



# United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
Glennallen Field Office  
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Glennallen, Alaska 99588  
<http://www.blm.gov/ak>

**Philip Nute – Right-of-Way**  
Environmental Assessment, DOI-BLM-AK-A020-2012-0030-EA

Case File, AA-093313

## **DECISION RECORD**

### **Background**

Philip Nute has filed a right-of-way application with the Bureau of Land Management (BLM) Glennallen Field Office for travel across BLM-managed lands to access mining claims located on adjacent State of Alaska lands. A right-of-way, 25 feet in width, is requested to transport machinery and equipment in support of mining activity.

The requested access begins at Mile 61.5 of the Richardson Highway. The legal land description for the right-of-way is the NE ¼ Sec. 18, T. 5 S, R. 3 E., Copper River Meridian. The area is commonly referred to as Mosquito Creek trail. Public lands being crossed are unencumbered BLM lands within the PLO 5150 corridor. The right-of-way would be issued for travel over Mosquito Creek trail for approximately 0.49 miles at which point BLM lands end and State of Alaska lands begin.

The BLM initially prepared a Categorical Exclusion (CX) for this action on the basis that Mr. Nute was requesting a right-of-way on an existing road/trail compatibly developed for his intended uses (BLM CX E.16). The BLM circulated the CX for public review and comment prior to making a decision on the authorization. One public comment letter was received and evaluated.

During that process and prior to a decision on the authorization, the BLM determined that Mr. Nute had not yet demonstrated a valid reason for the requested right-of-way. At the time of his application, he did not have a current Alaska Placer Mining Association (APMA) application on file to develop these claims.

On December 17, 2012, Mr. Nute submitted his APMA application demonstrating his intent to mine his claims. Under NEPA, the mining of his claims represents a “connected action” to the issuance of the BLM right-of-way. The mining action cannot or will not proceed but for issuance of the BLM access right-of-way. If the connected non-Federal action (i.e., mining on state claims) and its effects can be prevented by BLM decision-making (i.e., denial of the right-of-way grant), then the effects of the non-Federal action are considered indirect effects of the

BLM action and must be analyzed as effects of the BLM action (40 CFR §1508.7 and 40 CFR § 1508.25(c)).

For this reason, the BLM decided to evaluate the right-of-way and connected mining action using an Environmental Assessment (EA). The EA assisted the BLM in determining whether the effects of the proposed action, including the connected action of mining on adjacent State Lands, were significant.

Because of the connected action, the EA evaluated the effects associated with issuing a right-of-way grant as well as the effects of developing mining claims on State land. Note, however, that the BLM does not have jurisdiction over mine plans for operations occurring on non-BLM lands. Therefore, the EA presented and analyzed Mr. Nute's mine plan as proposed in his APMA to the State of Alaska.

## **Decision**

It is my decision to authorize Alternative 2, the Proposed Action Alternative, as described in the attached Environmental Assessment, DOI-BLM-AKA-020-2012-0030-EA. My decision to select Alternative 2 includes implementation of or adherence to all *Right-of-Way Project Design Features and Resource Protection Measures* identified in EA Section 2.3 as well as additional right-of-way grant terms, conditions, and stipulations (attached). Specifically, it is my decision to:

- Authorize a right-of-way grant 25 feet in width and 0.49 miles in length to transport machinery and equipment across BLM managed lands in support of mining activity occurring on adjacent State of Alaska mining claims;
- Issue the right-of-way grant for a period of five years with an option to renew, subject to compliance with the *Right-of-Way Project Design Features and Resource Protection Measures* (EA Section 2.3) and the attached grant terms, conditions and stipulations;
- Authorize brushing (i.e., limbing or pruning of vegetation) of the trail corridor up to a 12-foot width (with slightly larger widths along corners of the trail); however, Mr. Nute is not authorized to remove any riparian vegetation in the corridor;
- Authorize brushing of approximately 45 feet to establish a new trail corridor from an existing apron off the Richardson Highway to the existing Mosquito Creek trail;
- Authorize the construction of an armored stream crossing where the trail intersects Mosquito Creek, subject to the *Right-of-Way Project Design Features and Resource Protection Measures* (EA Section 2.3) as well as the additional grant terms, conditions and stipulations (attached);
- Authorize Mr. Nute to transport fuel across the right-of-way; however, no storage of fuel is authorized on BLM-managed lands; and
- Commit BLM staff to a minimum of three monitoring visits per year that the right-of-way grant is in effect.

## **Rationale for the Decision**

The No Action alternative was not selected because it did not meet the Purpose and Need nor the BLM's right-of-way objectives at 43 CFR § 2800. Two other alternatives were considered, but not carried forward for detailed analysis; these alternatives are described in EA Section 2.4 (pp. 10-11).

Consistent with 43 CFR § 2801.2, it is the BLM's objective - or, purpose in considering this action - to provide legal access across public lands in a manner that protects natural resources, prevents unnecessary and undue degradation of public lands, promotes the use of rights-of-way in common (where applicable), and coordinates with other interested parties. With the exception of 45 feet of new trail, Alternative 2 - the selected action - establishes a new right-of-way on an existing road/trail compatibly developed for its intended uses (EA, p. 2). Alternative 2 best addresses Mr. Nute's request for legal access across public lands, minimizes new disturbance to natural resources, prevents unnecessary and undue degradation of public lands, and promotes the use of rights-of-way in common.

The EA has highlighted the anticipated effects of implementing Alternative 2. Appropriate project design features, stipulations, and mitigation measures have been identified to avoid, minimize or rectify adverse effects of the right-of-way use and maintenance. Although the EA has acknowledged that mining operations in Ernestine Creek will have adverse effects; I have determined that these effects do not rise to the level of significance that would require the preparation of an Environmental Impact Statement (see attached Finding of No Significant Impact).

### **Laws, Authorities, and Land Use Plan Conformance**

The East Alaska Resource Management Plan and Record of Decision (RMP/ROD) of September 2007 provide the overall long-term management direction for lands encompassed by the proposed project. The proposed action and alternatives are consistent with the RMP/ROD. Specifically, the proposed action is consistent with the following decisions in the RMP/ROD:

#### **I. LANDS AND REALTY**

##### **I-1: Goals**

- Provide a balance between land use (rights-of-way, land use permits, leases and sales) and resource protection that best serves the public at large.

#### **T. TRAVEL MANAGEMENT AND OHV Use**

##### **T-1 Goals**

- Manage OHV use associated with permitted and development activities to provide for access while protecting resources.

The Proposed Action would be subject to various laws, regulations, and acts including, but not limited to:

- National Historic Preservation Act as Amended 1992
- North America Wetlands Conservation Act of 1989 (as amended 1990 and 1994)
- Executive Order 11987 of May 1977 (Exotic Organisms)
- Executive 11990 of May 1977 (Protection of Wetlands)
- The Bald Eagle Protection Act of 1940 (as amended 1959, 1962, 1972, and 1978)
- Migratory Bird Treaty Act of 1918 (as amended 1936, 1960, 1969, 1974, 1978, 1986, and 1989)

## **Public Involvement**

The EA was made available for public review and comment from March 22 through April 12, 2013. Comments letters or phone calls were received from four parties. All comments submitted were reviewed and categorized as either “substantive” or “non-substantive” based upon the guidance defined in the BLM’s National Environmental Policy Act Handbook H-1790-1 (BLM 2008).

Substantive comments do one or more of the following:

- Question, with reasonable basis, the accuracy of information in the EIS or EA.
- Question, with reasonable basis, the adequacy of, methodology for, or assumptions used in the environmental analysis.
- Present new information relevant to the analysis.
- Cause changes or revisions in one or more of the alternatives.

Comments that were non-substantive include the following:

- Comments in favor of or against the proposed action or alternatives without reasoning that meet the criteria listed above.
- Comments that only agree or disagree with BLM policy or resource decisions without justification or supporting data that meet the criteria listed above.
- Comments that do not pertain to the project area or the project.
- Comments that take the form of vague, open ended questions.

In summary, the comments highlighted concerns about water quality impacts in Mosquito and Ernestine creeks resulting from vehicle passes and mining operations; the need for BLM monitoring and corrective actions if resource degradation was identified; impacts to other resources including, but not limited to, recreation and wildlife habitat; and actual trail conditions. Several comments noted where additional explanations in the EA would be helpful (see Comments 2-4 and 4-13) and several comments identified new ideas for managing vehicle passes across Mosquito Creek in the event of resource degradation or unusually wet conditions (see Comments 3-7 and 4-11). All substantive comments as well as the BLM’s responses to those comments are attached to this Decision Record. The attachment indicates how each comment was addressed.

## **Consultation and Coordination**

The EA was prepared by the Glennallen Field Office Interdisciplinary Team. The APMA summary was obtained from the State of Alaska, Department of Natural Resources, Division of Mining, Land, and Water by BLM Geologist, James Whitlock. Site visits were conducted in September 2012 by BLM Glennallen Field Office staff, Tim Sundlov (Fisheries Biologist), Cory Larson (Outdoor Recreation Planner), and Mike Sondergaard (Hydrologist).

## Appeal Opportunities

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR § 4. To appeal you must file a notice of appeal at the BLM Glennallen Field Office, P.O. Box 147, Milepost 186.5 Glenn Highway, Glennallen, Alaska 99588, within 30 days from receipt of this decision. The appeal must be in writing and delivered in person, via the United States Postal Service mail system, or other common carrier, to the Glennallen Field Office as noted above. *The BLM does not accept appeals by facsimile or email.* The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR § 4.21 (58 FR 4939, January 19, 1993) for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. Except as otherwise provided by law or other pertinent regulation, a petition for a stay of decision pending appeal shall show sufficient justification based on the following standards: (a) The relative harm to the parties if the stay is granted or denied, (b) The likelihood of the appellant's success on the merits, (c) The likelihood of immediate and irreparable harm if the stay is not granted, and (d) Whether the public interest favors granting the stay.

Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the Office of the Solicitor (see 43 CFR § 4.413); Office of the Regional Solicitor, Alaska Region, U.S. Department of the Interior, 4230 University Drive, Suite 300, Anchorage, Alaska 99508; at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

/s/ *Elijah Waters*, Acting for

April 18, 2013

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Beth Maclean  
Glennallen Field Manager

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Date

## Attachments

1. BLM Response to Public Comments Received on *Philip Nute – Right-of-Way Environmental Assessment*, DOI-BLM-AK-A020-2012-0030-EA
2. Nute/AA-093313 Right-of-Way Grant Terms and Stipulations
3. *Philip Nute – Right-of-Way, Environmental Assessment*, DOI-BLM-AK-A020-2012-0030-EA
4. Finding of No Significant Impact, *Philip Nute – Right-of-Way Environmental Assessment*, DOI-BLM-AK-A020-2012-0030-EA

## References

BLM 2008. National Environmental Policy Handbook, H-1790-1.

## Attachment 1. BLM Response to Public Comments Received

Table 1 displays all substantive comments received from the public on the March 2013 release of **Philip Nute – Right-of-Way Environmental Assessment, DOI-BLM-AKA-020-2012-0030-EA**. Four comment letters were received. Each letter contained two or more substantive comments. Each letter was assigned a unique number (1 through 4) and each comment, including non-substantive comments, was also assigned a number.

**Table 1. BLM Responses to Substantive Public Comments on the Philip Nute – Right-of-Way Environmental Assessment, DOI-BLM-AKA-020-2012-0030-EA.**

Letter #- Comment #	Comment	BLM Response
1-1	<p>Commenter was also concerned about frequency of use of the trail....</p> <p>Commenter is concerned they are not accurate and that they will be exceeded.</p>	<p>The frequency of use identified in the EA is based on Mr. Nute’s APMA Plan of Operations. The BLM cannot speculate on whether this frequency of use will be exceeded.</p> <p>Nevertheless, the final Decision Record and Permit Stipulations address resource damage and subsequent stop work clauses should BLM monitoring discover resource degradation (i.e., rutting, excessive siltation, etc.).</p> <p>Concerning resource damage along the right-of-way, the following stipulation will be included with the right-of-way grant offer: <i>If monitoring or site visits indicate excessive rutting, erosion, sediment displacement, or if other resource damage is occurring along the right-of-way, the BLM will ask the permittee to halt operations or perform right-of-way maintenance including, but not limited to, application of gravel, grading trail tread, or other necessary measures to restore resource conditions and/or route of travel to an appropriate state.</i></p>
1-2	<p>Commenter is also concerned about regulations pertaining to the transfer of fuel and fuel containment.</p>	<p>Mr. Nute will be authorized to transport fuel across the right-of-way; however, no storage of fuel is authorized on BLM-managed lands.</p>

Letter #- Comment #	Comment	BLM Response
		Fuel management, including transfer across BLM-managed lands, are addressed in permit stipulations 4.5-4.8.
2-3	Section 2.2 Table 1, details the impact of tracked equipment with low impact potential, however excludes a Chevy Pickup Truck which even unloaded has impact potential of over 300 psi, far exceeding that of tracked equipment.	<p>The PSI on a rubber tired wheeled vehicle is variable depending on factors such as weight placed within the vehicle, amount of tire pressure in vehicle tires, and size of tires utilized by the vehicle. For this reason the PSI of the Chevy pickup truck referenced in Table 1. Proposed Equipment, Equipment Weight and Anticipated Frequency of Use on Right-of-Way (EA, p. 6) was intentionally left labeled as “N/A” or “not available.”</p> <p>With the exception of the stream crossing, the EA did not identify any effects on the Mosquito Creek trail tread by any vehicle proposed in Table 1. Section 2.3.1, <i>Stream Crossing Protection Measures</i> and Section 3.1.5, <i>Recommended Mitigation</i> for the proposed right-of-way provide adequate protection measures to mitigate these effects. See also the response to Comment 1-1 regarding the Environmental permit stipulation on BLM monitoring, resource damage, and repair.</p>
2-4	... a clear definition of “4 wheelers” is needed, as eighteen wheelers call pickups and suvs 4-wheelers. This distinction could avoid misunderstanding if access is authorized.	<p>A definition of 4-wheelers has been inserted into the EA providing maximum weight and size limits.</p> <p>The EA now indicates that “Assorted 4 wheelers” and “<b><i>OHV’s (not street vehicles)</i></b>” includes vehicles “<b><i>Not to exceed 2000 lbs. and 60” width.</i></b>”</p>

Letter #- Comment #	Comment	BLM Response
2-6	With regard to the Mosquito Creek crossing, “the crossing will be filled with material from existing rock and sand bars”, is BLM providing a permit or permission to excavate to the level of the stream bottom on BLM or State lands? Does the BLM expect the permitted to locate cobble as specified in your material guidelines (2.3.1) in existing rock and sand bars?	<p>The BLM is not providing a permit for excavation of material on State of Alaska lands or waters. Mosquito Creek is a non-navigable waterway. Therefore, the BLM has jurisdiction to authorize the excavation of material in this section of Mosquito Creek to construct the crossing. The BLM expects the permittee to locate cobble as specified in the Material Guidelines as well as within other guidelines in Section 2.3.1, <i>Stream Crossing Protection Measures</i>. If suitable material is not available or if there is a lack of suitable material available, the permittee retains the option of importing material to construct the crossing while still conforming to the <i>Stream Crossing Protection Measures</i> in Section 2.3.1. This language has been inserted into the EA.</p> <p>Alaska Department of Fish and Game (ADF&amp;G) has the statutory responsibility for protecting freshwater anadromous fish habitat and providing free passage for anadromous and resident fish in fresh water bodies (AS 16.05.841-871). It is the responsibility of the operator to contact Ronald Benkert (907) 861-3204, Alaska Department of Fish and Game, Habitat, Palmer to see if Fish Habitat Permit is required.</p>
2-8	A crossing frequency of twice per week is optimistic, as the applicant was attempting to develop a claim on Fall Creek 2012 and was crossing the Tiekel daily without proper permitting.	See response to Comment 1-1.
2-9	Section 3.0. Much of the Mosquito Creek Trail is often covered with water due to beaver dams and not “compacted and well drained soils” therefore, this plan should provide accommodations for beavers in the area.	As of the BLM’s site visit in fall 2012, the trail did not show signs of standing water or drainage issues. At that time, the BLM noted that the soils were compacted and well-drained (EA, p.11).

Letter #- Comment #	Comment	BLM Response
		<p>The BLM acknowledges that beaver activity is common in the region. However, as of the BLM’s site visit in fall 2012, there was no evidence of beaver dams, lodges, or stream modification in the immediate vicinity of the proposed stream crossing. Given that the “removal of riparian vegetation would not be permitted” to construct the crossing, the proposed right-of-way would not modify or diminish beaver habitat (EA, p. 6).</p> <p>Addressing beaver management issues is beyond the scope of this analysis; this would be addressed by separate State and Federal regulations.</p>
2-10	<p>In section 3.1, With reference to Ernestine Creek containing sediment and being turbid during the summer months, I provide the following. The Ernestine glacier is very small, sitting in an amphi-theater, surrounded by mountains and shielded from direct sun, facing directly north. After spring run-off Ernestine Creek runs clear, except in times of prolonged, heavy rainfall or times of very high temperatures in the upper mountains. It is my estimate that Ernestine Creek runs clear 95% of the summer.</p> <p>The statement “Glacial water from the Tiekel River backing into Mosquito creek”, is misleading as the Tiekel River becomes clear and emerald green after spring runoff. Therefore this leads the reader to think that sediment is being deposited by the Tiekel River or Ernestine Creek. Once again, after spring runoff, Ernestine Creek and the Tiekel River clear up for the summer months, with the exception as stated above. Ernestine Creek is fed by additional sources of water, not just Ernestine Glacier. It is important to</p>	<p>The mining plan of operations’ ability to meet water quality standards is regulated by the state and is therefore beyond the BLM’s jurisdiction. However, it should be assumed that the mining operation must meet State water quality standards regardless of background sediment loads.</p> <p>It is the BLM’s observation that Ernestine Creek flows increase through mid-July and are glacially turbid. As the season cools, discharge decreases and the water clears.</p>

Letter #- Comment #	Comment	BLM Response
	<p>understand that this creek runs clear and does not “have a high sediment load”. Thinking that Ernestine Creek contains a high sediment load when it does not, provides the mining operation greater latitude with regard to their operations plan meeting water quality standards and subsequent downstream effects. This single piece of information should play a key role while the BLM considers granting this access.</p>	
2-13	<p>In section 3.23, “it is anticipated that 9,000 cubic yards of material will be processed annually”. According to the operations plan, daily material processed is 400 cubic yards, with an annual sluice operation of 90 days. This calculation equates to 36,000 cubic yards annually, not 9,000 cubic yards, which translates into greater environmental impact.</p>	<p>In Phil Nute’s 2013 placer mine APMA summary (APMA # A133138) it is stated that material to be processed annually is estimated at 9,000 cubic yards. The analysis is based on this figure provided by Mr. Nute in his APMA plan.</p>
2-15	<p>The Mosquito Creek area is utilized by recreational hikers, photographers, berry pickers, as well as used as an access point for walk in only sheep hunters. These recreational activities do not intermix with mining activities. Referencing that mining can provide benefits for the other is misleading.</p> <p>On one hand usage is cited as increasing if the ROW is improved, and then “user displacement is not expected due to minimal use”. Walking up on a mining operation is always at your own risk, never comfortable and most often deters recreational activities.</p>	<p>The EA has been revised to clarify that the right-of-way improvements would result in <i>improved access</i> for recreation uses in this area.</p> <p>Proposed trail corridor maintenance in the right-of-way would improve access for all users. The right-of-way issuance itself would not displace users, however, mining operations and associated effects (e.g., noise) may cause recreational users to seek opportunities elsewhere (EA, p. 17).</p>
3-3	<p>Please consider the impact of the right-of-way on the beavers and recreational viewers and consider what would best mitigate those impacts. Certainly noise from trucks on a rough road is one of the impacts.</p>	<p>Regarding considerations for beavers in the project area, refer to response to Comment 2-9.</p> <p>The impacts of occasional noise on recreational users from vehicle use on the right-of-way has been added to the</p>

