

				<p>connected to a habitable structure.</p> <p>Bullets have been updated with the following text in 2.5:</p> <p>Out of a total of 192 properties that were eligible to be connected to water service, 185 environmental covenants (96%) were submitted and 178 of these properties (93%) were connected to water service by the end of 2022. There were just fourteen eligible properties (7% of the 192 total) not connected to water service at the completion of 2022. The owners of seven properties declined water service as they did not want to spend the money to meet the connection criteria because their homes are unoccupied and</p>		
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				<p>there is no need for water service. To meet the connection criteria, homes needed to have permanent heat, permanent electric, and a functional septic system. Four properties were not connected to municipal water because the owners refused to submit service connection paperwork. Three homes turned in service connection paperwork but were unable to meet connection criteria.</p> <p>Over the course of 2021 and 2022, 246 wells in total were decommissioned on 183 off-base properties in Moose Creek out of 189 properties total (97% of all properties had wells decommissioned). Decommissioning of</p>		
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				wells in Moose Creek is now complete for all properties that the owners gave the Air Force permission to decommission the wells for, and for all wells that the Air Force could locate.		
15	15	last full paragraph Section 6.2.	The text should state "compliance with LUCIP and IROD."	Concur. Text has been amended to include: <i>"to ensure compliance with the LUCIP and IROD"</i>	Accept	
16	17	Section 4.2	Please include more context for the "Mailing Questionnaire". This is the first section that it is mentioned and explanation would be helpful.	Concur. The text has been amended as follows: <i>"The Air Force will contact each property owner with a recorded EC to ensure that the terms of the EC have not been violated. The first means of contact will be via a Mailing Questionnaire, consisting of survey questions that the Air Force, will develop. The questions will include whether there have been any</i>	Accept	

				<i>changes in land use and whether ECs, if present, are still in place."</i>		
17	18	Section 4.2	Property owners may not respond within 30 days due to travel, unforeseen hospitalization, etc. A longer response period may help with the response rate.	Concur. The text has been amended to specify that surveys must be returned within 60 days from receipt.	Accept	
18	18	Section 4.2	Aerial imagery may not show violations of the environmental covenants (EC) on the property. If aerial imagery does not show any EC violations, would it be possible to inspect the property?	<p>The efforts put in place requires notification to the drillers about restricted drilling in the area, AF believes this will mitigate the likelihood of finding unauthorized wells, which is our primary concern regarding activities that are in violation of the activity and use limitations of the environmental covenant.</p> <p>There is always the small chance that a property owner may try to put in their own</p>	<p>USAF must verify the environmental covenant and CWMA have not been violated. In the event that property owners do not respond to the mail-in questionnaire, USAF is still responsible for verifying. Using aerial imagery and expecting local drilling companies to self report is not sufficient. USAF must visit the property and attempt to verify with the property owners. USAF should verify by mail in questionnaire or property visit</p>	<p>EPA's disagreement with the proposed AF approach is noted. Should the current proposed process prove ineffective, modification of the LUCIP would be proposed to include more direct methods of approach. This would be discussed and documented in future updates to the LUCIP. Properties without environmental covenants is covered under the</p>

