuel, 2014)
7. Burial of garbage on public lands is not authorized. All solid waste (garbage), including incinerated ash shall be removed from public lands and disposed of in an Alaska Department of Environmental Conservation (ADEC) approved waste disposal facility, unless otherwise specified. Solid waste combustibles may be incinerated in a contained and controlled manner. (Alaska Statute Title 18, Chapter 72)
8. Storage of hazardous materials, hazardous wastes, or solid wastes at the project area is not permitted.

Due to erosion concerns, Off Highway Vehicles (OHVs) would only be used on existing roads, and complete removal of the organic mat would not be allowed during any of the burns. The organic mat would be removed only underneath the woody debris piles. OHV and foot traffic, through and around the pile-burn footprint will be minimized for the purposes of sediment and erosion control. Utilizing BMPs and standard fire operating procedures, limited short-term impacts to soil resources would be expected to occur from the proposed action. Also, due to erosion and fisheries concerns in riparian areas, piles would not be burned within 50 feet of waterbodies.

Description of Alternatives Analyzed in Detail:

The no action alternative is to not conduct the prescribed burns.

Alternatives Considered but not Analyzed in Detail

The following alternatives were identified for further analysis by the Interdisciplinary Team preparing the Environmental Assessment as alternatives to using fire for the disposal of woody biomass:

1. Chipping the woody material.
2. Hauling the material to a landfill.

These alternatives were considered but not carried forward for further analysis. In the case of chipping, it was not analyzed as chipping would not meet the goal of removing the material. For the landfill option, the increased potential for invasive species spread was too substantial to warrant further analysis.

Conformance

In accordance with land use planning regulations (43 CFR 1610.8 (b)(1)), when an action is proposed on public lands covered by an existing land use plan; the action will consider the land use plan plus any other data and analysis necessary to make an informed decision and assess the impacts of the proposal and to provide a basis for a decision on the proposal. The applicable land use plans for the Proposed Action are:

1. Alaska Interagency Wildland Fire Management Plan (2010)
2. Bureau of Land Management-Alaska Wildland Fire Management Plan (2005)
3. Bureau of Land Management-Land Use Plan Amendment for Wildland Fire and Fuels Management for Alaska Environmental Assessment (2005)
4. Fortymile Management Plan Framework (1980)
5. Record of Decision, Resource Management Plan, Steese National Conservation Area (1986)
6. Resource Management Plan and Record of Decision for the Central Yukon Planning Area(1986)
7. Southwest Management Framework Plan Record of Decision (1981)
8. Utility Corridor Resource Management Plan/ Environmental Impact Statement (1991)

9. **White Mountains National Recreation Area Resource Management Plan and Record of Decision (1986)**

Affected Environment:

BLM guidelines include a list of issues that are addressed, where applicable, in NEPA assessments. Some elements are not present in the project area and are, therefore, not discussed further. A summary listing of related issues considered is provided in Table 3.1.

Table 3.1

Critical Elements and Other Elements to be Considered					
Critical Elements	Affected		Critical Elements	Affected	
	Yes	No		Yes	No
Air Quality	X		Native American Religious Concerns		X
Areas of Critical Environmental Concern	X		Threatened or Endangered Species		X
Cultural Resources		X	Hazardous and Solid Wastes	X	
Environmental Justice		X	Water Quality- Surface and Ground		X
Essential Fish Habitat	X		Wetlands/Riparian Zones		X
Prime and Unique Farm Lands		X	Wild and Scenic Rivers		X
Floodplains		X	Wilderness		X
Invasive, Non-native Species	X				
Other Elements	Affected		Other Elements	Affected	
	Yes	No		Yes	No
Access		X	Subsistence		X
Fire Management	X		Travel Management		X
Hydrology		X	Tribal Notifications		X
Paeontological		X	Vegetative Resources		X
Realty/Land Status		X	Visual Resources		X
Recreation	X		Wildlife/Aquatic		X
Socioeconomic		X	Wildlife/Terrestrial		X
Soils	X		Mineral Resources	X	

Air Quality

The City of Fairbanks and surrounding areas including North Pole were designated as a PM2.5 non-attainment area in December 2009. For pile-burn planning purposes, PM2.5 is primarily a concern during the winter months (October through March) when extremely strong temperature inversions are frequent and human-caused air pollution impacts increase.