Letter #- Comment #	Comment	BLM Response
		<p>EA as an issue considered but not carried forward for analysis for the following two reasons. First, the East Alaska RMP Recreation Opportunity Spectrum class for this area is designated as “semi-primitive, motorized,” which means that users in the area should have a reasonable expectation of motorized use occurring in or nearby to their activities. Second, the right-of-way is within sight and sound of Richardson Highway and is located within the TransAlaska Pipeline corridor.</p>
3-5	<p>I am concerned that the right-of-way permit will not be sufficiently stringent to protect the clear water from trucks crossing the river and mining operations stirring up sediments. I note that someone seems to think that the waters are already silty from glacial runoff. Whenever I have been there the waters were running clear, but I suppose like most streams that during spring break-up and after heavy rainfalls it may become silty temporally. The right-of-way permit and enforcement thereof should set standards and requirements that the downstream waters from the mine and stream crossings meet the current clear water standards.</p>	<p>Regarding mining impacts on water quality, including sediment loads, see response to Comment 2-10.</p> <p>Regarding the right-of-way stream crossing, the proposed armoring of this crossing would help to minimize these effects. Nevertheless, the EA indicates that sediment may increase for short periods of time following truck crossings (EA, p. 15).</p> <p>Additionally, as noted in response to Comment 1-1, the BLM will be monitoring the right-of-way. If resource degradation, including excessive or prolonged sedimentation effects, is observed, the BLM will require the applicant to either halt operations or repair the crossing.</p>
3-7	<p>I am concerned about how the crossing will be made. Taking rocks and sand from the stream will destabilize the streambed stirring up more sediments, plus every time a truck crosses more sediments will be disturbed. After talking to other friends who use the area, I suggest that the permit stipulate one of the following:</p> <p style="padding-left: 40px;">1) winter stream crossings only, or</p>	<p>Regarding commenter’s suggestions #1 and #3, the BLM considered both of these options but ultimately eliminated these from further consideration for the reasons described in Section 2.4, Alternative Considered but Not Analyzed in Detail (EA, pp. 10-11).</p> <p>As noted in response to Comment 1-1, the BLM will be monitoring the right-of-way. If resource degradation,</p>

Letter #- Comment #	Comment	BLM Response
	<p>2) placing a pick-up during the winter on the far side of the stream then during the summer months driving another pick-up to the stream, crossing the stream on foot transporting all supplies by foot to the truck on the other side, or</p> <p>3) building a bridge</p>	<p>including rutting, erosion, or excessive sedimentation effects, is observed, the BLM will require the applicant to either halt operations or repair the crossing. Commenter’s suggestion #2 regarding staging a vehicle on the “far side of the stream,” is a valid suggestion and will be considered as an option to allow Mr. Nute continued access when stream crossing or other resource conditions are not suitable or ideal.</p>
3-8	<p>I do find it odd that someone thinks that trucks on a primitive access road and mining will enhance the recreational experience of those who enjoy the silence and bird songs of the natural environment. It certainly would not enhance my experience!</p>	<p>Refer to response to Comment 2-15.</p>
4-2	<p><b>Tiekel SRMA:</b> This trail crosses through the Tiekel Special Resource Management Area (SRMA)—one of only three such areas in the East Alaska planning area. Unlike the other two, it is still awaiting a “step-down” plan. That plan will involve a much more thorough resource inventory than was done for the East Alaska Resource Management Plan, and it will determine how those resources will be protected and used in the future. The public will have several opportunities to provide information and preferences. Lacking all this, it is imperative that BLM proceed cautiously with respect to projects that have the potential to impact resources before the plan is done. The Phil Nute project has that potential.</p>	<p>Correction: “SRMA” is the acronym for Special <b>Recreation</b> Management Area. The Tiekel SRMA is one of four SRMAs in the East Alaska planning area.</p> <p>The EA has been updated to reflect that, “<u><i>The project is located within the Tiekel Special Recreation Management Area (SRMA).</i></u>”</p>
4-4	<p>There seems to be some question about whether the entire portion of the trail within BLM lands is indeed firm and dry.</p>	<p>See response to Comment 2-9.</p>
4-5	<p>Since—due to the timing of the applicant’s request—BLM staff have</p>	<p>See response to Comment 1-1. Additionally, the Decision Record</p>

Letter #- Comment #	Comment	BLM Response
	not inspected the trail during breakup or after heavy rains, CCA requests that BLM staff make multiple visits this coming spring, summer, and fall. If rutting begins to occur, travel should be temporarily halted and/or more stipulations imposed. The possibility that this could happen should be specified in the permit. It should be stipulated that the applicant give BLM a certain number of days' notice before any trail work is done, so that staff can be on hand to monitor the work.	commits BLM staff to a minimum of three monitoring visits per year that the right-of-way is in effect. Permit stipulations identify how resource damages will be addressed.
4-6	CCA requests that prior to the applicant's use, and periodically throughout the season, BLM check Mosquito Creek for aquatic invertebrates, fish, dippers, otters, and beavers.	The BLM will conduct measurements of aquatic invertebrates and fish during the annual monitoring visits defined in the Decision Record.
4-8	Beavers are valuable stream engineers and stabilizers, so CCA requests that there be a stipulation against harm to beavers and their structures.	See response to Comment 2-9.
4-9	Skiing and snowshoeing a gentle, meandering creek in winter, seeing dippers, otter tracks, and perhaps otters themselves, is a delightful winter activity. Mosquito Creek, and the Upper Tiekel River that it becomes a part of, look highly attractive for this activity. BLM should ensure that this is protected for the future.	"Mr. Nute's season of operation would generally be May through October with some variance due to annual snowmelt and freeze-up," (EA, p. 5). Given that Mr. Nute would be operating during the snow-free seasons, impacts to skiing and snowshoeing were not considered in this EA.
4-11	If unacceptable damage is occurring, one possible solution that would enable the applicant to continue to access his claims is that he leave one vehicle on each side of Mosquito Creek and cross on foot. Considering how far early-day prospectors carried loads on foot, this does not seem unreasonable.	See response to Comment 3-7.
4-13	What is not clear to us is whether BLM has jurisdiction over the mining operation if it causes damage to BLM land and water; e.g., if the operation creates a heavy sediment load that reaches BLM's sections of Ernestine	The BLM does not have jurisdiction under 43 CFR 3809 regulations on the mining operation even if it causes damage to BLM-managed land and/or water. However, the permit stipulations state that impacts to BLM-

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	Creek and Tiekkel River. Please clarify that.	managed lands from actions connected to this right-of-way grant, i.e., mining actions, are cause for revoking the permit.
4-14	Also, there seems to be some question about whether Ernestine Creek and the Upper Tiekkel River are actually turbid with glacial sediments all summer. We request that BLM staff make field trips to the area (a) before mining operations begin, (b) when heavy equipment is in Ernestine Creek, and (c) when it is not. Perhaps the Alaska Department of Natural Resources could require that the operator notify both DNR and BLM whenever it is working in the creek.	<p>See response to 2-10. Regardless of the turbidity levels, the mining operation must meet State water quality standards and acquire stream crossing permits.</p> <p>The Decision Record commits BLM staff to a minimum of three monitoring visits per year that the right-of-way is in effect. Permit stipulations identify how resource damages will be addressed.</p> <p>Alaska Department of Natural Resources requirements of individual operators are outside of BLM's jurisdiction.</p>



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## FINDING OF NO SIGNIFICANT IMPACT

### Background

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The BLM initially prepared a Categorical Exclusion (CX) for this action on the basis that Mr. Nute was requesting a right-of-way on an existing road/trail compatibly developed for his intended uses (BLM CX E.16). The BLM circulated the CX for public review and comment prior to making a decision on the authorization. One public comment letter was received and evaluated.

During that process and prior to a decision on the authorization, the BLM determined that Mr. Nute had not yet demonstrated a valid reason for the requested right-of-way. At the time of his application, he did not have a current Alaska Placer Mining Association (APMA) application on file to develop these claims.

On December 17, 2012, Mr. Nute submitted his APMA application demonstrating his intent to mine his claims. Under NEPA, the mining of his claims represents a “connected action” to the issuance of the BLM right-of-way. The mining action cannot or will not proceed but for issuance of the BLM access right-of-way. If the connected non-Federal action (i.e., mining on state claims) and its effects can be prevented by BLM decision-making (i.e., denial of the right-of-way grant), then the effects of the non-Federal action are considered indirect effects of the BLM action and must be analyzed as effects of the BLM action (40 CFR §1508.7 and 40 CFR § 1508.25(c)).

For this reason, the BLM decided to evaluate the right-of-way and connected mining action using an Environmental Assessment (EA). The EA assisted the BLM in determining whether the effects of the proposed action, including the connected action of mining on adjacent State Lands, were significant.

Because of the connected action, the EA evaluated the effects associated with issuing a right-of-way grant as well as the effects of developing mining claims on State land. Note, however, that the BLM does not have jurisdiction over mine plans for operations occurring on non-BLM lands. Therefore, the EA presented and analyzed Mr. Nute's mine plan as proposed in his APMA to the State of Alaska.

### **Finding of No Significant Impact**

This action and its effects have been evaluated consistent with the Council on Environmental Quality regulations for determining *significance*. Per 40 CFR § 1508.27, a determination of *significance* requires consideration of both context and intensity. The former refers to the relative context in which the action would occur such as society as a whole, affected region, affected interests, etc. The latter refers to the severity of the impact.

#### *Context*

The Proposed Action consists of a right-of-way, 25 feet in width and 0.49-mile in length, to transport machinery and equipment in support of mining activity on State of Alaska lands. The requested access begins at Mile 61.5 of the Richardson Highway.

Major recreational use within the area consists of helicopter-supported recreation, snowmachine riding, and backcountry hiking, and skiing. The harvest of firewood for home heating has increasingly become a predominant activity in the area as well. Public lands being crossed are unencumbered BLM lands within the PLO 5150 (TransAlaska pipeline) corridor.

Local effects may occur if the minerals are located and retrieved in an economically feasible manner on State of Alaska lands. This could lead to the expansion of interest in local mining claims, or operators which could result in more use or applications of use for the Mosquito Creek trail. The Proposed Action would not affect regional or national interests.

#### *Intensity*

##### *1. Impacts that may be both beneficial and adverse.*

The EA acknowledges both beneficial and adverse effects. For example, the EA discloses that Mr. Nute's proposed right-of-way brushing activities would improve access for other users (EA, p. 17); this may be perceived as a beneficial effect by some user groups. On the other hand, the EA also discloses the potential adverse effects associated with the proposed stream crossing and related placer mining activities in Ernestine Creek (EA, pp. 12-16).

