MINING MINNESOTA™
RESPONSIBLE DEVELOPMENT of NATURAL RESOURCES

August 11, 2017

VIA U.S. MAIL

Connie Cummins
Forest Supervisor, Superior National Forest
United States Forest Service
Attn: Northern Minnesota Federal Minerals Withdrawal EIS Project
8901 Grand Avenue Place
Duluth, MN 55808-1122
comments-eastern-superior@fs.fed.us

RE: MiningMinnesota's Comments to USFS's and BLM's Respective Notices Relating to the Proposed Withdrawal, SNF Plan Amendment, and EIS Scoping

MiningMinnesota appreciates the opportunity to submit comments in response to the United States Forest Service's ("USFS") and Bureau of Land Management's ("BLM") various notices relating to:

(1) the withdrawal and two-year segregation of federal minerals in the Rainy River watershed, as depicted in Figure 1 ("Withdrawal");

(2) the amendment of the USFS's Land and Resource Management Plan ("SNF Plan") to reflect the proposed withdrawal and, presumably, to prohibit mineral development ("Plan Amendment"); and

(3) the scoping of the environmental impact statement ("EIS") in which these proposed actions will be analyzed.

MiningMinnesota's members include companies engaged in mineral exploration and development of hardrock minerals in the Superior National Forest ("SNF"). These companies have invested hundreds of millions of dollars over many years to develop significant mineral, environmental, and other technical data regarding the potential development of hardrock minerals. These technical data, in conjunction with the State of Minnesota's independent scientific and environmental studies over decades, provide federal and state decision-makers with ample evidence that the development of hardrock minerals in the SNF can proceed, subject to appropriate mitigation measures, in a manner that does not adversely impact in the Boundary Waters Canoe Area Wilderness (BWCAW) or violate federal laws. In addition, the proposed Withdrawal and Plan Amendment do not comply with applicable federal laws or policies relating to the specific context of developing federal minerals in the SNF. MiningMinnesota acknowledges that USFS and BLM have important roles to play in determining ***how*** federal mineral development occurs in the SNF, but the agencies are proposing to go far beyond their authority and to decide ***whether*** mineral development may proceed. Duly elected federal officials, through congressional action passing laws signed by the president and specifically

applicable to the SNF, already have determined that mineral development in the Withdrawal area may proceed. USFS and BLM may not countermand that determination.

Accordingly, MiningMinnesota submits these comments ("Comments") in opposition to the proposed actions, and respectfully requests:

1. With respect to the proposed Withdrawal, USFS cancel its Application as set forth in 43 C.F.R. § 2310.1-4(a), and/or BLM deny the Application as specified in 43 C.F.R. § 2310.1-4(b) or 43 C.F.R. § 2310.3-3; (2), and

2. With respect to the proposed Plan Amendment, USFS refrain from pursuing any amendment, and instead, retain the current management direction for minerals, and develop appropriate stipulations and conditions based on site-specific analyses.

Additionally, while MiningMinnesota believes that USFS and BLM should abandon their proposed course for many reasons, in the event USFS and BLM nonetheless proceed with an EIS, these Comments discuss the scoping of that EIS. MiningMinnesota welcomes the opportunity to discuss with BLM, USFS, the companies, and other stakeholders an appropriate path forward for exploration and development of minerals. To facilitate review of these Comments, they are structured as follows:

- Part 1 presents general background information regarding federal minerals in the SNF and the federal agencies' proposed actions.

- Part 2 describes how the Withdrawal and Plan Amendment violate federal law and policies relating to mineral exploration and development.

- Part 3 discusses environmental laws and mining practices that are sufficient to protect forest and environmental resources.

- Part 4 articulates the unconstitutional and unlawful effect the Withdrawal and Plan Amendment would have on state and private rights

- Part 5 explains why the EIS is unnecessary and ineffective, and alternatively, presents MiningMinnesota's perspective on the scoping of the EIS if one is conducted.

PART 1 – BACKGROUND REGARDING FEDERAL MINERALS IN SNF AND THE FEDERAL AGENCIES' PROPOSED ACTIONS RELATING TO SUCH MINERALS

Approximately 70 years ago, mineral prospectors identified a substantial copper-nickel[1] deposit in northern Minnesota, which is commonly referred to as the Duluth Complex. (Affidavit of Dr. William Brice ¶¶ 18-20 (Aug. 10, 2017) ("Brice Aff."); Affidavit of Dr. Ronald Hays ¶ 4 (August 10, 2017) ("Hays Aff.").) The Duluth Complex, which includes multiple deposits as shown on Figure 2, extends from Canada, through the BWCAW and across the western edge of the SNF to the Iron Range. (*See* Hays Aff. ¶ 4, Ex. A, at 5.) The federal, state,

[1] The deposit also includes platinum group minerals (PGM), cobalt, and other minerals. For simplicity, these Comments will generally use the terms hardrock, nonferrous, or copper-nickel.

and private minerals in the BWCAW are not subject to mineral development due to the protections afforded it as a wilderness area, but those minerals within the SNF outside of the BWCAW independently constitute a remarkable resource. Various mining companies have invested many millions of dollars to discover and delineate substantial deposits within the SNF. These copper-nickel deposits are estimated to include, depending on cut-off grade, up to 20 billion tonnes of minerals and collectively represent decades and decades of potential mineral development in an area in need of economic revitalization.

Significantly, as a result of the patchwork nature of surface and mineral ownership within the SNF (depicted on Figure 3), many of these deposits comprise a mixture of federal, state, and private minerals and often include split estates (*e.g.*, federal surface overlying private reserved/outstanding minerals). As a result, development of these resources may only be feasible if a company can assemble secure rights to federal, state, and private surface and minerals interests. Federal surface and minerals play a critical role in a company's land holdings because, among other things: (1) it may not be economically or technically feasible to develop in isolated blocks of ore on parcels of state and private lands, particularly given the depth to the mineralized zone; and (2) deposits on state and private lands may require access across federal surface or through federal minerals/subsurface. (*See* Brice Aff. ¶¶ 24-25, 36) (discussing importance of federal access to enable mineral development on state and private minerals).)

Mining companies have invested hundreds of millions of dollars exploring the Duluth Complex. (*See* Hays Aff. ¶ 4.) (stating that publicly-disclosed expenditures in hardrock exploration and development in Minnesota amount to almost $1 billion).) They have conducted extensive exploration programs (thousands of drill holes across hundreds of acres) and have ensured that their activities fully complied with environmental laws. Figure 4 depicts a subset of the extensive drilling conducted in the SNF. *(See* Hays Aff. ¶ 4 (explaining that expenditures for preparing environment review documents and permit applications alone exceed $500 million).) These exploration programs generate significant data regarding geologic conditions (*e.g.*, extent, nature, and value of mineralization), subsurface conditions (*e.g.*, hydrogeologic information), and surface resources (*e.g.*, surveys relating to wetlands, species, and cultural resources).

