Save the Wild U.P.

P.O. Box 562 Marquette MI 49855

savethewildup.org | info@savethewildup.org | (906) 662-9987



Karen Maidlow, MAIDLOWK@michigan.gov Property Analyst, Minerals Management Department of Natural Resources P.O. Box 30452 Lansing, MI 48909

October 12, 2015

Dear Ms. Maidlow,

On behalf of Save the Wild U.P.'s Board of Directors, Advisory Board members, and SWUP's supporters, we strongly urge the Department of Natural Resources (DNR) to deny the mineral lease sought by North American Nickel, Inc. for 320 acres of State-owned land on the Yellow Dog Plains (SW1/4; N1/2 SE1/4; W1/2 NW1/4, Section 35, T51N, R29W, Michigamme Township, Marquette County).

We ask the DNR to deny this mineral lease for the following reasons:

Ecological Concerns

Ecologically, this land is part of the Escanaba River State Forest, and supports a jack pine forest habitat, including age/class critical to the endangered Kirtland's warbler. The DNR lease review acknowledges the possible (?) presence of this species. Does the lease review process involve any on-site review? Kirtland's warblers have been seen in this area by local birdwatchers. We ask the DNR to conduct a rare species survey on the property before further ecological disruption is sanctioned, in collaboration with local experts and environmental stewards who are deeply familiar with the land. Moreover, we request that the DNR complete a landscape-scale habitat preservation plan for the Yellow Dog Plains, with an eye to Kirtland's warbler conservation. The current Land Management Plan for the Yellow Dog Plains is out of date, and fails to address any of the industrial threats. The Yellow Dog Plains is seasonally used by migratory songbirds and waterfowl, which are unaddressed in the lease review.

According to the DNR's Management Plan for the Yellow Dog Plains, this area "provides multiple benefits including forest products, dispersed recreational activities, and provides habitat for a variety of fish and wildlife species" and the DNR's stated management priority in this area "is to continue to provide these multiple benefits..."

Note: Mineral exploration was NOT listed among the DNR's management priorities for this land.

Archaeological Concerns

The DNR lease review acknowledges the presence of a site of "archaeological significance" on this land. While confirming the nature of this archaeological site (a homestead), it has come to our attention that this significant site has never actually been evaluated. There is a standing ruin on the property, but also a

number of related sites on the property that would be difficult for a mineral exploration team to "see" much less avoid disturbing.

Historically, this land is an integral part of our collective culture. As historian Jon Saari has noted, "The Yellow Dog Plains is one of those storied places in our collective imagination. That place, and the larger community we live in, includes rivers, forests, wildlife, rocks and waterfalls, and quiet backwoods camps."

Archaeologically, the site contains a remnant structure from the Andersen Homestead, directly connected to the land's first European settlers, the result of the controversial Homestead Act. The Nels Andersen homestead (misspelled Anderson on some maps and sources), was built by early Danish immigrants who settled on the Yellow Dog Plains in 1902. Additionally, the history of the Andersen family and their homestead are interwoven with the history of White Deer Lake, as members of the Andersen family were employed by industrialist Cyrus McCormick — land now preserved as the McCormick Wilderness Area. Photographs, oral histories and stories related to the Andersen site were recorded by the late historian and storyteller, C. Fred Rydholm, in Superior Heartland: A Backwoods History.

Prior to the 1900's, the plains were frequented via a trail between L'Anse and Big Bay, used for hunting and berry-picking, with a strong pre-European Indigenous presence. Much evidence of this ancient trail was obliterated in 2014, when the historic sand road was replaced with a highway (pavement ends at the gates of Eagle Mine, approximately 3 miles SE of this historic site).

Recently, the physical integrity of the Andersen historical site was severely damaged during the DNR's logging of the public forest. The damage has not been remedied, and may have been undocumented. This fragile archaeological site will only be further compromised by new mineral exploration, and increased traffic on the 2-track roads that pass the ruins. This lease request (North American Nickel, Inc.) follows a mineral lease granted to Prime Meridian; it is clear that the Andersen archaeological site was damaged and the environment degraded during the tenure of that mineral lease — without DNR intervention.



Andersen archaeological site, damaged during recent resource extraction activities.

Save the Wild U.P. respectfully requests that a moratorium on mineral leasing be instituted until the integrity of all Andersen historical sites, and their archaeological significance, can be fully evaluated.