Areas of Critical Environmental Concern

Areas of Critical Environmental Concern (ACEC) designations highlight areas where special management attention is needed to protect, and prevent irreparable damage to, important historic, cultural, and scenic values, fish, or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards. The ACEC designation indicates to the public that the BLM recognizes that an area has significant values and has established special management measures to protect those values. In addition designation also serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered near or within an ACEC (BLM 1988). Within the proposed project area there are 38 ACECs. These are listed in table below with their designated significant resource value.

Tozitna River ACEC	Salmon and Sheefish Spawning Habitat
Sulukna River ACEC	Salmon and Sheefish Spawning Habitat
Galena Mountain ACEC	Crucial Caribou Calving Habitat

Tozitna Subunit North ACEC	Crucial Caribou Calving Habitat
Tozitna Subunit South ACEC	Crucial Caribou Calving Habitat
West Fork Atigan River ACEC	Lambing Areas, mineral lick
Shaktoolik River ACEC	Salmon and Sheefish Spawning Habitat
Nulato Hills ACEC	Crucial Peregrine Falcon Habitat
Dulbi-Kaiyuh Mountains Subunit ACEC	Crucial Peregrine Falcon Habitat
Big Windy Hot Springs ACEC	Natural Scientific Features
Serpentine Slide RNA	Natural Scientific Features
Limestone Jags RNA	Natural Scientific Features
Snowden Mountain ACEC	Lambing Areas, mineral lick
Sukakpak Mountain ACEC	Scenic, geology
Poss Mountain ACEC	Lambing Areas, mineral lick
Nugget Creek ACEC	Lambing Areas, mineral lick
Kanuti Hot Springs ACEC	Hot Spring
Jim River ACEC	Fishery, Recreation, Cultural
North River ACEC	Salmon and Sheefish Spawning Habitat
Ungalik River ACEC	Salmon and Sheefish Spawning Habitat
Inglutalik River ACEC	Salmon and Sheefish Spawning Habitat
Kateel River ACEC	Salmon and Sheefish Spawning Habitat
Gisasa River ACEC	Salmon and Sheefish Spawning Habitat
Galbreth Lake ACEC	Cultural, Rare or Sensitive Plants, Scenic Values, and Lambing Areas
Toolik Lake RNA	Research Activities, Cultural
Arms Lake RNA	Natural Scientific Features
Redlands Lake RNA	Natural Scientific Features
Ishtalitna Creek Hot Springs RNA	Natural Scientific Features
Spooky Valley RNA	Natural Scientific Features
Lake Todotonten Pingos RNA	Natural Scientific Features
Nigu-Iteriak RNA	Geology, Cultural
South Todatonten Summit RNA	Natural Scientific Features
McQuesten Creek RNA	Natural Scientific Features
Unalakleet River ACEC	Salmon and Sheefish Spawning Habitat
Mount Prindle RNA	Natural Scientific Features
Hogatza River Tributaries ACEC	Salmon and Sheefish Spawning Habitat
Indian River ACEC	Salmon and Sheefish Spawning Habitat
Box River Treeline RNA	Natural Scientific Features

The majority of the ACECs in the proposed project area are in a natural and undisturbed condition. Of the ACECs within the proposed project area, those designated for anadromous/salmon and sheefish spawning habitat have the most potential for being affected by the proposed action. See section “Essential Fish Habitat” for a description of the affected environment.

Essential Fish Habitat

For the purposes of this environmental assessment, essential fish habitat means those waters and substrate necessary for salmon for spawning, breeding, feeding, or growth to maturity (Magnuson-Stevens Act, 16 U.S.C. 1801 et seq). For the purpose of interpreting the definition of essential fish habitat: Waters include aquatic areas and their associated physical, chemical, and biological properties that are used by salmon and may include aquatic areas historically used by salmon where appropriate; substrate includes sediment, hard bottom, structures underlying the waters, and associated biological communities; necessary means the habitat required to support a sustainable fishery and the managed species contribution to a healthy ecosystem; and spawning, breeding, feeding, or growth to maturity covers a species full life cycle.

The National Marine Fisheries Service (NMFS) recognizes fresh waters cataloged as being used by salmon under AS 41.14.870 (*Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes*) as essential fish habitat. The project area has 15,116 miles of essential fish habitat (ADF&G 2014). These streams contain up to five salmon species: Chinook (*Oncorhynchus tshawytscha*), chum (*O. keta*), sockeye (*O. nerka*), pink (*O. gorbuscha*), and coho (*O. kisutch*) salmon.