The data collected as a result of industry's investment benefits both the public and the companies. With respect to the public benefit, the data collected from mineral exploration activities provides information that facilitates informed decision-making by land management and environmental permitting agencies on the manner in which mineral development is permitted to proceed. And private companies utilize this data and other technical information to analyze methods for developing this important mineral resource in a manner that complies with environmental laws, including those protective of the BWCAW. (*See* Hays Aff. ¶ 4 (noting that approximately sixty-five years of mineral exploration has not resulted in any reported significant or permanent environmental impacts that would justify halting development").) They deserve, and federal law requires that they be provided, the opportunity to submit a proposed mining plan for which a site-specific EIS can be conducted.

USFS's Application for Withdrawal

On December 14, 2016, USFS submitted an application to BLM to withdraw federal lands within the Rainy River watershed from disposition under various mining laws subject to

valid existing rights. In response to BLM comments, USFS revised and resubmitted its application for withdrawal on January 5, 2017 ("Application"). In this Application, USFS specified that that the lands subject to the Application for withdrawal ("Withdrawal Lands") are 234,328 acres of federal lands within the Rainy River watershed in the SNF but outside the BWCAW and the BWCAW Mining Protection Area ("MPA"). (Application at 2.) The Withdrawal Lands include both (1) federal lands reserved from the public domain subject to mineral exploration and development under the Minnesota National Forests Leasing Act (also referred to as the "Act of June 30, 1950"), 16 U.S.C. § 508b, and (2) federal acquired lands subject to exploration and development under the Weeks Act, 16 U.S.C. § 520, and Section 402 of the Reorganization Plan No. 3 of 1946 ("Reorganization Plan"). As noted by USFS, withdrawal of lands in either the BWCAW or the MPA is unnecessary because federal law already prohibits development of minerals on such lands. USFS requested that the withdrawal be effective for the maximum period of twenty years. (Application at 3.)

USFS expressly recognized that "any segregation or future withdrawal of these lands and interests in the lands will be subject to valid existing rights on Federal land." (Application at 1.) USFS further stated that the "segregation and withdrawal would also be inapplicable to private lands owned in fee, private mineral estates, and private fractional mineral interests." (Application at 1.) Remarkably, USFS indicated that the federal lands would remain open for the development of sand and gravel, which are mineral resources managed by USFS pursuant to 36 C.F.R. Part 228, subpart C. (Application at 1, 3.)

Notices Regarding Withdrawal, SNF Plan Amendment, and Scoping

On January 13, 2017, USFS published in the Federal Register a notice of its intent to prepare an EIS relating to its Application. 82 Fed. Reg. 4282 (Jan. 13, 2017). As specified in the USFS's notice, the proposed actions include both (1) the 20-year withdrawal of federal minerals within the Withdrawal Lands; and (2) an amendment to the SNF Plan to reflect the Withdrawal. Accordingly, the proposed USFS-led EIS is intended to document the "information and analysis necessary to support a decision on withdrawal, and to support an amendment to the Superior National Forest Land and Resource Management Plan." *Id.* As part of this EIS, USFS indicates it will evaluate the Withdrawal as the proposed action and will include the requisite no-action alternative ("No Action Alternative"), but does not identify any other alternatives.

On January 19, 2017, BLM published in the Federal Register its companion notice for the Application. 82 Fed. Reg. 6639 (Jan. 19, 2017). In addition to the information contained in the USFS notice, BLM specified that the notice immediately triggered a temporary 2-year segregation period and noted the presence of 190,321 acres of non-federal (i.e., state and private) lands within the withdrawal area. Significantly, BLM specified that "these parcels would not be affected by the temporary segregation of proposed withdrawal." *Id.*

On April 13, 2017, USFS published a revised notice in the Federal Register to extend the deadline for submitting comments for 120 days and to specify that comments must be submitted by August 11, 2017. These timely and substantive Comments are submitted in response to these initial notices and the subsequent notice of extension to preserve MiningMinnesota's right to object, appeal, or otherwise challenge the proposed actions and/or the EIS.

PART 2 – THE PROPOSED ACTIONS VIOLATE MULTIPLE FEDERAL STATUTES AND POLICIES, WHICH SPECIFY THAT USFS AND BLM MUST PERMIT MINERAL EXPLORATION AND DEVELOPMENT IN THE SNF.

The federal hardrock minerals within the Rainy River watershed are classified as both public domain minerals and acquired minerals. These two categories of minerals are subject to two different statutory schemes for mineral exploration and development, but are both administered by BLM (with specified USFS reviews) under a leasing program. *See* 16 U.S.C. § 508b (the "MN National Forest Leasing Act"); 16 U.S.C. § 520; the Reorganization Plan No. 3 of 1946, § 402; *see also* 40 C.F.R. Part 3500. In addition to these mineral laws, USFS administers the surface resources of the SNF under a variety of statutes, including the Organic Act, the National Forest Management Act ("NFMA"), and the Multiple-Use Sustained Yield Act ("MUSYA"). The Federal Land Policy and Management Act ("FLPMA") provides BLM with authority, in specified circumstances, to withdraw public lands.

This tapestry of laws must be read so as to effectuate their purposes and various statutory provisions. All of these laws are consistent with the following general principle: Congress has made the decision on ***whether*** the federal minerals in the SNF should be explored and developed and authorized BLM and USFS to regulate, consistent with applicable law, ***how*** such mineral development occurs. These laws collectively establish that BLM and USFS are required to "permit" mineral exploration and development in the SNF, and that the federal agencies can utilize available and appropriate regulatory tools to ensure compliance with the various land management and environmental laws applicable to SNF and BWCAW.

The proposed Withdrawal disregards Congress's direction to the agencies, including its imposition of limits on BLM's and USFS's administrative powers and its explicit reversal of the very policies the agencies are seeking to impose in this instance. More specifically:

- FLPMA does not authorize withdrawal of federal minerals subject to leasing programs
- The MN National Forest Leasing Act and other mineral laws establish that federal minerals in the SNF should not be subject to withdrawal and that the federal agencies are obligated to implement a program permitting mineral exploration and development.
- The various laws applicable to the management of the national forests do not empower USFS to prioritize the watershed and other surface resources over mineral development.

I. FLPMA DOES NOT AUTHORIZE THE WITHDRAWAL OF SNF FEDERAL MINERALS.

Under FLPMA, the Secretary of Interior "is authorized to make, modify, extend, or revoke withdrawals but only in accordance with the provisions and limitations of this section [entitled "Authorization and limitation; delegation of authority]." 43 U.S.C. § 1714(a). Thus, FLPMA specifies the precise scope of BLM's authority under the statute in three ways:

- The proposed action must constitute a "withdrawal" as defined in the statute;

- BLM can make, modify, extend, or revoke an administrative withdrawal, but does not have the power to modify, extend or revoke a ***congressional withdrawal***; and

- Any withdrawal must be consistent with provisions and limitations of FPLMA.

The proposed SNF Withdrawal exceeds BLM's authority with respect to each of these requirements.