				<p>well without going through a commercial driller, but individuals that would attempt this with the awareness of the CWMA and EC restrictions are likely the same property owners that would be resistant to allowing an inspection on their properties. Given the safety hazards of performing such inspections in MC, the AF believes that the surveys are a much less invasive and preferred means of assessing whether the activity and use limitations of the ECs are still in place on properties.</p> <p>Aerial imagery might be used as a last resort, but its recognized that it may not be able to uncover unknown wells due to such things as vegetation cover or</p>	<p>annually. This verification includes the 14 occupied properties without the environmental covenant and the 18 vacant properties without environmental covenants.</p>	<p>response provided under comment 6.</p> <p>EPA Response (11/16/2023): Disagree. USAF cannot assess if the properties have conformed to the restrictions and controls detailed in the Land Use Control (LUC) without a field inspection on non-responsive properties. As part of the LUCIP, field inspections of all properties that are non-responsive to questionnaire and phone call must be conducted. Inspection should occur during snow free conditions and daylight hours.</p> <p>AF Response (12/20/2023): Based on the meeting held on 20 November 2023, AF</p>
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				decorative well covers.		<p>agrees to add a statement to the mail questionnaire that a visual inspection will be conducted should the assessment not be completed by the property owner. Should the assessment and phone call fail to make positive connection, a visual inspection will be conducted. If a visual inspection cannot be conducted, a reason as to why will be documented and a summary will be provided in the Field Inspection Report.</p> <p>Please see section 4.2, bullet 3 as well as Appendix F for edits. Also note, the word survey has been corrected to assessment throughout the document.</p>
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						EPA Response (2/21/2024): Accept.
19	18	Section 4.2	How will coordinating with FNSB yield phone numbers for property owners? Are you looking it up in the tax database? Please be more specific.	<p>Text has been modified to include an online search for the property owner if available databases do not produce a phone number.</p> <p>The FNSB database has parcels with owner names and physical and mailing addresses only. The original source for the phone numbers and e-mails was the database Northwind-EA maintained for O&M of the water treatment systems. Phone numbers and e-mails will be updated and maintained if homeowners are willing to share their contact information.</p>	Accept	
20	18	Section 4.4	Please include definition of "local drilling companies". Is local a certain mileage	All Fairbanks-North Star Borough Drilling companies will be	Accept	

			from the site? All FNSB companies?	contacted. The text has been amended to clarify.		
21	21	Section 9.0	Eliminate “note to the file” as a possible way to revise the IROD (only an amendment or ESD are possible).	Concur. The phrase ‘ <i>note to the file</i> ’ has been changed to ‘ <i>memo to the site file.</i> ’	Accept	
22	21	Section 5.1	Does “water” mean all kinds of water or just groundwater? Please be more precise.	Concur. The text has been amended to specify groundwater usage.	Accept	
23	21	Section 5.2	Will field inspections also include surface water or are they only groundwater?	Field inspections will only concern groundwater as the IROD addresses groundwater contamination.	Accept. Please ensure you specify groundwater in section 5.2	Verified in text, only groundwater is referenced.
24	41	Figure 3	There are three circular anomalies depicted in dark blue, which is the same color as the PFAS plume boundary. EPA anticipates these are errors and not additional PFAS plumes. Please review and revise Figure 3.	Those circles were in the 2021 Atlas and are part of the PFAS plume.	Noted. Why are we using the 2021 PFAS data and not the most recent for this figure?	This is the latest plume figure with the latest data. 2022 data is still under review. EPA RESPONSE (11/16/23): Noted
25	91	Map of CWMA boundary,	Page 91 appears to have been saved incorrectly in the PDF. EPA can see two polygons and the header	It appears that it was saved incorrectly. The correct figure will be	Accept	

		attachment B, Appendix C	for Critical Water Management Area (CWMA) boundary, but the font is shadowed. Please revise.	included in the Draft Final.		
26	243	Questionnaire	Please add the sentence "has the land-use change in the last year?" to the first question box. It will be helpful to see if the land has changed in the last year, in addition to the total five years.	This question has been added.	Accept	
27	248	LUC General Information Sheet	What are 103/332 records? If applicable to this work, please define elsewhere in the document. If not applicable, please remove from the LUC General Information Sheet.	103/332 records are Eielson specific processes for work orders on base. These numbers or references to these records have been removed as they will not be applicable to properties off base.	Accept	
28	250	Control Checklist	Fences, roads, gates, and signed are not institutional controls being implemented for the Moose Creek properties. As such, please delete/strike out those sections of the checklist.	Those items will be removed from the checklist. The last page of the checklist was removed.	Accept	