Other local fish species which may be encountered in streams within the project include: Arctic lamprey (*Lamptera camtschatica*), Arctic grayling (*Thymallus arcticus*), Arctic char (*Salvelinus alpinus*), lake trout (*S. namaycush*), burbot (*Lota lota*), broad whitefish (*Coregonus nasus*), humpback whitefish (*C. clupeiformis*), least cisco (*C. sardinella*), bering cisco (*C. laurettae*), lake chub (*Couesius plumbeus*), round whitefish (*Prosopium cylindraceum*), inconnu (*Stenodus leucichthys*), Alaska blackfish (*Dallia pectoralis*), Dolly Varden (*Salvelinus malma*), northern pike (*Esox Lucius*), longnose sucker (*Catostomus catostomus*), and slimy sculpin (Mecklenberg et al. 2002).

The majority of streams with essential fish habitat in the proposed project area contain aquatic habitat which is in natural condition and properly functioning in terms of providing an unrestricted supply of high quality water, unimpeded access to habitat, clean substrate, high quality pools, natural composition of pools and riffles and off-channel habitats, natural stream bank stability and floodplain connectivity, and unaltered channel width to depth ratios.

Fire Management

The area of the proposed prescribed burning has a history of large, intense stand replacing summertime fires that are generally allowed to burn in unpopulated parts of the landscape and suppressed near human settlements and improvements. This situation created a mosaic of forest fuels across the landscape with the only areas of abnormal hazardous fuels buildup being near populated areas and human improvements.

Invasive, Non-native Species

Over 25 species of invasive plants have been documented in the proposed treatment area as of 2014. Two of the most common and highest priority species are white sweetclover (*Melilotus alba*) and bird vetch (*Vicia cracca*), however all invasive plants are subject to management under Executive Order No. 13112 which directs U.S. Federal Agencies not to authorize, fund, or carry out actions likely to cause or promote the introduction or spread of non-native, invasive plant species. The Order emphasizes the importance of both prevention and control of introductions in an environmentally-sound and cost-effective manner that minimizes economic, ecological, and human health impacts. In Alaska, where invasive plant infestation is less prevalent than in more southern areas of the U.S., prevention and utilization of the Early Detection Rapid Response (EDRR) approach to weed management is still possible. In the area managed by the Central Yukon Field Office *Melilotus alba* (white sweetclover; Alaska Exotic Plant Information Clearinghouse [AKEPIC] invasiveness ranking: 80), discontinuously infests developed areas (especially roads as well as adjoining waysides and material extraction sites). Notably, white sweetclover has been rapidly expanding its range northward along the Dalton Highway and has been found as far north as the Hammond River (MP 190). *Vicia cracca* (bird vetch; AKEPIC invasiveness ranking: 73), has been detected as far north as Coldfoot, Alaska.

M. alba and *M. officinalis* (yellow sweetclover, Ranking: 69), *V. cracca*, *Leucanthemum vulgare* (oxeye daisy, Rankin 61), *Medicago sativa* ssp *falcata* (yellow alfalfa, Ranking: 64) and *M. sativa*

ssp sativa (alfalfa, Ranking: 59) are species of greatest concern that occur in the area managed by the Eastern Interior Field Office. These species are of greatest concern primarily due to their location adjacent to or within Wild and Scenic River corridors. White sweetclover has been expanding to several small infestations along the Taylor Highway in the past four years and occurs in one to three acre infestations at MP 0, MP 113 (O'Brien Creek), and three miles toward the new Eagle Village, east of Eagle. The latter infestation is on the bank of the Yukon River. Bird vetch is spreading aggressively across the Taylor Highway and along the South Fork of the Fortymile Wild and Scenic River from an acre size infestation at the South Fork DOTPF station. Yellow alfalfa occurs mostly at MP 0 on the Taylor Highway and alfalfa has been detected north of the Fortymile River Bridge at MP 113. An approximately 0.5 acre infestation of oxeye daisy at the BLM field station in Central persists despite manual and mechanical treatment.

Mineral Resources

Any prescribed burning conducted on Federal mining claims would need to be dealt with in a site specific burn plan. Close work with a mining claimant would be necessary.