A. Under FLPMA, BLM Lacks Authority to Withdraw Federal Minerals Subject to Leasing Laws.

FLPMA defines "withdrawal" as "withholding an area of Federal lands from settlement, sale, location, or entry, under some or all of the general land laws." 43 U.S.C. § 1702(j). Thus, withdrawal is authorized with respect to lands subject to (1) "settlement, sale, location, or entry" and (2) "some or all of the general land laws." The federal minerals within SNF are neither, and BLM therefore lacks the requisite statutory authority to withdraw them.

Turning first to the question of whether federal minerals in the SNF are on lands subject to "settlement, sale, location, or entry," the answer turns on the nature of the federally-owned hardrock minerals in the SNF. 43 U.S.C. § 1702(j). In western states, federal hardrock minerals qualify as "locatable" under the General Mining Law of 1872 and, upon discovery of a valuable deposit, the prospector can obtain fee title to the federal minerals. 30 U.S.C. §§ 22-42; *United States v. Locke*, 471 U.S. 84, 86 (1985). The federal government then has limited authority to regulate such minerals. 30 U.S.C. § 29; *see also Locke*, 471 U.S. at 86 (explaining that those who satisfy the general mining laws are "virtually unconstrained by the fetters of federal control"). In the SNF, however, the hardrock minerals are either (1) public domain minerals that were withdrawn from the General Mining Law or (2) acquired minerals that were never subject to the General Mining Law. Both public domain and acquired minerals are subject to a leasing program administered by BLM.

Under this BLM leasing program, a prospector conducts exploratory activities on lands subject to a prospecting permit. Once a prospector demonstrates the discovery of a valuable deposit on lands subject to a prospecting permit, the prospector is entitled to a preference right lease for such federal minerals. Unlike locatable minerals, these minerals never change ownership. *Nat. Res. Def. Council, Inc. v. Berklund*, 609 F.2d 553, 555 (D.C. Cir. 1979). The federal government, including USFS as the surface managing agency and BLM as the minerals management agency, retains authority to impose stipulations in the lease and conditions on operations.

These differences are not merely academic. Because the federal minerals in the SNF are subject to a leasing program and are not locatable, they are not within the scope of BLM's withdrawal authority. To the contrary, the United States Supreme Court considered whether the phrase “settlement, sale, location, or entry” includes lands subject to leasing and concluded that the phrase *excludes* leasable minerals. *Udall v. Tallman*, 380 U.S. 1, 5, 19 (1965); *Noel Teuscher*, A-27099, A27104, A-27192, 62 I.D. 210, 211, 214 (May 31, 1955) (concluding that executive order withdrawing land from “settlement, sale, location, or entry” did not apply to leasable minerals). In reaching this conclusion, the Supreme Court recognized that

"'[s]ettlement,' 'location,' 'sale' and 'entry' are all terms contemplating transfer of title to the lands in question." *Id.* at 19.

When Congress enacted FLPMA shortly after the *Udall* decision, it chose to use the same phrase at issue in *Udall* in defining "withdrawal" and, in doing so, expressed its intent that the phrase be interpreted consistent with the Supreme Court's decision. *Bragdon v. Abbott*, 524 U.S. 624, 645 (1998) ("When administrative and judicial interpretations have settled the meaning of an existing statutory provision, repetition of the same language in a new statute indicates, as a general matter, the intent to incorporate its administrative and judicial interpretation as well."). Indeed, the House Report explains that FLPMA incorporates the "traditional meaning" of withdrawal, which "contemplate[s] cessation of actions conveying or leading to the conveyance of the title of the United States." H.R. Rep. No. 94-1163, at 5, 44, *reprinted in* 1976 U.S.C.C.A.N. 6175, 6179 (citation omitted).

Nor do the federal minerals in the SNF fall within the category of lands subject to "some or all of the general land laws." In *Udall*, the Supreme Court determined that "the term 'public-land laws' is used to refer to statutes governing the alienation of public land, and generally is distinguished from . . . 'mineral leasing laws.'" *Udall*, 380 U.S. at 19. Additionally, FLPMA's definition of withdrawal includes a notation that the term "general land laws" is limited to those laws codified in Title 43 of the United States Code. 43 U.S.C. § 1702 References in text (2006) ("The 'general land laws,' referred to in subsec. (j), are generally classified to [title 43]."). The statutes governing the leasing of both public domain and acquired minerals, however, are codified in Title 16. Finally, because the MN National Forests Leasing Act applies solely to two national forests in Minnesota, it has no general applicability to federal public lands and does not constitute one of the "general land laws."

BLM has long-recognized its inability to withdraw minerals subject to federal leasing programs. In the preamble to BLM's regulations implementing FLPMA's withdrawal provisions, BLM discusses its "emphasis" on withdrawing lands from the general mining laws, stating

> Withdrawal from the general mining laws is specifically mentioned in the rulemaking because withdrawal is the only method the Secretary of the Interior has to close Federal lands, on a long term basis, to location and disposal under the general mining laws. This is true because the 1872 Mining Law is a nondiscretionary land law which grants anyone the right to enter those public lands not closed to its operation for the purpose of exploring for and extracting hard rock minerals. The Mineral Leasing Act of 1920, as amended, on the other hand, gives the Secretary the discretion to preclude leasing of the minerals on the public lands that are covered by that Act, so the Secretary can, when necessary, prevent mining activity involving these minerals.

Federal Land Withdrawals; Amendment to Withdrawal Procedures, 46 Fed. Reg. 5794, 5795 (Jan. 19, 1981).

The federal hardrock minerals in the SNF are subject to a leasing program, and title to such minerals never transfers from the federal government. The lands therefore fall outside the scope of BLM's withdrawal authority under FLPMA, and the proposed Withdrawal is unlawful.

B. BLM Is Precluded from Modifying the Previous Withdrawal of Federal Minerals for the Establishment of the BWCAW and MPA.

FLPMA specifies that BLM must "***not*** make, ***modify***, or revoke any ***withdrawal created by Act of Congress***." 43 U.S.C. § 1714(j) (emphasis added). To establish the BWCAW and MPA, Congress enacted a statute to withdraw 1,297,500 acres of land from mineral development. BWCAW Act, Pub. L. No. 95-495 §§ 3, 9, 11, 92 Stat. 1649, 1650, 1655 (1978). FLPMA expressly forbids BLM from modifying that congressional withdrawal.

By now proposing to withdraw additional federal minerals in the Rainy River watershed for purposes of protecting the BWCAW, the agencies are attempting to modify a withdrawal created by Congress by expanding the geographic scope of the initial withdrawal to include an additional 234,328 acres. Thus, the federal agencies are looking to improperly "expand the wilderness boundaries beyond the area established by Congress." *Izaak Walton League of Am., Inc. v. Kimbell*, 516 F. Supp. 2d 982, 989-90 (D. Minn. 2007); *see also Sierra Club Northstar Chapter v. Kimbell*, Case No. 07-3160 ADM/RLE, 2008 U.S. Dist. LEXIS 107239, at *22-23 (D. Minn. Sept. 15, 2008).