##### *2. The degree to which the proposed action affects public health and safety.*

The Proposed Action does not include any activities that may affect public health and safety. Subsequently, the analysis does not identify any adverse effects to public health and safety.

- 3. Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

The Proposed Action contains no unique characteristics that have been identified through land use planning processes or other legislative, regulatory, or planning processes. For example, the EA discloses that the project area does not meet the BLM's criteria for Lands with Wilderness Characteristics and there are no known paleontological resources present in the project area (EA, p. 5 and p. 18, respectively). The project area, in general, does contain cultural resources that are both historic and prehistoric in nature. However, no cultural resources have been identified within the requested right-of-way footprint (EA, p. 18).

- 4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

No highly controversial effects were identified within the EA. While a handful of commenters may not agree with the decision to authorize the right-of-way, the effects of doing so are considered minimal. Effects in relation to the mining operations on State of Alaska lands are also disclosed in the EA. However, BLM has no jurisdictional authority over the mining operations on these lands. Nevertheless, the mining impacts identified are limited to a small footprint and do not rise to a level of significance that would otherwise require the preparation of an Environmental Impact Statement.

- 5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

Analysis of the Proposed Action has not demonstrated that there will be any highly uncertain, unique, or unknown risks. The issuance of short rights-of-way across BLM-managed lands is relatively common in rural Alaska. The potential effects on the human environment do not present highly uncertain or unique or unknown risks.

- 6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

Refer to the response to item #5. The issuance of short rights-of-way across BLM-managed lands is relatively common in rural Alaska and does not represent a decision that may establish a precedent for future actions with significant effects nor does it represent a decision in principle about a future consideration.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

The proposed right-of-way along Mosquito Creek trail will provide access to mining claims on State of Alaska lands. There is no other reasonable access to these mining claims. Therefore, the BLM has disclosed the effects of both the right-of-way grant and the applicant's intended mining activities, including the cumulative effects for both actions. Cumulative effects have been described by resource in the EA (EA, pp. 13-18). The applicant's requested right-of-way and associated mining activities are not related to other actions with individually insignificant but cumulatively significant impacts.

8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.*

See also the response to item #3. There are no known paleontological resources present in the project area (EA, p. 18, respectively). The project area, in general, does contain cultural resources that are both historic and prehistoric in nature. However, no cultural resources have been identified within the requested right-of-way footprint (EA, p. 18). An "Assessment of Heritage and Paleontological Resources," for this project is on file at the Glennallen Field Office. The assessment concludes that the requested right-of-way should be allowed to proceed with appropriate stipulations.

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*

There are no known occurrences of Federally threatened or endangered species nor habitat for these species in this area (EA, p. 5).

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The Proposed Action and/or alternatives do not threaten to violate any law. The Proposed Action and/or alternatives are consistent with the East Alaska Resource Management Plan and Record of Decision (2007) which provides for protection of the environment on public lands.

## **Conclusion**

Therefore, on the basis of the information contained in the EA, and all other information available to me, it is my determination that:

1. None of the environmental effects identified meet the definition of significance as defined by context and intensity considerations at 40 CFR § 1508.27;
2. The alternatives are in conformance with East Alaska RMP/ROD (2007); and
3. The Proposed Action and alternatives do not constitute a major federal action having a significant effect on the human environment.

Therefore, neither Environmental Impact Statement nor a supplement to the existing EA is necessary and neither will be prepared.

*/s/ Elijah Waters, Acting for*

April 18, 2013

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Beth Maclean  
Glennallen Field Manager

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Date

**Attachments**

Philip Nute – Right-of-Way Environmental Assessment, DOI-BLM-AK-A020-2012-0030-EA

**Attachment 3**  
**Stipulations for Phil Nute, Right-of-Way (AA-093313)**  
**April 18, 2013**

1.0 Definitions

- 1.1 The Glennallen Field Manager or designated representative is the Authorized Officer (AO), as defined by 43 CFR 2920.0-5(c).
- 1.2 “Grantee” means Phil Nute, and any and all assignees that may be of record, including all agents, contractors, subcontractors, and employees.
- 1.3 “Grant” means the license, lease, permit, or other permission granted by the United States to the grantee for the use of public lands and resources.

2.0 General

- 2.1 The grantee will address all matters to the Glennallen Field Manager, P.O. Box 147, Glennallen, Alaska 99588.
- 2.2 In case of change of address, the grantee shall immediately notify the AO.
- 2.3 Any modifications to the proposed activities must be approved in writing by the AO.
- 2.4 This grant is subject to all prior valid and existing rights, and the United States makes no representations or warranties whatever, either expressed or implied, as to the existence, or nature of such valid existing rights.
- 2.5 The right to grant additional rights-of-way or permits for compatible use on, over, under, or adjacent to the land involved in this grant is reserved to the AO.
- 2.6 It is the responsibility of the grantee to ensure that field party members are familiar with and adhere to these stipulations.
- 2.7 The grantee, in exercising the privileges granted under this grant shall comply with the regulations of the Department of the Interior and all Federal, State, Borough and Municipal laws, ordinances, or regulations, which are applicable to the area of operations covered by this grant.
- 2.8 The grantee may be requested by the AO to furnish transportation and quarters for designated field representatives or observers while inspecting operations.
- 2.9 In the advent of a disagreement of the interpretation or implementation of these stipulations the grantee agrees that the AO shall have the final say in how these stipulations are interpreted and implemented.

- 2.10 Grantee shall defend and hold the United States, its assigns, agents, employees, representatives and successors in interest, harmless from and against any and all actions, fees, for injury to or death of any person, persons, or property arising in connections with and as a direct result of grantee's activities, included but not limited to United States negligence, if any, in failing to recognize or remedy a hazardous condition existing on public lands.
- 2.11 This grant may not be encumbered, hypothecated, assigned, subleased, or transferred without prior written approval by the AO.
- 2.12 The AO may revoke or terminate this grant in whole, or in part, upon a determination by the AO that the terms, conditions, or stipulations of the grant have been violated, or by determination by the AO that the grantee's actions pose a threat to human health or safety, or irreparable harm to the surrounding environment.
- 2.13 The grantee shall not enclose or obstruct in any manner, or erect or maintain any signs or structures on roads or trails commonly used for public travel or access to public lands surrounding the grant.
- 2.14 This grant does not authorize the permittee to take from the public lands any mineral or vegetative material, including timber, without securing authorization under 30 USC 601 et seq.
- 2.15 This grant does not authorize any other use of the public lands or improvements belonging to the US Government.
- 2.16 Grantee shall comply with Title VI of Civil Rights Act of 1964 (42 U.S.C. 2000 et seq.) and the regulations of the Secretary of the Interior issued pursuant thereto.

### 3.0 Environmental

- 3.1 If monitoring or site visits indicate excessive rutting, erosion, sediment displacement, or if other resource damage is occurring along the right-of-way, the BLM will ask the permittee to halt operations or perform right-of-way maintenance including, but not limited to, application of gravel, grading trail tread, or other necessary measures to restore resource conditions and/or route of travel to an appropriate state.
- 3.2 Excessive resource impacts to BLM-managed lands from actions connected to this right-of-way grant, i.e., mining actions, are cause for revoking the permit.
- 3.3 All operations will be conducted in such a manner as not to cause damage or disturbance to any fish or wildlife, or to impede rural residents from pursuing their traditional subsistence activities (ANILCA, P.L. 96-487).
- 3.4 Grantee will not intentionally harass or harm migratory birds or interfere with their nesting and brood rearing activities.

- 3.5 All activities shall be conducted so as to avoid or minimize disturbance to vegetation. If it becomes necessary to remove vegetation beyond that approved in the Decision Record, prior approval by the AO is required.
- 3.6 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 cause the pollution or siltation of any stream or lake.
- 3.7 Use of pesticides or herbicides shall comply with the applicable Federal and State laws. Pesticides or herbicides shall be used in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides or herbicides, the grantee shall obtain from the AO written approval of a plan showing the type and quantity of materials to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the AO. Emergency use of pesticides or herbicides shall be approved in writing by the AO prior to such use.
- 3.8 The grantee shall conduct all activities associated with the construction, operation, and termination of the authorization within the authorized limits of the authorization. If any scarring or damage occurs outside of approved areas as a result of the holder's operations, the areas shall be repaired and reseeded, or otherwise corrected as necessary to the satisfaction of the AO.
- 3.9 The grantee will do everything reasonable, both independently and/or upon request of the authorized officer to prevent and suppress fires on or near the lands occupied under the authorization.
- 3.10 Petroleum products or by-products shall not be used for dust suppression.
- 3.11 Any revegetation will be with native species only.
- 3.12 The holder will do everything reasonable, both independently and/or upon request of the authorized officer to prevent the introduction and/or spread of invasive non-native plants ("weeds") on BLM managed lands. Revegetation shall occur through seeding of native seed or by providing for soil conditions that allow the site to revegetate naturally, whichever provides the most effective means of reestablishing natural ground cover and minimizing erosion. Permittee will prevent and control noxious weed infestations. Noxious weeds in Alaska are listed under Alaska Statute 11 AAC 43.020.

#### 4.0 Operational

- 4.1 There shall be no disturbance of any archaeological or historical sites, including graves and remains of cabins, and no collection of any artifacts whatsoever. Also, collection of vertebrate fossils, including mammoths and mastodon bones, tusks, etc., is strictly prohibited. If historic resources are encountered then all artifacts will be respectfully left in place and the Glennallen Field Office's cultural resources staff will be notified immediately.