Indigenous Natural Resources

Contemporary tribal uses of this land include the gathering of traditional foods and medicines, in accordance with protected treaty rights. Given the long history of pre-European Indigenous presence, the Yellow Dog Plains have a cultural value — beyond their ecological value, watershed, mineral or timber value, deeper than the value of any individual archaeological site. This land should be seen as an integral part of the human culture and natural history of Marquette County, the Keweenaw Bay Indian Community, "the wild U.P." and the State of Michigan as a whole.

Hydrological Concerns

In their Management Plan for the Yellow Dog Plains unit, the DNR states that "almost all state lands are leased and extensive exploration has been conducted" yet notes "there is insufficient data to determine the glacial drift thickness" on the Yellow Dog Plains.

Clearly, the State of Michigan is allowing a live experiment — industrialization of a remote and previously unpolluted environment — to play out in real time, with insufficient monitoring and a pattern of "insufficient data."

If the DNR does not possess sufficient data about the thickness of glacial sand deposits in this area, they must also lack sufficient understanding of the complex hydrogeology of the Yellow Dog Plains, especially the groundwater aquifer contained in these glacial sands, an aquifer which is currently pristine and without industrial contamination. Groundwater from the NW Yellow Dog Plains aquifer feeds the headwaters of several rivers and coldwater trout streams, such as Cedar Creek, Salmon Trout River, Yellow Dog River — and unique spring-fed ponds, including nearby Andersen Lake, which provide key habitat for mammals (especially predators crossing the Yellow Dog Plains), migratory birds, reptiles, amphibians, insects and native plants, including threatened species.

No watershed information is included in this mineral lease application, but we assume that surface water (precipitation) on this parcel drains into headwaters of Cedar Creek, flowing into Mountain Lake en route to Lake Superior. Mountain Lake is a pristine wilderness lake of critical scientific research value, located entirely within the Huron Mountain Club. Groundwater in this parcel, by contrast, feeds the Salmon Trout River. Mineral exploration poses serious and apparently unconsidered risks to groundwater. We ask that the DNR explain how mineral exploration is regulated with regards to *drilling in this unconfined sand aquifer*, given the "insufficient data" about the land's hydrogeology, and lack of oversight in the field.

Note: if the DNR is truly interested in hearing the public comments about mineral leasing of State lands on the Yellow Dog Plains and elsewhere, we believe the ideal venue for this exchange of information would be a Public Hearing – something which Save the Wild U.P. has repeatedly requested.

Because Lake Superior is fed by watersheds with headwaters on the Yellow Dog Plains, Lake Superior is threatened each time a new lease for mineral exploration is granted. In 2006, the Superior Watershed Partnership (SWP) recommended to "prohibit sulfide-based mining" on the Yellow Dog Plains, and SWP continues to stand by that recommendation. "The potential impacts to groundwater, surface water and Lake Superior are simply too great," says Carl Lindquist, SWP's executive director. Save the Wild U.P. joins

SWP in their recommendation to prohibit sulfide-based mining and exploration. We ask the DNR to deny this mineral lease, and place a moratorium on further leasing until the environmental impacts of sulfide mining and related mineral exploration can be assessed.

Cumulative Environmental Impacts

The DNR's Office of Minerals Management repeatedly assures the public that mineral exploration is "minimally intrusive to the land." What strange yardstick is the DNR using? How does the DNR calculate the scale and scope of the mineral exploration industry's environmental impacts? Was environmental baseline data was gathered prior to the mineral leasing boom, which substantiates the DNR's claim that mineral exploration is "minimally intrusive"? How frequently are DNR staff in the field, actively monitoring mineral exploration activities on the Yellow Dog Plains?

In fact, Save the Wild U.P. finds that mineral exploration on the Yellow Dog Plains has proven *profoundly intrusive*, and the cumulative environmental impacts remain uncalculated.