C. BLM's Withdrawal Must Comply with All Applicable FLPMA Provisions and Limitations.

Any withdrawal action actually undertaken by BLM must comply with all applicable FLPMA provisions and limitations on its authority. MiningMinnesota hereby reserves its right to comment on, object to, and/or challenge BLM's proposed withdrawal on the grounds that it violated FLPMA's requirements and limitations.

II. CONGRESS HAS DIRECTED BLM AND USFS TO PERMIT MINERAL EXPLORATION AND DEVELOPMENT IN THE SNF BECAUSE IT DEEMED THAT THESE FEDERAL MINERALS SHOULD NOT BE WITHDRAWN.

While USFS and BLM propose to conduct an EIS to answer the question of whether federal minerals within the Rainy River Watershed in the SNF should be withdrawn from mineral exploration and development, Congress has already answered this question with a resounding "no." USFS's and BLM's proposed Withdrawal disregards this congressional determination and its directive that USFS and BLM should focus on ***how***, not ***whether***, to allow mineral exploration and development to proceed. USFS and BLM do not have the legal authority to administratively nullify those statutes with which they may not agree.

In 1909, President Theodore Roosevelt established the SNF through a proclamation and, in doing so, reserved public domain lands from entry under the federal mining laws. Proclamation No. 848, 35 Stat. 2223 (Feb. 13, 1909). For the next forty years, the general mining laws, which applied to public domain lands in the west, had no application to public domain lands in the SNF. As such, the federal government effectively withdrew these federal minerals from mineral development more than a century ago. Over time, however, the federal executive and legislative branches recognized the significant mineral potential within the SNF and took concrete action to ensure such minerals could be developed.

For public domain lands, the legislative directive is apparent from unambiguous statutory language. In 1950, Congress, in recognition of the significance of the vast mineral resources in the SNF, decided to make such lands available for mineral exploration and development through a special statute applicable solely to the national forests in Minnesota. Accordingly, it passed what is sometimes referred to as "the MN National Forest Leasing Act." 16 U.S.C. § 508b. Under this statute, Congress specifically authorized the Department of Interior ("DOI") to implement regulations that "permit the prospecting for and development and utilization of" minerals "[w]here, ***through withdrawal or reservation*** or by statutory limitation or otherwise, all or any part of the mineral resources in public-domain lands . . . within the exterior boundaries of the national forests in Minnesota, are not subject to development or utilization." 16 U.S.C. § 508b (emphasis added).

Congress directed BLM to implement regulations to "permit" mineral exploration development. In the legal context, "permit" means to "to consent formally; to allow (something to happen, esp. by an official ruling, decision or law" or "to give opportunity for to make (something) happen." Permit, *Black's Law Dictionary* (10th ed. 2014). The plain meaning of the term "permit" includes: "consent to," "give permission to," "authorize," and "afford opportunity to." *Republican Party of Minn. v. Kelly*, 63 F. Supp. 2d 967, 981 n.6 (D. Minn. 1999) ("The words 'authorize' and 'permit' are commonly used words that both involve the concept of consent.") (quoting Webster's II New College Dictionary (1995)), *rev'd on other grounds by* 416 F.3d 738; *see also Permit*, Am. Heritage Dictionary of the English Language 1315 (5th ed. 2011) (generally same); *Permit*, Merriam-Webster's Collegiate Dictionary 923 (11th ed. 2014) (generally same)

The MN National Forest Leasing Act also establishes that Withdrawal is not appropriate for federal public domain minerals in the SNF by virtue of Congress' decision to affirmatively overturn a previous withdrawal. Thus, the unambiguous language of the MN National Forest Leasing Act shows that (1) Congress determined that these federal minerals should not be withdrawn; and (2) BLM must proceed with developing and implementing a program to enable exploration and development.

This interpretation is consistent with the stated purposes of the MN National Forest Leasing Act. Both the statutory language and legislative history indicate that one purpose was "to permit the development of mineral resources in the national forests in Minnesota." *See* Senate Report 81-1778, at 2 (1950) (noting that DOI and USDA representatives testified that "it is *highly desirable* to permit the prospecting, development, mining, removal, and utilization of the mineral resources with the Superior National Forest"); *see also* H.R. Rep. 81-795, at 1 (1949) (same). And the plain language of the statute confirms that a second purpose was to reverse the previous withdrawal of federal minerals to form the SNF. USFS and BLM must interpret the statute and their respective authorities so as not to frustrate these purposes. *See The Emily & The Caroline*, 22 U.S. (9 Wheat.) 381, 388 (1824).

In direct conflict with this statutory direction, USFS and BLM are now endeavoring to reinstate the legal landscape that existed before Congress decided that mineral exploration and development should occur in the SNF. Under established federal law, the agencies lack the authority to do so. Federal courts have repeatedly admonished agencies that they may not engage in administrative nullification of statutes enacted by Congress. A federal agency

"charged with the administration of a statute is [e]ntrusted with the power of carrying out, its provisions, and not with a kind of veto power to nullify them." *Belcher v. United States*, 34 Ct. Cl. 400, 420 (1899); *see also Consol. Rail Corp. v. Smith*, 664 F. Supp. 1228, 1233 (N.D. Ind. 1987) ("That agencies may not nullify statutes has long been the law."). Executive agencies and officers are not empowered to use policy statements to "nullify a legislative enactment." *United States v. McCalvin*, 608 F.2d 1167, 1171 (8th Cir. 1979). "Regardless of how serious the problem an administrative agency seeks to address, however, it may not exercise its authority 'in a manner that is inconsistent with the administrative structure that Congress enacted into law.'" *Food & Drug Admin. v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 125 (2000) (quoting *ETSI Pipeline Project v. Missouri*, 484 U.S. 495, 517 (1988)); *see also Ragsdale v. Wolverine World Wide, Inc.*, 535 U.S. 81, 91 (2002) (same). USFS and BLM simply cannot "'construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion.'" *Nat. Res. Def. Council v. E.P.A.*, 777 F.3d 456, 461 (D.C. Cir. 2014) (quoting *Whitman v. Am. Trucking Ass'ns, Inc.*, 531 U.S. 457, 782 (2001)).

Even if the federal agencies were to claim some conflict between FLPMA's general (and inapplicable) authorization for administrative withdrawal and the MN National Forest Leasing Act, the latter nonetheless would control. The MN National Forest Leasing is the most specific statute articulating congressional intent with respect to whether specific federal minerals should be withdrawn or should instead be subject to exploration and development. *See Radzanower v. Touche Ross & Co.*, 426 U.S. 148, 153 (1976) (noting that statutes addressing "narrow, precise, and specific subject" control over general statute); *Morton v. Mancari*, 417 U.S. 535, 550-51 (1974) (stating that "specific statute will not be controlled or nullified by a general one, regardless of the priority of enactment.").