Recreation

Within the Central Yukon/Eastern Interior Field Offices, the scope of this EA, the recreation program is responsible for maintaining over 300 miles of winter and summer trails, 10 campgrounds, over 25 waysides and trailheads, and 9 visitor or administration sites. Some of the maintenance requirements at these sites include brushing back new brush and tree growth around the sites. This amounts to a considerable level of brush accumulation. Some brush is scattered along trails in particular but much of it around the sites is stacked for removal. These sites are typically significant distances from landfills and other disposal sites. The burning of piles is often the most economical and efficient method of disposal.

Recreation facilities including trails are managed to be clean and user friendly. They also strive to maintain a high visual quality to enhance the user's experience.

Soils

The components of the soils in the project area that would be affected are: vegetative cover; litter; organic soil layers; down, dead, and woody fuels.

Wastes, Hazardous or Solid

The proposed action is to conduct prescribed burns to dispose of debris piles comprised of woody vegetation from less than 40-acres of forest annually, within the 28.5 million acres contained inside the Central Yukon and Eastern Interior Field Offices. The Central Yukon and Eastern Interior Field Offices have identified contaminated sites and areas of concern within these boundaries. These sites are cataloged in the internal Abandoned Mine Site Clean-up Module (AMSCM) database and the Alaska Department of Environmental Conservation (ADEC) contaminated sites database at <http://dec.alaska.gov/applications/spar/CSPSearch/default.asp>.

Water Quality

There is water throughout the area of the proposed action. The proposed action would not occur within 50 feet of water bodies.

Environmental Effects:

Air Quality

Proposed Action:

The proposed action to authorize the BLM to burn small piles of woody debris from varied sources on BLM Central Yukon or Eastern Interior Field Office managed lands has the potential to adversely affect local air quality, particularly in winter when environmental conditions frequently result in temperature inversions. Pile burns should be conducted only when environmental conditions are favorable for dispersion of smoke from the initial burn as well as extended smoke production from burn-piles that may smolder for several days.

No Action:

Under the no action alternative air quality would not be altered from the current state.

Areas of Critical Environmental Concern

Proposed Action:

Of the ACEC within the proposed project area, those designated for anadromous/salmon and sheefish spawning habitat have the most potential for being affected by the proposed action. See section "Essential Fish Habitat" for a description of the potential environmental effects of the proposed action on anadromous/salmon and sheefish spawning habitat within designated ACEC.

No Action Alternative:

Under the no action alternative ACEC would not be altered from their current characteristics.

Essential Fish Habitat

Proposed Action:

Potential impacts to essential fish habitat from the proposed action would occur primarily as a result of increased surface runoff and subsequent degraded water quality. Increased surface runoff can lead to increased sediment delivery to local surface waters which in turn can stress the stability of streams and lead to increased water temperature and turbidity. Deposition of excessive fine sediment on the stream bottom reduces the permeability of spawning gravels and blocks the exchange of subsurface and surface waters. Degraded water quality would be the result of increased turbidity. This increased turbidity within waterbodies could result in reduction of primary and secondary production and displacement of fish for an unknown distance downstream. To protect water quality, streambank stability, and surface runoff patterns, a 50-foot (minimum) buffer would be maintained around all waterbodies. This riparian buffer zone would create a vegetation buffer which would maintain natural surface runoff patterns and reduce the amount of sediment entering the stream which could adversely affect essential fish habitat.

No Action Alternative

Under the no action alternative essential fish habitat would not be altered from its current characteristics.

Fire Management

Proposed Action:

Burning small acreages of piled vegetation would not have a measurable effect at the landscape level. The immediate area surrounding the pile burning would be returned to a more “natural” or normal state by the burns because piled vegetation does not occur naturally on the landscape except in the case of beaver dams. Since piles are most likely to occur near human settlements and improvements, reducing forest fuels through the proposed prescribed burning would decrease the risk of loss due to wildfire in the vicinity of the burn.

No Action Alternative:

Under the no action alternative anyplace piles remained would be an unnaturally dense fuel arrangement with the effect of increasing potential fire intensity and severity in the location of the pile during a wildfire.

Invasive, Non-native Species

Any new disturbance has the potential to provide a new vector for invasive plant spread; the vast majority of invasive plants currently established in Alaska most readily colonize disturbed areas (including fire scars). Pile burning in the vicinity of established invasive plants, but in previously undisturbed areas, increases the probability of invasive plant spread.