- 4.2 Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the Grantee, or any person working on his behalf, on public or Federal lands shall be immediately reported to the AO. Grantee shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the AO. An evaluation of the discovery will be made by the AO to determine appropriate actions to prevent the loss of significant cultural or scientific values. The Grantee will be responsible for the cost of evaluation and the AO will make any decision as to proper mitigation measures after consulting with the Grantee.
- 4.3 All waste generated during operation, maintenance, and termination activities under this authorization shall be removed or otherwise disposed of as required by state and federal law. In this case the waste must be dumped in a DEC approved landfill site. waste in this sub-paragraph means all discarded matter, including but not limited to, human waste, trash, garbage, refuse, and oil drums, petroleum products, ashes and discarded equipment.
- 4.4 Areas of operation shall be left clean of all unauthorized foreign objects. This shall include, but is not limited to, wires, pins, flags and reflectors.
- 4.5 All fuel or lubricant spills will be cleaned up immediately, taking precedence over all other matters, except the health and safety of personnel. Spills will be cleaned up utilizing absorbent pads or other Alaska State DEC approved methods. Any such spill sites will be documented so that they can be located during the compliance check.
- 4.6 Recovered spill fluids will be removed and incinerated in approved receptacles.
- 4.7 As soon as possible, but not later than 24 hours, notice of any such discharge as defined in Alaska Statute Title 18, Chapter 75, Article 2, will be given to the AO and any other Federal and State Officials as are required by law.
- 4.8 All State and Federal safety standards and regulations for fuel transportation and handling will be followed. All fuel containers, including barrels and propane tanks, shall be marked with the grantee's name, product type, and year filled.
- 4.9 The grantee shall protect Survey Monuments. In the advent of obliteration or disturbance of a survey monument, the grantee shall immediately notify the AO. The grantee will be financially responsible to reestablish the survey monuments to the Bureau standards.
- 4.10 No hazardous materials shall be transported or disposed of within the area of authorized use unless otherwise specified in the Decision Record.
- 4.11 Prior to abandonment of any portion of the facilities authorized by this grant, the grantee shall contact the AO, and if the situation warrants, to arrange a joint inspection of the right-of-way. The inspection will be held to agree on an acceptable rehabilitation

plan. The AO must approve the plan in writing prior to the grantee commencing any abandonment and/or rehabilitation activities.

- 4.12 The grantee shall at his expense, perform all maintenance and repairs, including exterior painting, structural maintenance and repairs, and maintenance of the ground necessary to keep the premises in first class order, repair, and safe conditions throughout the term of the lease. The grantee waives the right to make repairs at the expense of the United States Government.
- 4.13 All construction, maintenance, painting, etc., shall be done utilizing natural earth tone colors/materials, approved by the AO.
- 4.14 Any further ground disturbance will be done after approval by the AO.
- 4.15 Grantee shall inform and ensure compliance of the grant and its stipulations by his/her agents, contractors, subcontractors, employees, and guests.
- 4.16 No new access trails or roads are authorized without written authorization from the Bureau of Land Management, or upon conveyance of the land to the State of Alaska.
- 4.17 The site must be kept clean. All waste generated during the operation and termination activities of this lease shall be removed and disposed of as required by state and federal laws. As defined in this paragraph "waste" means all discarded matter, including but not limited to human waste, trash, garbage, litter, oil drums, petroleum, ashes, and discarded equipment.
- 4.18 This authorization does not relieve the lessee from securing any other permits, licenses, or other authorizations required by federal, state, or local law.

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Permittee Signature

Date

**U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

Glennallen Field Office  
P.O. Box 147  
Glennallen, Alaska 99588

**Philip Nute – Right-of-Way  
Environmental Assessment**  
DOI-BLM-AK-A020-2012-0030-EA

Applicant: Philip Nute  
Case File Number: AA093313

April 18, 2013

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**1.0 INTRODUCTION**

Note to reader: This Environmental Assessment (EA) was made available for public review for approximately three weeks in late March/early April 2013. Based on the public comments received, the BLM has made minor, clarifying revisions to this document. Revisions are indicated as follows: new text appears in ***bold, underlined italics*** and deleted text appears in strikethrough (e.g., ~~example of strikethrough~~). Visually impaired readers should contact the BLM Glennallen Field Office for an accessible version. Typographical corrections have been made, but are not highlighted.

**1.1 Summary of Proposed Action**

Philip Nute has filed a right-of-way application with the Bureau of Land Management (BLM) Glennallen Field Office for travel across BLM managed lands to access mining claims located on adjacent State of Alaska lands. A right-of-way, 25 feet in width, is requested to transport machinery and equipment in support of mining activity.

**1.2 Project Area Description and Land Status**

The requested access begins at Mile 61.5 of the Richardson Highway. The legal land description for the right-of-way is the NE ¼ Sec. 18, T. 5 S, R. 3 E., Copper River Meridian. The area is commonly referred to as Mosquito Creek trail. Public lands being crossed are unencumbered

BLM lands within the PLO 5150 corridor. The right-of-way would be issued for travel over Mosquito Creek trail for approximately 0.49 miles at which point BLM lands end and State of Alaska lands begin.



**Figure 1. Typical Section of Mosquito Creek Trail**

The BLM initially prepared a Categorical Exclusion (CX) for this action on the basis that Mr. Nute was requesting a right-of-way on an existing road/trail compatibly developed for his intended uses (BLM CX E.16). The BLM circulated the CX for public review and comment prior to making a decision on the authorization. One public comment letter was received and evaluated.

During that process and prior to a decision on the authorization, the BLM determined that Mr. Nute had not yet demonstrated a valid reason for the requested right-of-way. At the time of his application, he did not have a current Alaska Placer Mining Association (APMA) application on file to develop these claims.

On December 17, 2012, Mr. Nute submitted his APMA application demonstrating his intent to mine his claims. Under NEPA, the mining of his claims represents a “connected action” to the issuance of the BLM right-of-way. The mining action cannot or will not proceed but for issuance of the BLM access right-of-way. If the connected non-Federal action (i.e., mining on

state claims) and its effects can be prevented by BLM decision-making (i.e., denial of the right-of-way grant), then the effects of the non-Federal action are considered indirect effects of the BLM action and must be analyzed as effects of the BLM action (40 CFR §1508.7 and 40 CFR § 1508.25(c)).

For this reason, the BLM has decided to evaluate the right-of-way and connected mining action using an Environmental Assessment (EA). The EA will help the BLM to determine whether the effects of the proposed action, including the connected action of mining on adjacent State Lands, are significant.

Because of the connected action, this EA will evaluate the effects associated with issuing a right-of-way grant as well as the effects of developing mining claims on State land. Note, however, that the BLM does not have jurisdiction over mine plans for operations occurring on non-BLM lands. Therefore, this EA will present and analyze Mr. Nute's mine plan as proposed in his APMA to the State of Alaska.

### **1.3 Purpose and Need**

The BLM action under consideration is a right-of-way authorization. The need for the action is established by BLM's responsibility under the Federal Land Policy and Management Act (FLPMA) to respond to requests for access across public lands. Consistent with 43 CFR § 2801.2, it is the BLM's objective - or, purpose in considering this action - to provide legal access across public lands in a manner that protects natural resources, prevents unnecessary and undue degradation of public lands, promotes the use of rights-of-way in common (where applicable), and coordinates with other interested parties.

#### **1.3.1 Decision to be Made**

The decision to be made is whether to authorize the requested right-of-way and, if authorized, what terms and conditions would apply to the right-of-way authorization.

### **1.4 Land Use Plan Conformance**

The East Alaska Resource Management Plan and Record of Decision (RMP/ROD) of September 2007 provide the overall long-term management direction for lands encompassed by the proposed project. The proposed action and alternatives are consistent with the RMP/ROD. Specifically, the proposed action is consistent with the following decisions in the RMP/ROD:

#### **I. LANDS AND REALTY**

##### **I-1: Goals**

- Provide a balance between land use (rights-of-way, land use permits, leases and sales) and resource protection that best serves the public at large.

#### **T. TRAVEL MANAGEMENT AND OHV Use**

##### **T-1 Goals**

- Manage OHV use associated with permitted and development activities to provide for access while protecting resources.

## **1.5 Other Applicable Laws, Regulations, Policies, etc.**

The proposed action would be subject to various laws, regulations, and acts including, but not limited to:

- National Historic Preservation Act as Amended 1992
- North America Wetlands Conservation Act of 1989 (as amended 1990 and 1994)
- Executive Order 11987 of May 1977 (Exotic Organisms)
- Executive 11990 of May 1977 (Protection of Wetlands)
- The Bald Eagle Protection Act of 1940 (as amended 1959, 1962, 1972, and 1978)
- Migratory Bird Treaty Act of 1918 (as amended 1936, 1960, 1969, 1974, 1978, 1986, and 1989)

### **1.5.1 Alaska National Interest Lands Conservation Act**

The BLM is required by Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA) to consider potential impacts to subsistence activities, resources, or access to subsistence activities from project proposals. A complete analysis of Section 810 findings is located on file at the Glennallen Field Office.

## **1.6 Summary of Public Involvement**

This EA will be made available for public review for a period of no less than two weeks prior to issuing a decision. The initial notice for this EA was posted on the Glennallen Field Office NEPA Register website on August 28, 2012.

## **1.7 Issues Identified / Issues Eliminated from Further Analysis**

Scoping revealed the following issues in relation to this project

Issues related to the proposed right-of-way:

- How would an improved crossing at Mosquito Creek affect fisheries resources within the creek?
- How would an improved crossing at Mosquito Creek affect hydrology of the creek?
- How would improvements and brushing of Mosquito Creek trail affect the recreational resources of the area?
- How would use of the existing trail by heavy equipment affect cultural resources?

Issues related to the proposed mining activity:

- How would mining activities impact natural solitude, soundscape, and visual resources proximate to the mining area?
- How would mining activities affect water quality in Ernestine Creek?

- How would mining activities affect aquatic resources in Ernestine Creek? For example, would it increase or change sedimentation levels, turbidity, stream morphology, and removal of riparian vegetation.

The following issues were identified but eliminated from further analysis for the reasons provided:

- *Effects to Federally threatened and endangered species.* There are no known occurrences of Federally threatened or endangered species nor habitat for these species in this area.
- *Effects to Subsistence resources and access.* The impacts to subsistence resources and access discussed above would be minimal. There is no reasonably foreseeable significant decrease in the abundance and distribution of harvestable subsistence resources.
- *Effects to Lands with Wilderness Characteristics.* The lands associated with the proposed project do not meet the criteria for Lands with Wilderness Characteristics. Conditions identified in support of this finding include evidence the route was constructed by mechanical means, evidence of regular and continuous motorized use, and determination that the area does not offer outstanding opportunities for solitude or primitive and unconfined recreation. A complete analysis of Lands with Wilderness Characteristics is located on file at the Glennallen Field Office.
- ***Effects of occasional right-of-way vehicle noise on recreational users: The East Alaska RMP Recreation Opportunity Spectrum class for this area is designated as “semi-primitive, motorized,” which means that users in the area should have a reasonable expectation of motorized use occurring in or nearby to their activities. Furthermore, the right-of-way is within sight and sound of Richardson Highway and is located within the TransAlaska Pipeline corridor. Therefore, this issue is not being carried forward for further analysis.***

## 2.0 ALTERNATIVES

### 2.1 Alternative 1 - No Action Alternative

The No Action Alternative would be to deny the requested right-of-way authorization.