Similarly, with respect to federal acquired minerals, in 1917, Congress authorized the federal Department of Agriculture ("USDA") to "permit the prospecting and development, and utilization of the mineral resources of the lands acquired under the [Weeks Act]." 16 U.S.C. § 520. This statute, which Congress enacted two years after the withdrawal of public domain minerals in the SNF, applies to minerals subsequently acquired by USFS within SNF. Notably, Congress did not exempt acquired minerals in the SNF from this statute or otherwise determine that acquired minerals should be withdrawn form mineral exploration and development. Under Section 402 of the Reorganization Plan No. 3 of 1946, the executive branch then transferred authority for managing these acquired mineral to BLM subject only to the requirement that "mineral development on such lands shall be authorized by the Secretary of the Interior only when he is advised by the Secretary of Agriculture that such development will not interfere with the primary purposes for which the land was acquired and only in accordance with such conditions as may be specified by the Secretary of Agriculture in order to protect such purposes." Thus, Congress and the executive, branch again directed the agencies to evaluate ***how*** to develop such minerals consistent with other applicable laws not ***whether*** to do so. Simply stated, in seeking to withdraw these minerals, BLM and USFS are attempting to nullify duly enacted federal legislation and exceed the authority granted to them by Congress.

III. BECAUSE THE WITHDRAWAL IS SUBJECT TO VALID EXISTING RIGHTS, INCLUDING SIGNIFICANT FEDERAL, STATE, AND PRIVATE MINERALS RIGHTS, THE WITHDRAWAL CAN ACHIEVE ITS STATED PURPOSE.

USFS's and BLM's notices recognize that the Withdrawal and Plan Amendment must be subject to valid existing rights. Consequently, any withdrawal decision is precluded from withdrawing those federal minerals that constitute valid existing rights.

In the SNF, companies holding prospecting permits conduct a variety of exploratory activities on the permitted lands to identify and characterize the hardrock minerals on those lands. As experience in the Withdrawal Lands confirms, over the course of years, companies will invest millions of dollars conducting drilling operations, surveying surface resources, navigating environmental review and permitting, and analyzing the feasibility of developing those minerals. In those circumstances where the geologic data, financial evaluations, and engineering and environmental studies demonstrate that a reasonable person of ordinary prudence could profitably develop a mine, the companies are deemed to have discovered a valuable mineral deposit. It is this discovery of a valuable deposit that establishes the entitlement to a preference right lease from BLM (subject to appropriate restrictions imposed by USFS for protecting surface resources). Thus, a successful prospecting permit holder is entitled to a preference right mineral lease if the criteria in 43 C.F.R. § 3507.11 are met. *See* 43 C.F.R. § 3507.11(a) (including as requirement the discovery of valuable mineral deposit on lands subject to permit within its term). And it is this discovery of a valuable deposit that creates a valid existing right to the minerals subject to the prospecting permit. *See Skaw v. United States*, 13 Cl. Ct. 7, 28 (1987) (holding that claimant has valid existing rights upon discovery of valuable mineral deposit, as of the time of relevant withdrawal); *see also Vane Minerals (US), LLC v. United States*, 116 Fed. Cl. 48, 57 (2014) ("BLM and [USFS] must conduct a valid existing rights determination . . . to ascertain whether a claimant has made a discovery of a valuable mineral deposit, thus endowing them with 'valid existing rights.'").

Consistent with this established right, resulting from years of substantial economic investment, companies will submit an application for a preference right lease. While the specific considerations differ depending on whether the lands are acquired or public domain lands, the general leasing process is the same, including requirements relating to application requirements, environmental review, and lease terms and conditions.

Multiple companies maintain valid existing rights over federal hardrock minerals in the SNF. MiningMinnesota fully supports individual companies in the exercise of their legal rights with respect to their leases, permits, and applications. In demonstrating the discovery of a valuable deposit through various efforts, these companies have established valid existing rights to the minerals and became entitled to receive a preference right lease, subject to specified USFS requirements for surface resources. *See Skaw*, 13 Cl. Ct. at 28; *see also Vane*, 116 Fed. Cl. at 57. They have invested hundreds of millions of dollars in exploration and development activities with the expectation of, at a minimum, applying for mining permits. To deprive them of this asset based on unlawful, arbitrary and capricious, and flawed grounds is unsupportable.

Federal minerals subject to valid existing rights cannot be included in the Withdrawal. Indeed, both BLM and USFS recognize the well-established principle that they may not infringe on valid existing rights for mineral holders. Thus, the Withdrawal must exclude:

- All federal minerals subject to valid existing rights (e.g., rights created through discovery of valuable deposit) (Figure 5 shows some examples of federal valid existing rights.)

- State minerals (including reasonable access over federal surface) (Figure 6 depicts the state minerals that constitute valid existing rights, including those minerals subject to active state leases.)

- Private minerals (including reasonable access over federal surface) (Figure 7 shows private minerals that qualify as valid existing rights in the SNF.)

Consequently, any withdrawal intended to prevent mineral development in the Rainy River watershed will be ineffective because it cannot impact these mineral rights, which are expansive. The State has about 147,600 acres of mineral ownership within the SNF and the Rainy River watershed, and this land "has mineral potential for exploration and discovery of valuable minerals." (Brice Aff. ¶ 35.) A similar amount of private mineral rights are within the SNF and Rainy River watershed, and this "private land also has significant mineral potential." (*Id.*) The mining of this state and private mineral wealth is likely to take place in the Rainy River watershed over the next 20 years. (*See* Hays Aff. Ex. A, at 6 (explaining that this probability of mining is based on factors such as: the exploration already conducted; available and emerging exploration, mining, and processing technology; available environment and emerging mitigation technology; current federal and state laws and regulations; global demand and economic development; and world events).) Given the likelihood that mineral development will proceed at some scale, the federal agencies should be investing their resources in focusing on site-specific analysis of exploration and/or development proposals, which can then form a reasonable basis for general stipulations.

IV. AMENDMENT OF THE SNF PLAN TO PRECLUDE THE EXPLORATION AND DEVELOPMENT OF THE SNF FEDERAL MINERALS IS A VIOLATION OF APPLICABLE FEDERAL LAWS.

Any Withdrawal requires, at a minimum, an amendment to the SNF Plan so as to eliminate as a "desired condition" the exploration and development of federal minerals. *See* 36 C.F.R. § 219.13(a) (specifying that plan amendment is required to modify or remove a plan component); *see also* SNF Plan at 1-11 – 1-12. Consistent with this legal requirement, USFS indicates in its notice that it expects to amend the SNF Plan to conform it to the Withdrawal.

USFS, however, is obligated to comply with several statutes in managing the national forests, and the Plan Amendment must be consistent with these statutes, including the Organic Act, the NFMA, and the MUSYA. When these statutes are read in conjunction with FLPMA and the various mining statutes, including the MN National Forest Leasing Act, they establish that BLM is ultimately responsible for management of the minerals underlying national forests and that USFS lacks the legal authority to prohibit mineral development in SNF. As one federal judge expressed it, "the Secretary of Agriculture and the forest plans created within his agency

do not have authority to open or close lands to mining." *See Yount v. Salazar*, 2014 WL 4904423, *24 (D. Ariz. 2014).