Although there is limited documentation of invasive plant infestation of discrete pile burn scars in Alaska, one monitoring project along the road system in the Copper River Basin near the Wrangell-St. Elias NPS Headquarters lead to the detection of invasive plants (1-5 plants per pile) within a limited number of pile burn scars that were near a source of previously established invasive plants. The seed source for infestation of pile burn scars appears to have come from established invasive plants in the area. Known invasives in the Headquarters area include dandelion, alsike clover, herb sophia, narrowleaf hawsbeard, plantago, lambsquarters, European stickweed, foxtail barley, prostrate knotweed and white sweetclover; all of which were documented in a 2007 survey of the developed headquarters area (AKEPIC Database). Two of these species, dandelion (*Taraxacum officinale*: AKEPIC invasiveness ranking: 58) and narrowleaf hawksbeard (*Crepis tectorum*: AKEPIC invasiveness ranking: 56), both with windborne seeds, were documented in pile burn scars that were estimated to be 10-15 meters away from the seed source along the road edge. The other invasive plant species present in the area had not been detected in the pile burn scars within 2 years of burning (Barnes pers comm). In summary, it has been documented that the creation of new burn scars as a result of pile burning in areas of undisturbed substrate adjacent to (within 10–15 meters of) “weed”-infested areas has been documented to lead to establishment of invasive plants with wind-borne seeds in the Copper River Valley in Alaska. This effect could be observed elsewhere in Alaska and could occur as a product of the proposed action.

Recreation

Proposed Action:

Effects of the proposed action on Recreational Resources would be limited. Positive effects would be realized through more efficient maintenance at the many remote recreation sites. Recreation would benefit in having pile burning as a tool to use in disposing of unwanted brush generated in regular maintenance of these sites.

Negative effects could occur but would likely be temporary in nature if burn sites are located poorly within popular recreation sites. Brush piles waiting to be burned or post burn ash and

other remaining debris may impact public use and travel associated with the recreation sites. Consideration should be given in where burn sites are established as to the normal use and traffic of the site.

No Action Alternative:

The environmental effects of the no action alternative would be greater than the action alternative. Effects could include: less cutting maintenance of recreation and administrative sites, less efficient removal of brush to other disposal sites, and/or accumulation of unburned brush on site possibly leading to diminished visual quality and higher potential fire danger.

Soils

Proposed Action:

Fire may alter soil chemical properties, nutrient availability, post-fire soil temperatures, microorganism populations and their activity rates, and erosion and sedimentation. In order to prevent excessive soil erosion, the burn prescription should incorporate: the needed amount of fuel and organic layer moisture to minimize organic layer removal; timing the fire so that seasonal vegetation recovery would occur soon after the burn; avoiding pile-burns on steep hillsides, and maintenance of a 50 foot no-burn buffer around the riparian area within the valley bottom.

No Action Alternative:

Under the no action alternative soils would not be altered from current characteristics.

Wastes, Hazardous or Solid

Proposed Action:

The proposed action has the potential for the release of hazardous materials to the environment. Equipment operation, refueling, and fuel transfers increase the potential for petroleum, oil and lubricants (POL) spills. Additionally, any POL spills must be cleaned-up to ADEC clean-up levels and may require the removal of contaminated soils or vegetation. Clean-up efforts for spills may have indirect effects such as short-term inhibition of vegetation growth. Effects from the proposed action are reduced due to the use of drip torch fuel in place of gasoline or other hazardous materials. Hazardous materials (drip torch fuel) used for fire ignition and burn are anticipated to be consumed by the fire and would have minimal impact on the environment. There are no anticipated long-term or permanent effects.

No Action Alternative:

Under the no action alternative conditions would not be altered from the conditions normally encountered.

Water Quality

Pile-burns have the potential to affect water quality, depending on several variables, including fire size, fire severity, soil condition, slope, vegetation, vegetation regrowth, precipitation events, and size of the burn area. However, implementation of BMPs and standard fire operating procedures should minimize or eliminate potential water quality effects.

Tribes, Individuals, Organizations, or Agencies Consulted:

None consulted due to the small scope being limited to less than 40–acres of BLM land per year.