### 2.2 Alternative 2 - Proposed Action Alternative

#### *Right-of-Way*

The BLM would grant a 25-foot by 0.49-mile non-exclusive right-of-way across BLM-managed lands to Mr. Nute. The right-of-way would be issued for a period of five years with the option to renew. The right-of-way would allow for overland transport of OHVs, machinery, and mining equipment along Mosquito Creek trail (reference map on page 8). Mr. Nute’s season of operation would generally be May through October with some variance due to annual snowmelt and freeze-up.

The table below depicts the type, weight, and frequency of use of specific vehicles:

**Table 1. Proposed Equipment, Equipment Weight and Anticipated Frequency of Use on Right-of-Way.**

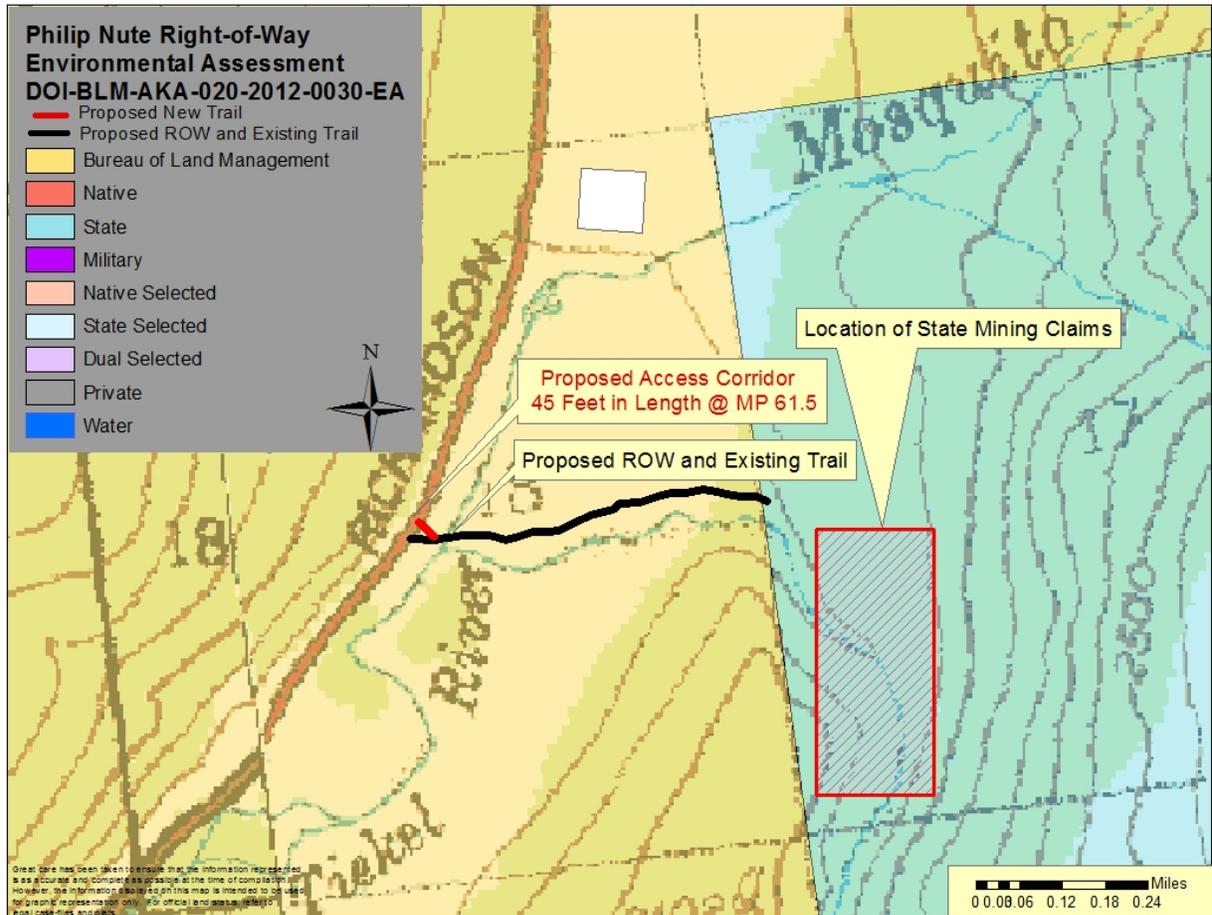
Vehicle	Weight and PSI	Frequency of Use
TD 15 Dozer	26,000 lbs. 6.5 PSI	Once yearly in/out
Case W 14 Loader x 2	17,500 lbs.	Once yearly in/out
Linkbelt Excavator	28,000 lbs. 5.0 PSI	Once yearly in/out
Wheeled Log Skidder	6,000 lbs.	Once yearly in/out
Shaker Plant	N/A	Once yearly in/out
6X Duece Truck	N/A	Once yearly in/out
Chevy Pickup Truck	N/A	Twice per week
Assorted 4 wheelers <i>or OHV's (not street vehicles)</i>	<b><i>Not to exceed 2,000 lbs. and 60" width, 5.0-8.0 PSI</i></b>	Three trips per week

Brushing (clearing of small vegetation and limbing trees or shrubs) would need to occur along the route to allow for passage of vehicles. Brushing width would typically consist of a 10-12 foot corridor with a slightly larger width along corners of the trail. Approximately 45 feet of vegetation clearing would clear a new trail from the Richardson Highway to the crossing site of Mosquito Creek. This would allow for access to the trail from an existing pullout along the highway.

The Mosquito Creek crossing site would be constructed as a wet or armored crossing. Excavation of the west bank of Mosquito Creek would occur to a depth of 3 feet (to creek bed) with a length of 15 feet to achieve a desired slope of entry and exit from the creek bed. The crossing would be constructed at a 90-degree angle to the creek and filled with material from existing rock and sand bars. ***If suitable material is not available or if there is a lack of suitable material available the permitted operator retains the option of importing material to construct the crossing while still conforming to the Stream Crossing Protection Measures in Section 2.3.1.*** Removal of riparian vegetation would not be permitted for this activity. Additionally, for excavation of existing gravel bars, removal of material below current stream bottom would not be permitted.



**Figure 2. Mosquito Creek Crossing**



**Figure 3. Locator Map, Phillip Nute Right of Way**

### *Mining on State Lands*

The mining operation is designed to economically recover gold and complete acceptable reclamation. The layout of the mine is directly related to reclamation procedures. Mining will progress in the following steps:

1. Vegetation, including trees, brush, tundra, etc., will be separated from topsoil and overburden gravel and stockpiled in such a manner as to avoid erosion. Stockpiles will be 100 feet in length, 25 feet in width, and 15 feet tall.
2. Topsoil will be separated and placed next to the vegetation stockpiles. A space will be maintained between the topsoil and vegetation so that the topsoil can be respreads before the vegetation. Each topsoil stockpile will be 100 feet in length, 25 feet in width, and 15 feet tall and located on the left limit of each mining cut
3. Gravel overburden will be used to reconstruct the stream channel and cap ponds. Gravel from each cut will be pushed into the previously mined cut forming a dike for the next recycle pond. The dike will be constructed in such a manner that the largest portion of the pond will be immediately below the processing plant on the left limit. This places the pond sediment away from the reclaimed stream channel. The return portion of the pond will be narrow, the width of the dozer, forcing the fines to settle in the large pond area.

4. A stockpile of gravel, 100 feet in length by 25 feet in width, will be placed on the right limit of the mine cuts and used to reconstruct the stream channel in the left limit of the ponds. Coarse tailings will be pushed onto the pond dike and used to cap ponds.

Reclamation activities will progress in the following steps:

1. Ponds will be drained slowly with care taken not to lose sediment.
2. Reestablished streams will not run through reclaimed settling ponds. The stream will be reestablished to the right limit of the ponds. All sediment will be bailed out and a stable stream channel will be established using tailings stockpiled in the center and right limit of the ponds. The flood plain will be wide enough to prevent erosion during high water events. For this stream the reconstructed flood plain will consist of a stream bed 20 feet in width with side banks 20 feet wide. The banks will have a 20:2 foot slope.
3. The remaining tailing stockpiles will be used to cap the large portion of the pond areas to prevent erosion. Final shaping will be done across the slope rather than up and down.
4. Banks of ponds will be flattened out to allow natural revegetation and avoid erosional degradation. The banks will have a slope of 20:1 feet. Topsoil will then be respreads over the tailings. Finally vegetation will be respreads over the topsoil. The vegetation will trap seeds and moisture as well as reduce erosion.

### **2.3 Right-of-Way Project Design Features and Resource Protection Measures**

The following resource-specific project design features and/or protection measures have been identified will be considered in the final Decision Record for incorporation into the requested right-of-way grant:

#### **2.3.1 Stream Crossing Protection Measures**

The applicant has requested to construct a ford stream crossing to provide access to a mining claim. Ford crossings have the least detrimental impact on water quality when their use is infrequent. Ford crossings are adapted for crossing wide, shallow watercourses with firm streambeds.

The location was determined on site visit (09/04/2012) by Tim Sundlov and Cory Larson, see Figure 1. The location has been previously used as a crossing by all-terrain vehicles. The crossing is perpendicular to the direction of the flow of the stream, and at the midpoint between the stream meanders (glide section).

#### *Design Guidelines:*

- Make the cross-sectional area of the crossing equal to or greater than the natural channel cross-sectional area. Make a portion of the crossing depressed at or below the average stream bottom elevation when needed to keep base flows or low flows concentrated. Match ford shape to the channel cross-section to the extent possible. To the extent possible, the top surface of the ford crossing shall follow the contours of the stream bottom but in no case shall the top surface of the ford crossing be higher than 0.5 foot above the original stream bottom at the upstream edge of the ford crossing. Make the

downstream edge of the ford crossing with a low-flow hydraulic drop less than 0.5 foot above the original stream bottom.