Eliminating exploration and development of federal minerals as a "desired condition" contradicts these statutes, and therefore the Plan Amendment is precluded under federal law. Simply stated, "minerals on federal land are to be managed to promote exploration and development, [and] Congress intended land use planning to facilitate that objective, not impede it." Constance E. Brooks, Multiple Use Versus Dominant Use: Can Federal Land Use Planning Fulfill the Principles of Multiple Use for Mineral Development?, 33 RMMLF-INST 1 (1988).

A. The Organic Act Establishes that USFS May Not Unreasonably Restrict Mineral Exploration and Development in the SNF.

Under NFMA, USFS, acting on behalf of USDA, must "develop, maintain, and, as appropriate, revise land and resource management plans for units of the National Forest System." 16 U.S.C.. § 1604(a). In these plans, USFS "must take both environmental and commercial goals into account." *Ohio Forestry Ass'n v. Sierra Club*, 523 U.S. 726, 729, 118 S.Ct. 1665, 140 L.Ed.*2d* 921 (1998). USFS must consider its statutory mandates to develop and administer the national forests. *Montanans For Multiple Use v. Barbouletos*, 568 F.3d 225, 226–27 (D.C.Cir.2009).

The Organic Act establishes that USFS may not unreasonably restrict mineral exploration and development in national forests. USFS is not authorized to prohibit any person from entering national forests for "prospecting, locating, and developing mineral resources" so long as such persons "comply with the rules and regulations covering such national forests." *See* 16 U.S.C. § 478. In enacting the Organic Act, Congress indicated:

> Since ***these forests are not to be in the nature of parks***, they are to remain open to public use and enhance for all purposes, excepting in so far as restrictions appear necessary in order to protect the property from damage or degradation. ***Prospecting and mining are to be permitted under proper regulations.***

Public Forest Reservations, Report of the House of Representatives Committee on Public Lands, H.R. Rep. No. 1593, 54th Cong., 1st Sess. 19 (1896) (emphasis added). Thus, Congress again expressed its intention that USFS had a role to play in regulating mineral exploration and development, but could not flatly prohibit such development:

B. Under MUSYA, USFS's Balancing of the Forest's Renewable Surface Resources Cannot Be Construed to Adversely Affect Mineral Exploration and Development.

USFS justifies its Application by asserting that it must protect the Rainy River watershed from the adverse effects of developing these federal minerals. In so doing, USFS seeks to prioritize the use of the watershed (a statutorily-defined renewable surface resource, over the development of minerals. USFS is precluded under MUSYA from doing so and, to the contrary, must recognize minerals as the dominant use of SNF lands outside the BWCAW. This result is particularly warranted when mining companies can use appropriate mitigation measures and safeguards to protect Minnesota's waters. (*See* Brice Aff. ¶¶ 8-21 (discussing development of extensive Minnesota minerals regulatory regime and observing that there have been no known

negative impacts to water quality in the BWCAW from minerals exploration and development).) Mining and protected waters are not mutually exclusive conditions.

Land and resource management plans must comply with MUSYA. *Yount v. Salazar*, 2014 WL 4904423, *24 (D. Ariz. 2014) (stating that USFS land and resource management plans must "provide for multiple use and sustained yield of the products and services obtained therefrom in accordance with MUSYA"). The current SNF Plan confirms its intent to comply with this statute. *See* SNF Plan at 1-5, 1-9.

MUSYA provides that USFS must "administer the renewable surface resources of the national forests for multiple use and sustained yield of the several products and services obtained therefrom." 16 U.S.C. § 529 (emphasis added); see also 76 Fed. Reg. at 8494. Moreover, under MUSYA, "multiple use" is defined as "the management of all the various renewable resources of the national forests" and these multiple uses include "outdoor recreation, range, timber, watershed, and wildlife and fish." 16 U.S.C. §§ 528, 531(a) (emphasis added). Significantly, the phrase "renewable surface resources" does not include minerals, which are nonrenewable resources located in the subsurface. And if this statutory language were not sufficient to establish that MUSYA does not equate minerals to renewable surface resources, MUSYA states that nothing in USFS's mandate to balance renewable forest surface resources (not minerals) "***shall be construed so as to affect the use or administration of the mineral resources of national forest lands***." 16 U.S.C. §§ 528, 531(a) (emphasis added); *see also Rocky Mountain Oil & Gas Ass'n v. United States Forest Serv.*, 157 F.Supp.2d 1142 (D. Mont. 2000) (determining that MUSYA does not apply to mineral leasing in national forests).

The exclusion of minerals from MUSYA's balancing establishes that minerals are not considered to be on equal footing with the renewable surface resources in the national forests. Rather, consistent with well-established principles of law, minerals remain the dominant estate and USFS is legally precluded from justifying a blanket prohibition on mineral development on the basis of protecting a particular surface resource.

USFS, however, is continuing its pattern of overlooking these statutory limits on its authority to restrict mineral exploration and development. For example, when USFS last revised its planning rule, USFS noted that it believed the meaning of MUSYA "has changed since 1960, and incorporates all values, benefits, products, and services [USFS] now knows the [National Forest System] provides, and what are now more typically identified as ecosystem services." 76 Fed. Reg. at 8494. USFS appears to be adhering to this philosophy as part of its efforts to withdraw federal minerals from exploration and development and amend the SNF Plan. USFS, however, does not have statutory authority to rewrite MUSYA nearly sixty years after its enactment to remove the mineral exemption and effectively place minerals on the same playing field as the renewable surface resources discussed in MUSYA. USFS must abide by MUSYA's unambiguous mandate that, in balancing the renewable resources of the national forests, USFS cannot manage the multiple uses of the national forests so as to adversely affect the mineral resources of national forest lands.

In addition, USFS and BLM present, as certain and inevitable, that mining will result in adverse impacts to the BWCAW due to the hydrologic connection in the Rainy River watershed. This characterization fails to take into account available evidence demonstrating that mining in

the SNF will not adversely affect the BWCAW. Specifically, based on initial studies of hydrogeologic conditions in key areas of the Withdrawal Lands, "data collected to date overwhelmingly indicates an absence of a groundwater migration pathway from the ore body where mining will take place to surface waters." (Foth Infrastructure & Environment, LLC, Memorandum, *Lack of Hydrologic Basis for BLM and USFS Decision to Reject Renewal of Twin Metals Minnesota's Mineral Leases and Potentially Withdraw Federal Minerals in the Rainy River Watershed*, at 15 (Aug. 9, 2017) ("Foth Report").) As a result, there is "no route for constituents released from the ore body either during operations or following reclamation and closure, to reach surface water and flow into the BWCA Wilderness lakes or rivers." (*Id*.) This conclusion is consistent with the actual outcomes experienced to date in the Rainy River watershed. (*See* Brice Aff. ¶21 (discussing observed impacts to water quality in the BWCAW from historic minerals exploration and development activities in watershed).) Because USFS has not demonstrated that mining will adversely impact waters within the BWCAW, its decision to unlawfully prioritize the watershed over mineral development is particularly troubling.