List of Preparers and Persons Consulted

Table 1. List of Preparers and Persons Consulted

Name	Title	Responsible for the Following Section(s) of this Document or topics
Elizabeth Andringa	Environmental and Hazmat Coordinator	Wastes, Hazardous or Solid, Water Quality
Collin Cogley	Outdoor Recreation Planner	Recreation, Travel Management
Kevan Cooper	Realty Specialist	Visual Resources, Wild and Scenic Rivers
David Esse	Fisheries Biologist	Areas of Critical Environmental Concern, Essential Fish Habitat, ANILCA Section 810 Compliance
Ruth Gronquist	Wildlife Biologist	Invasive, Non-native Species
Rebecca Hile	Physical Scientist	Wastes, Hazardous or Solid, Water Quality
Erin Julianus	Wildlife Biologist	ANILCA Section 810 Compliance, Subsistence
Ben Kennedy	Hydrologist	Air Quality, Floodplains, Hydrology, Soils, Water Quality, Wetlands and Riparian Zones
Holli McClain	Outdoor Recreation Planner	Wilderness Characteristics Assessment
Jennifer McMillan	Ecologist	Invasive, Non-native Species, Threatened or Endangered Species, Vegetation, Wildlife
Robin Mills	Archeologist	Cultural Review, Native American Religious Concerns, Paleontological, Tribal Notifications
Thomas St. Clair	Fire Management Specialist	Environmental Justice, Farm Lands, Fire Management, Socioeconomic
Darrel VandeWeg	Geologist	Mineral Resources
Vic Wallace	Realty Specialist	Realty/Land Status

Valued Environmental Components (VEC) Matrix

Valued Environmental Components	Identify Issues for Analysis (Refer to Section 6.4 of the BLM NEPA Handbook)			Briefly Describe Rationale for Determination
	Yes	No	Negligible*	
Air Quality			X	<p>The proposed action to authorize the BLM to burn small piles of woody debris from varied sources on BLM Central Yukon or Eastern Interior Field Office managed lands has the potential to adversely affect local air quality, particularly in winter when environmental conditions frequently result in temperature inversions. Pile burns should be conducted only when environmental conditions are favorable for dispersion of smoke from the initial burn as well as extended smoke production from burn-piles that may smolder for several days.</p> <p>Recommended permit stipulations:</p> <p>1) Pile burns should be conducted only when environmental conditions are favorable for dispersion of smoke from the initial burn as well as extended smoke production from burn-piles that may smolder for several days.</p> <p>The City of Fairbanks and surrounding areas including North Pole were designated as a PM2.5 non-attainment area in December 2009. For pile-burn planning purposes, PM2.5 is primarily a concern during the winter months (October through March) when extremely strong temperature inversions are frequent and human-caused air pollution impacts increase.</p> <p>Recommended permit stipulations:</p> <p>2) Winter pile-burns should not be conducted within a 25 mile radius of the Fairbanks non-attainment area when predominant wind direction is such that smoke generated from pile-burns would likely impact the air quality of the Fairbanks non-attainment area. BWK 121214</p>
Areas of Critical Environmental Concern			X	Esse – There are currently 36 ACECs within the proposed project area. To ensure that there are no negative effects on ACECs the proposed action will require adequate design features and mitigation measures. DAE 10/21/14
Cultural Resources		X		Mills: Cultural resources will not be affected by the proposed action. ROM 10-14-14
Environmental Justice		X		St. Clair: Environmental Justice will not be affected by the proposed action. TBS 2-12-14
Essential Fish Habitat	X			Esse – Essential Fish Habitat exists throughout the project area. To ensure that there are no negative effects on EFH the proposed action will require adequate design features and mitigation measures. DAE 10/21/14
Farm Lands		X		St. Clair: The proposed action will not affect Farm Lands. TBS 2-12-14
Fire Management	X			St. Clair: The proposed action will facilitate fire management activities. TBS 2-12-14
Floodplains		X		The proposed action does not include plans to conduct pile-burns on floodplains; hence, no direct, indirect, or cumulative impacts to floodplains should result from pile-burns. The proposed action is consistent with E.O. 11988, Floodplain Management. BWK 121214
Hydrology		X		Fires can produce substantial effects on the stream flow regime of both small streams and rivers, especially fires of high severity. However, footprint of the burn-piles would be relatively small (< 1 acre) and no impacts to local or regional stream discharge or flow duration would be expected from the proposed action. Utilizing BMPs and standard fire operating procedures, there should be no adverse impacts to hydrology. BWK 121214
Invasive, Nonnative Species	X			Will address in EA. JM 2-3-2014
Mineral Resources		X		VandeWeg: This project does not affect mineral resources or geology. DAV 14 Jan. 2015
Native American				Mills: Native American Religious Concerns will not be affected by the proposed action.