Comments submitted by: Alyssa Millard

Name(s)	Statewide Abatement of Impaired Land (SAIL) and Water Sections
Agency/Organization	Alaska Department of Natural Resources-Division of Mining, Land and Water
Document Reviewed	Draft Land Use Controls Implementation Plan Version Dated November 2022 Moose Creek, Alaska

No.	Agency	Office	Document Section	Page No.	Wording Change/Comment	
1.	ADNR	SAIL	1.0	1	This plan is a part of the EAFB LUCIP, updated annually. As landowners and land managers of the state parcels in the CWMA please include the DNR SAIL section on reviews each year. As designators of the CWMA please include the DNR Water Section on reviews each year.	Concur. The DNR Water Section and SAIL will be part of the annual LUCIP review process. ADNR agree
2.	ADNR	Water	2/3	5-	Please check tense on these chapters globally. Some actions were already taken and should be mentioned in past tense (Section 2.4 for example). Has the water main and local distribution system been installed?	Concur. The text has been updated to reflect that the actions have been completed. The water main and local distribution system have been installed. ADNR agree
3.	ADNR	SAIL	2.2	4	Please work with DNR-SAIL to determine the best way to assign covenants to the state parcels. For example, should we use the smallest tax parcel or attached the covenant to the patent. Suggest changing the follow sentence until discussions occur: “The ADNR is the owner of seven individual parcels within Moose Creek.” Additionally, why is parcel (PAN 701036) south of the CWMA boundary included in	Concur. Text has been revised as recommended. Parcel 701036 will not be included in the LUC plan. Response: First comment not addressed. See additional notes below the table. Appendix A: Property Listing Table lists 7 parcels but figure 3 shows 6 parcels.

No.	Agency	Office	Document Section	Page No.	Wording Change/Comment	
					<p>this LUC plan? Has contamination been documented on this parcel? Referencing Appendix A, I don't see this parcel listed.</p> <p>If it should not be included remove it from the Figure 3 map.</p>	<p>09/20/2023 AF Response: How DNR wishes to assign covenants to the state parcels, will be up to DNR. AF is available to consult with as DNR is working through the process.</p> <p>Table list will be corrected to only show the 6 parcels as highlighted on the figure.</p> <p>10/10/2023 DNR agree</p>
4.	ADNR	SAIL	3.3	7	<p>We suggest changing the verb tense to accurately reflect that the CWMA has been issued. Please review the entire document and update the tense for items that have been addressed or are ongoing.</p>	<p>Concur. The text has been revised as recommended. ADNR agree</p>
5.	ADNR	SAIL	4.1/5.1/6.1	9/13/15	<p>Why would these sections be different? Shouldn't each of these sections have the same text that is in section 4.1? Please review the document and resolve inconsistencies.</p> <p>5.1 and 6.1 are the state land and federal land Prohibitions and Restrictions Sections. They both state <i>"The CWMA provided in Error! Reference source not found. details prohibitions and restrictions to water usage established by the ADNR."</i></p> <p>I don't have Appendix C. Are there different restrictions on federal and state land?</p>	<p>This report was designed for the end user in mind, so each property type was broken out individually to make it clear as to what applies to each. Private properties have different restrictions when compared to Federal and State, such as the requirement of an Environmental Covenant (EC).</p> <p>Please explain comment further-what restrictions would a private parcel have that a state or federal parcel would not. Both should point to the restrictions established in the CWMA.</p> <p>09/20/2023 AF Response – The Air Force can only speak to the land use control restrictions for the private properties as the restrictions are clearly identified in the</p>