C. The Plan Amendment Must Be Consistent with USFS Regulations and Guidance, and Mining Should Be Afforded Appropriate Management Priority.

USFS regulations and guidance recognize the importance of mineral exploration and development and require USFS to facilitate such activities. The Withdrawal and effective prohibition on mineral development to be included in the Plan Amendment are inconsistent with existing USFS policy both nationally and within the SNF.

1. The Plan Amendment Violates USFS's National Policies

According to USFS's stated policies, it "considers mineral exploration and development to be important parts of its management program." FSM 2822.03. Moreover, while USFS "is mainly involved with surface resource management and protection, it recognizes that mineral exploration and development are ordinarily in the public interest and can be compatible in the long term, if not immediately, with the purposes for which the National Forest System lands are managed." *Id*.

USFS directives are also quite firm on the boundaries of wilderness areas, stating that "***withdrawals may not be requested merely to protect the existing wilderness character within a wilderness or primitive area***." FSM 2822.21 (emphasis added). The agency's guidance further specifies that USFS should "***not maintain buffer strips*** of undeveloped wildland to ***provide an informal extension of wilderness***." FSM 2320.3 (emphasis added). As federal courts have recognized, "at some point, the wilderness stops and civilization begins." *Izaak Walton League*, 516 F. Supp. 2d at 989-90

2. The Plan Amendment Is Inconsistent with USFS Policies Applicable to the SNF.

USFS regulations provide detailed instruction on the preparation of land and resource management plans, including requirements relating to specific plan components. If USFS proceeds with Amendment, such action must be consistent with these regulatory requirements and should also take into account USFS's analysis and conclusions from two previous SNF Plan versions (1986 and 2004).

USFS land and management plans include "desired conditions," which is defined as a "description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed." 36 C.F.R. § 219.7(e)(1)(i); *see also* U.S. Forest Serv., Forest Plan, Ch.1, at 1-7; Ch. 4 at 4-16 (2004) (defining "desired conditions as "broad statements that describe the situation that the Forest Service will strive to achieve" and noting that "[e]fforts will be made to move resources toward desired conditions"). These management plans also include "standards and guidelines." In this context, a "standard" is a "mandatory constraint" on decision-making "established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements." 36 C.F.R. § 219.7(e)(1)(iii). A "guideline" is a "constraint" on decision-making that allows flexibility so long as meets the guideline's purpose of achieving or maintaining a desired condition. *Id*. § 219.7(e)(1)(iv). Thus, as USFS notes in the SNF Plan, these standards and guidelines are "the specific technical direction for managing resources" and "provide another link in moving toward the desired conditions." U.S. Forest Serv., Forest Plan, Ch.1, at 1-8.

USFS's current and previous land and resource management plans for the SNF appropriately recognize USFS's responsibility to "permit" mineral exploration and development in the SNF. Those current and previous plans included a desired condition to give effect to this responsibility, and USFS has no lawful or technical basis to change course now.

1986 SNF Plan

When USFS issued the 1986 SNF Plan, it did so after conducting an EIS ("1986 SNF EIS"), which included an analysis of the potential impacts associated with mineral exploration and development. In the SNF EIS, USFS explained its reasoning behind designating mineral development as a desired condition: "[USFS] has limited control over the development of minerals owned by others. [Except for the BWCAW, MPA, and certain research areas], the rest of the Forest is available. *Areas of the Forest most likely to be developed have been identified* and guidelines prepared to mitigate the effects on surface resources." [1986 SNF EIS, p. 1-9 (emphasis added)]. Additionally, USFS recognized that SNF's "nickel deposits are the largest in the Country," that "a large scale mining operation is possible," and that such operations "may entail the use of a large number of surface resources." U.S. Forest Serv., Forest Plan, Ch. 2 at 2-11, Ch. 4 at 4-16 (1986). Based on USFS's apparent understanding of its statutory obligations and limited authority over private and state minerals, USFS's discussion of minerals in the SNF EIS and the 1986 SNF Plan properly focus on how mineral development should proceed (*e.g.*, applicable standards and guidelines) instead of whether mineral development should occur.

2004 SNF Plan

When USFS updated its SNF Plan in 2004 to its current form, USFS again recognized the importance of developing both federal and non-federal minerals. Noting in the SNF Plan EIS that "the existing direction for managing federal mineral resources on the two National Forests [Superior and Chippewa] has been working well," USFS elected not to conduct a detailed analysis of minerals. Instead, it carried forward the management direction for minerals from the 1986 SNF Plan. 2004 SNF EIS, at 1-29.

Consistent with this analysis, the SNF Plan components reflect USFS's understanding of its statutory responsibilities and technical analysis. USFS's management guidance differs as between federal and non-federal minerals and as between the management area in which they are located: the BWCAW, the MPA, or the remainder of the SNF. Figure 1 shows the location of these management areas. Table 1 summarizes relevant plan components relating to the exploration and development of minerals within the SNF, including desired conditions, standards, and guidelines.

Table 1 – Summary of Relevant SNF Plan Components for Mineral Exploration and Development

Minerals	Location	Relevant Desired Condition, Standards and Guidelines
Federal Minerals	SNF (outside BWCAW & MPA)	Desired Condition D-MN-1: "Exploration and development of mineral and mineral material resources is allowed on National Forest land, except for federally owned minerals in designated wilderness (BWCAW) and the Mining Protection Area (MPA)." SNF Plan, at 2-9. Desired Condition D MN-2: USFS should "[e]nsure that exploring, developing, and producing mineral resources are conducted in an environmentally sound manner so that they may contribute to economic growth and national defense." *Id*.
	Within MPA	Standard S-MN-6: "No permit, lease, or other authorization will be issued for the exploration of, or mining of minerals owned by the United States. *Id*.
	Within BWCAW	Standard S-MN-3: "No permit, lease, or other authorization will be issued for the exploration of or mining of minerals owned by the United States. *Id*.
Non-Federal Minerals	SNF (outside BWCAW & MPA)	Standard S-MN-10: The use of National Forest System land for exploration and development of nonfederal mineral rights will be governed by the reserved or outstanding rights indicated in the chain of title. *Id*. at 2-10. Standard S-MN-11: A permit is not required for occupancy of federal surface for exploration or development of the underlying mineral estate unless the chain of title indicates one is appropriate. *Id*. Standard S-MN-12: The protection of federal surface will be accomplished through negotiating with the mineral owner or operator and implementing applicable State and federal Laws. *Id*. Standard S-MN-13: Where a federal permit is required, mitigation measures and management requirements will be established to minimize and mitigate adverse environmental effects. *Id*. Guideline G-MN-1: Land disturbed by mineral development activities or facilities will generally be reclaimed as soon as practical. Reclamation work will generally reflect the landscape character and processes of the surrounding landscape. Reclamation measures will generally be implemented so that the mining project areas would meet the pre-project SIO as soon as practical.