*Material Guidelines:*

- Use rock of sufficient size (large gravel to cobble - golf ball to baseball size) to resist mobilization by high (bankfull) flows. Bankfull flow is the discharge that fills a stream channel up to the elevation at which flow begins to spill onto the floodplain. Crossings shall be adequately protected so that out-of-bank flows safely bypass without eroding the streambanks or the crossing fill.

*Approach Guidelines:*

- Blend approaches to the stream crossing with existing site conditions, where possible. Make the approaches stable, with gradual ascent and descent grades which are not steeper than 4 horizontal to 1 vertical (4:1), and of suitable material (large gravel and cobble) to withstand repeated and long term use.

*Side Slope Guidelines:*

- Make all side slope cuts and fills stable for the channel materials involved. Make the side slopes of cuts or fills in soil materials no steeper than 2 horizontal to 1 vertical (2:1). Make rock cuts or fills no steeper than 1.5 horizontal to 1 vertical (1.5:1).

*Width Guidelines:*

- The width will be no more than 30 feet wide, as measured from the upstream end to the downstream end of the stream crossing, not including the side slopes.

*Maintenance Guidelines:*

- Inspect the stream crossing, after each major storm event and make repairs if needed. Remove any accumulation of organic material, woody material, or excess sediment.

### **2.3.2 Cultural Resources Protection Measures**

- The applicant and all associated activities shall remain within the granted 25-foot right of way and the collapsed and standing historic structures at 49-VAL-510 will be avoided by the applicant's equipment under either the Proposed Action or Alternative 3.

### **2.4 Alternatives Considered but not Analyzed in Detail**

An alternative was considered which would construct a plank or bridge type crossing of Mosquito Creek. This alternative was eliminated due to greater probability of hydrological change to the creek, possible associated erosion, and liability incurred with the existence of such a structure.

The BLM considered an alternative that would have required Mr. Nute to move his heavy equipment in winter months when the ground and stream crossing was sufficiently frozen. This alternative was eliminated from further consideration because it was determined that the

frequency of moving heavy equipment (once yearly in/out) would result in no changes to the effects as described in the Proposed Action.

### **3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL EFFECTS**

The Proposed Action is located near the confluence of Mosquito Creek and Ernestine Creeks at which point the water regime becomes the Tiekel River. The right-of-way authorization would allow for overland mechanized travel on Mosquito Creek trail. The trail is comprised of compacted, well drained soils and is dry throughout except for the crossing of Mosquito Creek. The existing trail bed ranges from 4-8 feet in width while traversing BLM lands. In the past the trail was maintained at a wider width as evidenced by berms found along the trail. At one time the trail was passable by conventional automobile as there is an older model sedan approximately 0.25 miles in the trail. White spruce, aspen, and cottonwood are present along the trail route as well as a variety of willow and alder species.

Resources affected by the Proposed Action are analyzed in detail below. Where additional mitigation is recommended beyond the *Right of Way Project Design Features and Resource Protection Measures* identified in Section 2.3, individual resources have highlighted these recommendations.

#### **3.1 Fisheries and Riparian Resources**

##### **3.1.1 Affected Environment**

The riparian vegetation along Mosquito and Ernestine creeks is composed of willow, alder, and grasses. Naturally-vegetated riparian areas perform many beneficial functions for aquatic resources and comprise some of the most important and productive habitat on BLM-managed lands. These riparian functions may be grouped into four broad categories of habitat, water quality, water quantity, and food supply.

The complexity, hydraulic resistance, and stability provided by riparian vegetation to streams affects the size, shape, and distribution of the stream channel and habitat features such as pools, riffles, and undercut banks. The riparian vegetation also helps to maintain the hydrologic connectivity between mainstem stream channels, side channels, tributaries, backwater sloughs, and hyporheic (groundwater) zones.

Water quality functions performed by riparian vegetation includes fine sediment deposition and filtering of contaminants, thereby reducing erosion and turbidity while maintaining high water quality required by many aquatic organisms. Riparian habitats also provide leaf litter and detritus to rivers and streams supporting the primary production that is the basis of the aquatic food web. An example of a riparian food supply is the detritus (decomposed vegetative matter) from decaying leaves, twigs, etc. which fall into the stream and provide a key energy source fueling the base of the aquatic food chain.

Mosquito Creek is clear-water tributary to the Tiekel River. Glacial water from the Tiekel River back-ups into the mouth of Mosquito Creek upstream 200-300 feet. A natural flood event in Mosquito Creek watershed has caused the channel to severely downcut in some sections. The

current stream channel has created plunge pools with drop heights that may preclude upstream migration for some fish. Fish and riparian habitat inventories have not been completed in Mosquito Creek. However, based on inventories of other streams in the area, it is likely to be used by resident fish species (including Dolly Varden and slimy sculpin) in the area of the proposed right-of-way activity.

Ernestine Creek flows south of Mosquito Creek. There is a glacier at the headwaters of Ernestine Creek and glacial meltwater in the summer months causes Ernestine Creek to be turbid and contain sediment. Fish and riparian habitat inventories have not been completed in Ernestine Creek. However, based on inventories of other streams in the area, it is likely to be used by resident fish species (including Dolly Varden and slimy sculpin) in the area of the proposed mining activity.

### **3.1.2 Direct and Indirect Effects from No Action Alternative**

Under the No Action Alternative, the BLM would deny the requested right-of-way. Subsequently, the mining activity in Ernestine Creek would not occur. Neither transportation of heavy mining equipment across Mosquito Creek nor mining in Ernestine Creek would occur. Under the No Action Alternative, occasional recreation use would continue on this BLM-managed right-of-way. These activities are currently occurring and have not resulted in adverse effects to fisheries and riparian resources in the drainages.

### **3.1.3 Direct and Indirect Effects from Proposed Action Alternative**

#### *Effects of the Proposed Right of Way*

The applicant has requested to construct a ford stream crossing to provide access to a mining claim. Ford crossings are adapted for crossing wide, shallow watercourses with firm streambeds. The location was determined on site visit (09/04/2012) by Tim Sundlov and Cory Larson, see Figure 2. The location has been previously used as a crossing by OHVs. The crossing is perpendicular to the direction of the flow of the stream, and at the midpoint between the stream meanders (glide section).

ROWs may affect fish habitat through runoff that may introduce sediment and removal of riparian vegetation. Multiple stream crossings can cause alterations of the streambank's structure and function and may cause the introduction of sediment into the waterway (Weidmer 2002). Frequent stream crossings will cause tire ruts in the stream bed and prevent fish migration.

#### *Effects of the Proposed Mining Operations*

It is difficult to determine the effects to riparian resources because of a significant lack of information in the mining plan of operations and lack of habitat stream surveys for Mosquito and Ernestine Creeks. It appears from the hand-sketches that the proposed mining activity would result in the direct modification and relocation of Ernestine Creek stream channel and result in the destruction of aquatic habitat. Ernestine Creek would be diverted into bypass channels while

21 feet of the original channel is mined and then returned to a newly built channel once mining is complete. It has been common practice to construct stream bypasses and new channels with different geometry and physical characteristics (e.g., flood prone and bankfull widths, bankfull depth, sinuosity, slope, entrenchment, and substrate size) than that of the natural channel. As a result, new channels are often straighter, have a higher gradient, and consequently have more energy than the natural channel.

In addition, the mining reclamation plan does not offer any information on the rehabilitation of instream habitat. New reclamation channels often lack the diversity of habitats (pools, glides, riffles) and cover components (undercut bank, overhanging vegetation, and large woody debris) that enhance the quality of habitat in natural channels.

The reclamation plan states that the streambanks would have a slope of 20:2. Construction of tall, steep slopes that high above the level of the stream should be avoided. Such slopes are characterized by surfaces that are high above the groundwater table, excessively well-drained, have poor moisture retention characteristics, and are consequently highly resistant to natural revegetation.

Wherever practical, slopes should be graded to no more than 3:1 (horizontal to vertical) in order to enhance natural revegetation processes. Revegetation success was significantly lower on slopes exceeding 19 degrees in angle; and revegetation success decreased significantly with increasing height above the stream (USKH 2005). The relationship of revegetation success and height above the stream is tied to the availability of groundwater for plant growth. Subarctic riparian plants have characteristically large, shallow root masses, with most of the roots occurring in the upper 1.5 feet of the soil. Newly constructed floodplain surfaces should slope at about 1 percent toward the channel so that overbank flows will be routed back to the channel rather than cutting a new channel in the floodplain (USKH 2005).

### **3.1.4 Cumulative Effects**

#### *Effects of the Proposed Mining Operations*

There was no information available on previous mining operations in Ernestine Creek. Most of the aquatic habitat disturbed from mining activity since 1981 on BLM-managed lands in Alaska remains in an impaired condition. Field evaluations by BLM staff and Carlson and Karle (1997) reveal that reclamation, including re-establishing hydrologically stable drainages; properly functioning floodplains and riparian zones; and a diverse mix of habitat types and cover components, has rarely been realized.

The removal of streamside riparian-wetland vegetation during mining would result in loss or degradation of aquatic habitat until proper functioning condition could be reestablished. In general, the time required for riparian-wetland areas to attain proper functioning condition would be dictated by natural processes and may require decades to centuries before it approximates the structure and function of the original aquatic habitat (NCSU 1998; BLM and Montana Dept. of Environ. Quality 1996; BLM 1988). Therefore, most of the riparian habitat disturbed in the next 20 years would be additive to that lost in the past. If placer mining occurs on previously worked

claims, this would result in setting back aquatic/riparian recovery by the number of years between the previous and future operation.

### **3.1.5 Recommended Mitigation**

#### *Proposed ROW*

Tire ruts in the streambed should be repaired with a shovel or hoe, frequently, so possible fish passage is not impeded. Adhere to stream crossing stipulations attached to this EA.

#### *Proposed Mining Operations*

Topsoil and organic material that have been stockpiled, these materials should be mixed into the upper 1-1.5 feet of the surface of recontoured tailings. This has been shown to promote rapid riparian revegetation on reclaimed surfaces. Tailings should be graded and smoothed in such a way that the final valley shape looks relatively natural and similar to the pre-mining valley configuration, see above for guidelines. After recontouring is completed, bulldozers should be driven up and down slopes, perpendicular to slope contours, so that the resulting surface texture will help prevent the washing of sediments from slopes, and aid in seed capture and moisture retention.