No.	Agency	Office	Document Section	Page No.	Wording Change/Comment	
						<p>ECs for the private properties that signed for them. As the state is working on their ECs for the state parcels within the Moose Creek CWMA, we won't know the full extent of the land use control restrictions on the state properties until the state finalizes their ECs for these parcels. Assuming they will all be the same as the private would be premature. Regarding federal properties within the MC CWMA, the Air Force does not have the authority to impose Notice of Activity and Use Limitations (NAULs) on other federal parcels, and so any land use control restrictions on these parcels are up to the federal property owner to implement, not the Air Force. As the MC LUCIP is a living document, updates can be made as we learn more about the land use control restrictions that the owners of the state and federal parcels within the MC CWMA decide to implement. Keeping these items called out separately for the time being makes it easier to address changes and updates to each property type especially if they turn out to be drastically different from each other.</p> <p>10/10/2023 DNR agree</p>
6.	ADNR	Water	4.1	9	Suggested change to first sentence: <i>The CWMA designation establishes restrictions on the future use of groundwater and surface water from within the defined area to protect public health, safety, and welfare in response</i>	<p>Concur. The text has been revised as recommended with the exception that the area is designated as <i>the community of Moose Creek</i> in order to avoid confusion with the water body. ADNR agree</p>

No.	Agency	Office	Document Section	Page No.	Wording Change/Comment	
					<i>to PFAS in the waters of the Moose Creek area.</i>	
7.	ADNR	SAIL	5.2	13	<p><i>Comments:</i> Please provide additional details about how and when field inspections will be completed:</p> <p>-The parcel boundaries should be evaluated for current and new access routes each year.</p> <p>-Will field inspections be aerial, by foot, or a combination. How much area will be covered? This section does not explain where field inspections will occur.</p> <p>-When will field inspections occur-what season? Winter would be inappropriate. Aerial surveys during the summer may limit what is visible on the ground.</p> <p>It may be appropriate to create a state or undeveloped parcel specific inspection book.</p> <p><i>Sentence edits:</i></p> <p>1 Checklists should only be modified according to USAF, regulators and ADNR review and input.</p> <p>2 If activities on the state parcels are inconsistent with the LUC ADNR needs to be notified immediately.</p> <p>3 USAF will ensure that the appropriate personnel undertake the necessary measures to ensure compliance with the LUCIP in coordination with ADNR following proper permitting.</p> <p>4 The USAF will provide notice of any IC/LUC changes to the EPA, ADEC, and ADNR for their review and approval...</p>	<p>1. Concur, parcel boundaries will be evaluated for current and new access routes each year.</p> <p><i>Please see additions to the field inspection checklist in separate document.</i></p> <p>09/20/2023 AF Response – See updated checklist 10/10/2023 DNR agree</p> <p>2. Aerial imagery could be used to help identify new trails or roads that could be used to install new wells on State property. Field inspections would then occur by foot on existing, established, or new roadways, right of ways, or trails.</p> <p><i>Can this be added? How can we ensure this is done consistently across years?</i></p> <p>09/20/2023 AF Response – See updated checklist 10/10/2023 DNR agree</p> <p>3. Field inspections will occur on a yearly basis and may be performed at any time during the summer months, or what would typically be considered a construction field season for Alaska (May-October).</p> <p>ADNR agree 10/10/2023 DNR agree</p> <p>4. A checklist for inspection of undeveloped parcel's was added to the inspection report.</p> <p><i>Is this the state and federal checklist? Shouldn't there also be a vacant/undeveloped parcel checklist?</i></p>

No.	Agency	Office	Document Section	Page No.	Wording Change/Comment	
						<p>09/20/2023 AF Response – See updated checklist 10/10/2023 DNR agree</p> <p>Sentence Edits: 1Concur. Text has been revised as recommended. ADNR agree 2Concur. The text has been revised as follows: <i>“The USAF Remedial Project Manager (RPM) will be responsible for notification of the ADNR of any activity that is inconsistent with the LUC objectives or use restrictions or any other action that may interfere with the effectiveness of the LUCs.”</i> ADNR agree 3 Concur. Text has been revised as follows: <i>“USAF will ensure that the appropriate personnel undertake the necessary measures to ensure compliance with the LUCIP and IROD in coordination with ADNR and following proper permitting.</i> ADNR agree</p> <p>09/20/2023 AF Initiated Change: During follow-up review, corrections were found to still be needed to be able to best reflect current regulation and policy. As such, “...and following proper permitting” has been removed from the sentence. CERCLA response actions are exempt by law when it comes to obtaining Federal, State, or</p>