During the period (2001-2015) covered by a previous mineral lease of this land, for example, vehicle traffic on the Yellow Dog Plains and *in this specific parcel* increased exponentially: new trails were created, former logging trails were reopened, and existing sand roads were eroded. Mineral survey teams routinely use ORVs to pull cables and other equipment into roadless terrain. Their new trails and widened roadways, in turn, are exploited by additional vehicle traffic (hunters, campers, ORVs), resulting in increased habitat fragmentation, disrupted nesting areas, wildlife disturbances, etcetera. Far from being "minimally intrusive," mineral exploration has left the Yellow Dog Plains riddled with new roads, and festooned with garbage and spray-painted markers. To be clear: the mineral exploration industry is doing a terrible job of regulating itself. Following a phase of surface and seismic mineral exploration in 2014, when miles of geophysical survey cables were pulled through the landscape, piles of white PVC pipes were left abandoned in forests, ravines, and swamps, a plague of plastic ribbons fluttered from trees, and ATV tracks cut through wetlands.

During the same period (2001-2015), the DNR also cleared the way for further mineral exploration of the land by clear-cutting hundreds of acres of jack pine forest, in and surrounding the Andersen tract. Contrary to Best Management Practices, many of the trails created to facilitate the timber harvest remain open. Increased traffic poses a direct threat to the Andersen property's Kirtland's warbler habitat.

In 2014, a small sand road was replaced with a paved highway connecting Big Bay to the gates of the Eagle Mine, a change which further exacerbated the environmental impacts of mineral exploration, and brought a wave of new exploratory drilling. Is this still considered "minimally intrusive to the land"? It must be noted that the paved highway was constructed on behalf of the mining industry (and paid for by Eagle Mine), a clear violation of Part 632 regulations which clearly require haul-roads to be evaluated as part of the mining permit. As a result of this regulatory failure, cumulative environmental impacts were not calculated — for a new swath of pavement that cuts halfway across the Yellow Dog Plains. "Minimally invasive" is not the phrase that comes to mind. This single example — the untallied cumulative environmental impact of roads built or improved during mineral exploration — cuts to the heart of the issue, and demonstrates why the public no longer trusts the State of Michigan to regulate mineral exploration, or subsequent mining activities.

Regulatory Concerns

According to the state's "Typical Metallic Mining Exploration Flowchart," much of the mineral exploration process occurs before any permits are required, allowing industry to perform exploration without regulatory or public scrutiny. Companies conducting exploratory drilling on the Yellow Dog Plains do so with impunity. According to the Michigan Department of Environmental Quality's (MDEQ) website, "exploration companies are extremely secretive about their projects. All information regarding exploration drilling is considered proprietary under Part 625." Also, according to the MDEQ, "Most metallic mineral exploration occurs in an area exempt from acquiring a Part 625 permit."

The lack of regulatory oversight has real consequences. Members of the public – including adjacent landowners and watersheds – learn of active exploration drilling sites only when the drill rigs appear, bringing 24-hour drilling noise, or leaving behind pools of drilling fluid or garbage.

Moratorium on Yellow Dog Plains Mineral Leasing Requested

Since the State of Michigan controls surface rights as well as mineral rights on this property, the State has full discretion to *remove this parcel from leasing* until a comprehensive environmental assessment of the Yellow Dog Plains management area can be completed.

In summary, Save the Wild U.P. respectfully requests that a moratorium on mineral leasing be instituted on the Yellow Dog Plains. In this case, no mineral lease to North American Nickel should be granted until the integrity of the Andersen historical sites, and their full archaeological significance, can be evaluated, including a preservation plan. We ask the DNR to hold a Public Hearing on this lease, enabling further discussion of the significant environmental risks posed by mineral leasing of the historic Andersen property, and other State-owned forest lands on the Yellow Dog Plains — a public hearing in which we can honestly discuss the regulatory shortcomings of Part 625, given clear evidence of unregulated environmental degradations caused by mineral exploration activity, recent damage to a state archaeological site on Public Land, etcetera. We ask the DNR to take this opportunity to visit the Yellow Dog Plains, direct staff to update the Land Management plan for this area, and complete a survey of rare species on State-owned lands, especially this parcel.

We urge the DNR to deny the requested mineral lease from North American Nickel.

Sincerely,

Alexandra Maxwell, executive director, Save the Wild U.P., grassroots@savethewildup.org
Save the Wild U.P. Board of Directors, board@savethewildup.org
Save the Wild U.P. Advisory Board, advisoryboard@savethewildup.org

http://www.michigan.gov/documents/deq/deq-ogs-iccmining-flowchart1_429219_7.pdf