## **3.2 Hydrology and Water Resources**

### **3.2.1 Affected Environment**

Mosquito Creek is a small clear flowing tributary to the Tielkel River. It initiates out of the Chugach Mountains and flows westward to the east side of the Richardson Highway. Main flows are generated from spring snow melt (late May and early June) and summer season precipitation. Mosquito Creek is a low-gradient stream with a well-defined and moderately incised channel. Riparian vegetation consists of a heavy composition of willows and grasses. Water quality is generally considered to be very good.

Ernestine Creek flows just to the south of Mosquito Creek. It is a glacial stream (with glacial sediment) and also flows from the Chugach in a westerly direction to the East side of the Richardson. Flows for the larger Ernestine Creek are also generated from spring snow melt but also include a large contribution of glacial melt between mid-June to mid-September. Due to the glacial input with higher sediment loads and erosional forces, riparian vegetation, and stream bank stability is somewhat compromised. This is more prevalent at low elevations where loosely compacted sands and silt make up the bank structure.

At the confluence of Mosquito and Ernestine creeks is the beginning of the Tielkel River which flows in a southerly and then easterly direction cutting through the Chugach Mountains and emptying directly into the Copper River. For both Mosquito and Ernestine creeks, there are indications of previous human disturbance including: trails; creek crossings; old structures; and miscellaneous solid debris.

### **3.2.2 Direct and Indirect Effects from No Action Alternative**

With the No Action Alternative there would continue to be minimal use of the Mosquito Creek trail and no mining activity on Ernestine Creek. Therefore, water quality and stream bank stability at on both Ernestine and Mosquito creeks would not change.

### **3.2.3 Direct and Indirect Effects from Proposed Action Alternative**

#### *Effects of the Proposed Right-of-Way*

Initial bank work would produce short- term increased levels of sediment from bank reshaping and heavy equipment churning. Sediment levels would also increase during and for a short time after vehicle and equipment crossings. Possible stream bank erosion and riparian loss may occur during high-flow periods and be exacerbated by multiple crossing during these periods of high flow.

#### *Effects of the Proposed Mining Operations*

The affected stream in the Nute placer mining operation is Ernestine Creek. Direct impact from the proposed operation would result from mechanical placer mining utilizing a TD-15 dozer, 130 Link Belt Excavator, and a W14 Case loader. Equipment would be utilized directly in the stream channel removing stream bank and stream bed for processing through a screen plant. Depending on discharge rates and velocity of water from Ernestine Creek, removal of bed and bank materials would accelerate erosion of disturbed stream banks and immediately increase the amount of sediment entering the stream. The increase in sediment would reduce downstream water quality and potentially negatively impact stream bank stability for downstream users.

It is anticipated that 9,000 cubic yards of material would be processed annually at the mine site. The screen plant process would produce waste water with extremely high Nephelometric Turbidity Unit (NTU) levels. (NTU is a unit used to describe turbidity. Nephelometric refers to the way the instrument, a nephelometer, measures how much light is scattered by suspended particles in the water. The greater the scattering, the higher the turbidity. Therefore, low NTU values indicate high water clarity, while high NTU values indicate low water clarity.) This water would not be acceptable for reentry into the Ernestine Creek without treatment. The mine plan proposes the construction of settling ponds to remedy high sediment. According to State standards, water reentering the stream must be within 5 NTUs of background samples. If there is a mixing zone where settled water re-enters the creek it must be approved through the state and a monitoring protocol must be followed. The construction of settling ponds would require cutting material adjacent to the creek. The combination of cutting and the churning of soil material with large equipment would result again in increases soil erosion and increased sediment inputs into Ernestine Creek. This would again affect water quality and stream bank stability.

The reclamation plans for this proposal include backfilling ponds, reshaping and grading of the banks and flood plain, and replacing top soil and vegetation. It is well understood in Alaska the difficulties in successfully reclaiming a stream resulting in an intact stream channel with stable banks, energy-reducing flood plain, and functional riparian vegetation. Growing seasons are

short which makes reestablishment of riparian vegetation difficult. Winter freeze-up creates thick ice in the channel and sometimes overflow ice on the banks and flood plain which sometimes causes intense erosional forces on the channel during spring break up. Shortly after stream reclamation it may be expected that the newly formed stream banks and flood plain could be lost or damaged due to high stream energy and sediment loads and lack of established stream bank vegetation with rooting capable of holding banks and soils together. The mining plan associated with this proposal shows little planning in regards to stream mechanics and function to help design a new stream channel. For the proposed stream reclamation, because of lack of detailed planning, direct impacts from equipment and stream channel/flood plain destruction, and the Alaska environment and resource characteristics, it can be anticipated there would be bank and floodplain failure and increased erosion and sediment transport.

### **3.2.4 Cumulative Effects**

The Tiekel Block has a long history of mining and many of the streams within the watershed have some history of mining disturbance. As a watershed, mining has had an overall cumulative effect on water quality, stream bank structure and stability, and riparian vegetation. BLM's proposed right of way contributes to the cumulative effects by adding more sediment and stream bank erosion by grading the Mosquito Creek crossing for better access and adding more numerous crossings and added heavy mining equipment. The connected action of the right of way to access state land and development and operation of a placer mine on Ernestine Creek would also add more long-term overall stream sediment, erosion, and loss of riparian vegetation. This is the result of active mining and repeated equipment disturbance directly in the stream channel.

### **3.2.5 Recommended Mitigation**

- 1) Consider a 50 foot stream buffer thereby leaving the creek, bed, and bank undisturbed.
- 2) If there are plans for excess pond water to be drained directly into Ernestine Creek, the mine plan should also include a mixing zone permit from the State of Alaska with NTU exceedance limits and a monitoring/reporting program.
- 3) Seek professional assistance from a hydraulic engineer for design and reclamation of the stream channel. Stream channel design should consider characteristics such as stream discharge, belt width, meander length, bank/height ratios, bank composition, stream gradient, stream profile, cross sectional information, etc. It should also consider an upstream reference reach for future design and planning.

## **3.3 Recreational Resources**

### **3.3.1 Affected Environment**

The Mosquito Creek trail is a seldom used OHV and hiking supplying access to the Ernestine Creek watershed and Chugach Mountains. Recreational use is considered minimal and primarily consists of winter trapping and access to bear-baiting stations. Estimated annual use is 30 visits per year.

**The project is located within the Tielke Special Recreation Management Area (SRMA).**

### **3.3.2 Direct and Indirect Effects from No Action Alternative**

Under the No Action alternative, the BLM would deny the requested right-of-way and access would not be enhanced or improved. Recreational use and access would remain at current levels estimated at 30 visits per year.

### **3.3.3 Direct and Indirect Effects from Proposed Action Alternative**

#### *Effects of the Proposed Right-of-Way*

Effects would include increased provide improved recreational access use and opportunities within the area. The trail would supply access to a prime bear hunting area, increases the availability and proximity to harvestable firewood, and to a lesser degree would serve as an improved access route to the Chugach Mountains for hiking, berry picking, and sport and subsistence hunting. User displacement is not expected as minimal use occurs presently in the area. Some competition for resources may occur once word gets out of a new “trail” in the area.

#### *Effects of the Proposed Mining Operations*

Direct effects include changes to the natural solitude, soundscape, and visual resources in proximity to the mining operations. While mining operations would not occur on BLM lands, the operation of machinery and other heavy equipment would produce non-natural sounds that have the potential to reach BLM-managed lands. A recreational user near the boundary of BLM-managed lands would see visual effects (equipment operating, vehicles, structures) and impacts (disturbed ground, vegetation clearing) caused by mining operations on State of Alaska lands. These effects could alter the experience of recreational users and spur them to seek recreational opportunities in a different area.

Indirect effects of the mining operation consist of the potential for future expansion of mining operations or claims. If valuable minerals are recoverable in an economically feasible manner mining operations and activity could increase on State of Alaska lands which would further contribute to changing the character and recreational experience within the Ernestine Creek drainage.

### **3.3.4 Cumulative Effects**

For recreation resources, the geographic scope for cumulative effect considerations is limited to the immediate Mosquito Creek and Ernestine Creek basins. Ernestine Creek, where the applicant’s mining activity would occur, is steep-walled and heavily forested. The topography and vegetation in this drainage help to screen both sound and visual impacts. Equipment movement activities and mining activities would be limited to the summer construction season. Therefore, the temporal scope for cumulative effect considerations is limited to the summer season. Given that the mining activities are confined to the Ernestine Creek drainage in the summer months and recreational use is low, the potential for cumulative effects is negligible.

## **3.4 Cultural & Paleontological Resources**

### **3.4.1 Affected Environment**

The project area contains cultural resources that are both historic and prehistoric in nature. There are no known paleontological resources present in the project area. An archaeological survey of the area conducted in 2009 for a trespass cabin removal project located and recorded both standing and collapsed framed cabins, 49 VAL 510, 50 feet east of the existing trail proposed for this project's right of way (Jangala 2009a; 2009b). The trail was also inspected at the time by the same archaeologist, and no additional cultural resources were located along the proposed trail.

### **3.4.2 Direct and Indirect Effects from No Action Alternative**

There are no anticipated effects from the No Action Alternative, since there are no expected changes in the trail's usage from this alternative.

### **3.4.3 Direct and Indirect Effects from Proposed Action Alternative**

#### *Effects of the Proposed Right-of-Way*

The project's proposed right of way passes with 50 feet of 49-VAL-510, a standing historic frame cabin and collapsed historic frame cabin near the end of the right of way, adjacent to Ernestine Creek. However, there is only a small chance of adverse effects from this action since the existing trail and proposed right of way are located outside of the site's boundaries.

#### *Effects of the Proposed Mining Operations*

The proposed mining activity would occur within the active stream gravels of Ernestine Creek, which has seen extreme flooding in the last decade as well as annual flooding during spring break up and high rain fall periods. This area is unlikely to contain intact cultural or paleontological resources because of this flooding and stream remodeling. Therefore, there are no anticipated effects to cultural resources due to the proposed mining.

### **3.4.4 Cumulative Effects**

Given that no direct or indirect effects were identified, by definition, this project does not incrementally contribute to cumulative effects.

## **4.0 CONSULTATION AND COORDINATION**

This EA was prepared by the Glennallen Field Office Interdisciplinary Team.

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