No.	Agency	Office	Document Section	Page No.	Wording Change/Comment	
						<p>local permits related to cleanup activities completed on site.</p> <p>10/10/2023 DNR agree</p> <p>4 Concur with qualification. Text has been revised as follows: <i>"The USAF will provide notice of any IC/LUC changes to the EPA, ADEC, and ADNR- for review."</i> The IROD does not give ADNR approval authority for changes to the LUC component of the remedy. ADNR agree</p>
8.	DNR	SAIL	7.0	Page 17 line 7	...provided to the EPA, ADEC, and ADNR . This includes the DNR SAIL section and DNR Water section	<p>Concur. Text has been revised as recommended.</p> <p>ADNR agree</p>
9.	DNR	SAIL	7.0	17 line 9	The annual monitoring report, submitted to the regulatory agencies and ADNR by the USAF, ...	<p>Concur. Text has been revised as recommended. ADNR agree</p>
10.	DNR	SAIL	7.2.1	17	Is the annual monitoring report different from the field report and different from the annual report/annual LUC compliance review. These reports are not clear throughout the document please use the same term for each report or provide a table explaining the name of the report, purpose, frequency, and who the report should be submitted to, etc.	<p>The field inspection report, a compilation of site inspection checklists and dailies, is included in the Annual LUC Report. Sections that refer to a field inspection report will be updated to clarify that these reports are included in the annual LUC Report. ADNR agree</p>
11.	DNR	SAIL	7.2.1	17	Appendix G here is called Annual Checklist and Annual Review Checklist but an inspection book in other sections and on the	<p>Appendix G has been renamed Inspection Book and references within the text have been updated accordingly.</p>

No.	Agency	Office	Document Section	Page No.	Wording Change/Comment	
					Appendix G page, please make this consistent. If the text “annual checklist” should not capitalized please correct.	ADNR agree
12.	DNR	SAIL	9.0	21	The USAF will decide whether to modify or discontinue a LUC with the review and approval of EPA, ADEC, and ADNR.	<p>Non-concur. In accordance with the interim Record of Decision (IROD), ADNR does not have the authority to approve or disapprove changes to the LUC component of the selected IROD remedy.</p> <p>Stated in the IROD, under the Land Use Control section, item number vii: “The USAF will be responsible for implementing, maintaining, monitoring, and reporting of LUCs as specified in the Moose Creek Land Use Control Implementation Plan and Land Use Control Management Plan. The Implementation Plan will be developed by the USAF with input from and approval by ADEC and the EPA.</p> <p>Followed by item number xiv: “EAFB shall not modify or terminate LUCs, implementation actions, or land use that are associated with the selected remedy without the approval of the EPA and the opportunity for concurrence by ADEC. EAFB shall seek prior concurrence of the EPA and the State before any anticipated action that may disrupt the effectiveness of the LUCs, or any action that may alter or negate the need for LUCs.”</p>

No.	Agency	Office	Document Section	Page No.	Wording Change/Comment	
						ADNR agree. As discussed in person: ADNR will review the LUC but will not be a signatory on the LUC.
13.	DNR	SAIL	10	23	<p>Please update this section to include ADNR in all reporting.</p> <p>Why is State of Alaska used in this section instead of ADNR?</p> <p>Text states: <i>“Should the USAF become aware that a land use within the LUC boundary is in violation of one or more terms of the LUCs, the USAF will also work cooperatively with EPA and the State of Alaska to re-establish compliance”</i></p>	<p>Concur. ADNR has been included in notification of discovery of activities inconsistent with LUC objectives etc., and how USAF will address.</p> <p>State of Alaska has been corrected to ADEC and ADNR to be consistent throughout the report.</p> <p>ADNR agree</p>
14.	DNR	SAIL	Figures		<p>The figures contain a red outlined polygon labeled “Moose Creek Groundwater Control Land Use Area” wouldn’t this LUCIP plan apply to the entire CWMA polygon? If so the use of the red outlined polygon is misleading and confusing for Figures 1-3.</p>	<p>The outline for the Moose Creek Groundwater Control Land Use Area has been removed to eliminate confusion. That particular boundary was the study area to develop an emergency response to property owners affected by groundwater contamination. LUCs apply to the entire area within the CWMA, and that area is captured within that footprint. The boundaries have been updated on each of the figures and reference to the Moose Creek Groundwater Land Use Area has been removed.</p> <p>ADNR agree</p>
15.	DNR	SAIL	Appendix G		<p>The field report should contain additional entries such as describing any limitations to your observations, description of the</p>	<p>Additional entries will be included in the field report.</p> <p>What additional entries were included?</p>