Valued Environmental Components (VEC) Matrix

Paleontological		X		Mills: Paleontological resources will not be affected by the proposed action. ROM 10-14-14
Realty/Land Status		X		No issues or concerns with proposed action so long as it occurs on lands Managed by BLM. VW 12-04-2014
Recreation	X			This action will greatly increase the recreation and forestry programs ability to mitigate excess vegetation debris generated from simple clearing brushing functions associated with day to day maintenance needs. Burning actions occurring in and around established recreation facilities should be coordinated with recreation staff as to not impact the recreation activities of the site. CC 11/11/14
Socioeconomic		X		St. Clair: There are no measureable socioeconomic effects from the proposed action due to its small scale. TBS 2-12-14
Soils			X	Prescribed burning and pile-burns affect soils primarily by consuming live vegetative cover; litter; organic soil layers; down, dead, and wood fuels. Fire may alter soil chemical properties, nutrient availability, post-fire soil temperatures, microorganism populations and their activity rates, and erosion and sedimentation. In order to prevent excessive soil erosion, the burn prescription should incorporate: the needed amount of fuel and organic layer moisture to minimize organic layer removal; timing the fire so that seasonal vegetation recovery would occur soon after the burn; avoiding pile-burns on steep hillsides, and maintenance of a 50 foot no-burn buffer around the riparian area within the valley bottom. Restricting OHV and foot traffic, through and around the pile-burn footprint, should be included in the sediment and erosion control portion of the burn plan. Utilizing BMPs and standard fire operating procedures, limited short-term impacts to soil resources would be expected to occur from the proposed action. BWK121214
Subsistence		X		810 needed JM 3-12-2014
Threatened or Endangered Species		X		No Concerns JM 3-12-2014
Travel Management		X		Burn piles should not be located on established trails and roads as to temporarily block access or impact future travel. CC 10/10/14
Tribal Notification – Ft. Yukon		X		Mills: No tribal notification is necessary for the proposed action. ROM 10-14-14
Vegetation		X		No Concerns JM 3-12-2014
Visual Resources				The proposed action with standard fire operating procedures will not impact visual resources. All impacts will be temporary and no permanent change to the landscape will occur. KJC 12-1-14
Wastes, Hazardous or Solid	X			8 proposed stipulations to minimize effects from spilled fuel. Residual effects are minimized if stipulations are in place. See full analysis (HAZMAT.doc) EDA – 10/29/2014
Water Quality – Surface or Ground			X	Pile-burns have the potential to affect water quality, depending on several variables, including fire size, fire severity, soil condition, slope, vegetation, vegetation regrowth, precipitation events, and size of the burn area. However, implementation of BMPs and standard fire operating procedures should minimize or eliminate potential water quality effects. BWK121214
Wetlands / Riparian Zones		X		Utilization of BMPs, standard fire operating procedures and maintenance of a 50 foot no-burn buffer around riparian areas should ensure no adverse impacts to wetland/riparian areas. The proposed action is consistent with E.O. 11990 Protection of Wetlands. BWK121214
Wild and Scenic Rivers		X		The proposed action to authorize BLM to burn small brush piles when discovered within the Wild and Scenic River corridors would have no significant adverse impacts on wild & scenic river outstanding and remarkable values. All fires would be small in nature, would be temporary and no permanent change to the landscape will occur. KJC 12-1-14

Valued Environmental Components (VEC) Matrix

Wilderness Characteristics		X		McClain: Will the organic mat removed underneath the woody debris piles be replaced after burn activities are completed? Debris piles should remain small on lands with wilderness characteristics and efforts made to restore disturbed soils or vegetative materials not completely burned to a natural appearing condition. Burn activities should not be substantially noticeable in the area as a whole. Hgm 6 Nov 2014
Wildlife/Aquatic			X	Analysis covered in EFH, riparian, wetlands, and floodplains
Wildlife/Terrestrial		X		Mcmillan No concern. JM

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Date Initiated: July 10, 2014

Project Name: Programmatic Fuel Reduction for Fairbanks District Office

Project Lead: Thomas St. Clair

* **Negligible** – issue is present but minor and does not need to be analyzed in the NEPA document.