No.	Agency	Office	Document Section	Page No.	Wording Change/Comment	
					route/area inspection including a map showing the route/areas visited.	Should this information go on the field inspection check list? Suggestions in separate document. 09/20/2023 AF Response – See updated checklist 10/10/2023 DNR agree
16.	DNR	SAIL	Appendix H		ADNR is not a regulator please update the title of this section (see comment #1).	Title changed to “review comments”. This is now Appendix I. ADNR agree
17.	ADNR	SAIL			General comment: are there plans for any monitoring wells or surface water sampling on the state parcels? Monitoring wells will require an authorization with ADNR.	The need for monitoring wells or surface water sampling will be determined as AF proceeds through the CERCLA process. If a need is identified for monitoring wells or surface water sampling on state parcels, stakeholders will be informed before anything is actually installed or sampled. ADNR agree
18.	ADNR	SAIL			General comment: will USAF place signage along access points to identify LUCs in place, and to alert the public? There are access routes to the state parcels via easements and other trails. Signs should be erected and maintained by USAF at all access locations currently available and any that are created in the future. If access is currently blocked or restricted, please describe blockages observed during field inspections in the field report.	Since LUCs only address groundwater, no signs are proposed to be used at access points. Signage is more likely to be used if there are also controls in place that restricts digging or a risk to human health has been identified in surface soils. Air Force believes that signs to identify groundwater contamination are not needed at this current time since no wells should be installed on properties in public locations. ADNR agree

----- END OF COMMENTS -----

Additional comments on FINAL

ADNR	SAIL	1.0	2	<p>Appendix I hasn't been updated to Review Comments on this page.</p> <p>AF Response – comments are not included until the final version 10/10/2023 DNR agree</p>
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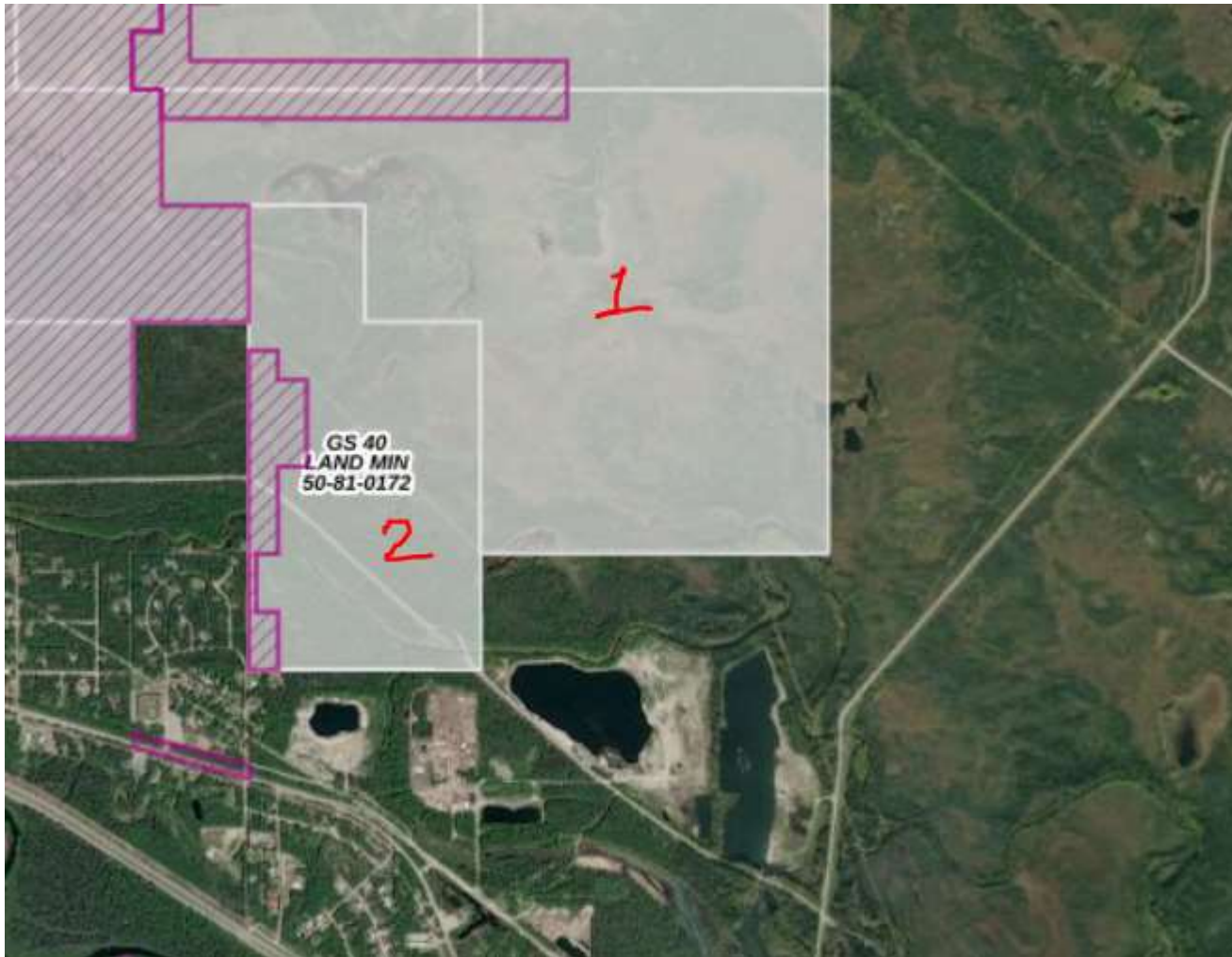
Additional information for comment #3

Two Parcel options based on the patent:

Red label #1 GS 40 Patent 1232752

Red label #2 GS 40 Patent 50-81-0172

State parcels are in grey, pink/purple are lands that have been conveyed out of state ownership.



Versus the tax parcel as found in the LUCIP:

PAN (new)	Owner1	Abbreviated Legal Description
185001	ALASKA STATE OF DNR	TL-2101 SEC 21 T2S-R3E
185027	ALASKA STATE OF DNR	TL-2103 SECTION 21 T2S-R3E PATENT 50-81-0172
185035	ALASKA STATE OF DNR	TL-2201 SECTION 22 T2S-R3E SERVICE AREA SPLIT - NOW KNOWN AS TL 2203 & 2204 2S 3E
185043	ALASKA STATE OF DNR	TL-2200 SECTION 22 T2S-R3E
185451	ALASKA STATE OF DNR	TL-2836 SEC 28 T2S-R3E PATENT 50-81-0712
531928	ALASKA STATE OF DNR	TL 2105 SECTION 21 2S 3E CORRECTIVE DEED 005147 1244-887 3-19-2001 Previously assessed as 2S 3E 21 2102
531936	ALASKA STATE OF DNR	TL 2882 SEC 28 2S 3E CORRECTIVE DEED 005147 1244-887 3-19-2001 Previously assessed as 2S 3E 21 2102

Attachment E
Adjacent Landowners and Third-Party Interests Map