The plan components related to mineral exploration and development in the SNF Plan are generally consistent with USFS's statutory obligations. For example, USFS recognized that its responsibility is to permit mineral exploration and development subject to appropriate restrictions to protect the environment. Similarly, with respect to private and state minerals, the specific technical direction provided by the applicable standards and guidelines establish that USFS has limited authority to impede the access to or development of state and private minerals in the SNF. USFS developed these plan components as part of USFS's deliberative process and analysis of relevant technical matters, and USFS should not abruptly reverse these policies, particularly without either a statutory mandate or technical basis for doing so.

3. USFS Should Ensure the Plan Amendment Aligns with USFS's Mineral Policies

At this stage, USFS has not explained the scope of its proposed Plan Amendment other than to note it would bring SNF Plan into conformance with the Withdrawal. Without this information, MiningMinnesota cannot be expected to formulate comprehensive comments to the Plan Amendment. USFS regulations require that companies must have an opportunity to comment on specific plan amendment language. 36 C.F.R. §§ 219.5(2)(ii); 219.13(2). Accordingly, MiningMinnesota reserves its right to submit substantive comments, objections, administrative appeals, or other challenges pertaining to this matter.

To the extent that the proposed Plan Amendment intends to eliminate or impede exploration or development of federal, state, and private minerals as desired conditions, such Plan Amendment would be barred by the various laws discussed in these Comments. BLM and USFS simply cannot use their administrative powers, whether through Withdrawal or Plan Amendment, to disregard congressional mandates and restrictions on their authority. Congress told USFS in multiple statutes that the agency must ***permit*** mineral exploration and development. USFS cannot use a land and resource management plan to overcome congressional will and countermand statutory directives established in duly passed and signed federal laws.

V. FEDERAL POLICIES PROMOTE MINERAL EXPLORATION AND DEVELOPMENT

A. Federal Mineral Policy Favors Development of the SNF Federal Minerals.

Congress has repeatedly established a national policy favoring the exploration and development of mineral resources. For example, in 30 U.S.C. § 21a, which sets forth national mining and minerals policy, Congress declared:

> [I]t is the continuing policy of the Federal Government in the national interest to foster and encourage private enterprise in
>
> > (1) the development of economically sound and stable domestic mining, minerals, metal and mineral reclamation industries,
> >
> > (2) the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs,
> >
> > (3) mining, mineral, and metallurgical research, including the use and recycling of scrap to promote the wise and efficient use of our natural and reclaimable mineral resources, and
> >
> > (4) the study and development of methods for the disposal, control, and reclamation of mineral waste products, and the reclamation of mined land, so as to lessen any adverse impact of mineral extraction and processing upon the physical environment that may result from mining or mineral activities.

30 U.S.C. § 21a (emphasis added).

Similarly, in 30 U.S.C. § 1602, Congress further provided that "it is the continuing policy of the United States to promote an adequate and stable supply of materials necessary to maintain national security, economic well-being and industrial production with appropriate attention to a long-term balance between resource production, energy use, a healthy environment, natural resources conservation, and social needs." 30 U.S.C. § 1602. As part of this policy, federal agencies are required to, among other things: (1) identify needed minerals and "assist in the pursuit of measures that would assure the availability of materials critical to commerce, the economy, and national security"; (2) "promote and encourage private enterprise in the development of economically sound and stable domestic materials industries"; (3) "establish a long-range assessment capability concerning materials demands, supply and needs, and provide for the policies and programs necessary to meet those needs"; and (4) "facilitate availability and development of domestic resources to meet critical materials needs." *Id*.

In enacting such legislation, the federal legislative and executive branches in binding laws recognized the importance of a reliable supply of domestic minerals to meet the country's economic, industrial, national security and environmental needs. This national policy and these national concerns have particular force in the context of copper-nickel mineral exploration in the SNF. These minerals, which are currently imported in significant quantities and which are abundant in the SNF, play a significant role in the U.S. economy, are essential to the country's national security, and are critical components of innovative environmental and other commercial technologies. Doctor Ronald Hays discusses in his affidavit and report in support of these Comments the importance of minerals to these national interests, stating that the national economy of the United States depends substantially on the availability of basic materials for its sustainability. (Hays Aff. ¶ 7.) A sustainable mining industry requires planning and decisions concerning future supplies to have a "long-term global perspective and an integrated approach to land use and to resource and environmental management" (USGS). (Hays Aff. Ex. A, at 12.)

Additionally, Dr. Hays observes that the United States national security is currently at risk because the United States is dependent on other countries for basic materials for producing consumer and defense goods. (Hays Aff. ¶ 6, Ex. A, at 6.) A 20-year withdrawal of mining for these minerals would have significant national security implications by increasing the United States' reliance on imports of critical materials from other countries. (Hays Aff. ¶ 6.)

Mining copper, nickel, cobalt and PGM minerals in the Rainy River watershed will contribute to the national economy and national defense, reduce risk to the economy's supply chain and other commercial activities, increase national manufacturing opportunities, and decrease the United States trade balance. (Hays Aff. ¶ 7.) Federal law therefore requires USFS to adopt measures to promote the timely exploration of such deposits in the SNF for national security and economic purposes.

Moreover, Congress has, in recognition of the significance of such hardrock minerals, determined that the SNF should be managed so as to promote hardrock mining. Indeed, sixty years ago, Congress enacted special legislation whose purpose was "to permit the development of mineral resources in the national forests in Minnesota." 16 U.S.C. § 508b; *see also* Senate Report 81-1778. At that time, both USFS and the BLM testified before Congress that "***it is highly desirable to permit the prospecting, development, mining, and removal, and utilization of mineral resources within the Superior National Forest***." Senate Report 81-1778 (emphasis

added). This national policy has particular force in the context of copper-nickel mineral exploration in the SNF because estimates of such resources in the SNF "indicate that these deposits contain sufficient copper to supply the nation's needs for 20 years, and sufficient nickel for 70 years." 1986 EIS at 3-23. According to Dr. Hays, copper-nickel development in the SNF could significantly increase the annual U.S. production of copper to roughly 1.9 million tons and nickel production to 100,000. Based on current U.S. mineral import and consumption rates, development of copper-nickel deposits in the SNF could enable the United States to become a net exporter of nickel instead of an importer and, based on 2016 copper pricing, could reduce the annual U.S. trade deficit by approximately $2.2 billion. (Hays Aff. Ex. A, at 11-13.)

Simply stated, Congress has already determined that the SNF should be managed to promote the exploration and development of mineral resources and that BLM should advance these policies subject to only specified involvement by USFS. The agencies cannot eviscerate this Congressional mandate through the withdrawal, planning, and environmental review processes. To the contrary, given the national policy favoring mineral exploration, the strategic importance of hardrock minerals, and the express statutory mandate that the SNF be used for mineral exploration and development, the agencies should abandon the proposed Withdrawal and related regulatory actions. At a minimum, BLM and USFS must ensure that the EIS relating to the proposed regulatory actions is scoped in accordance with these applicable mineral policies and statutes so that if the proposed Withdrawal and Forest Plan Amendment move forward, the appropriate reviews are undertaken to ensure that final regulatory actions are consistent with the controlling law.

B. Exploration and Development of SNF Federal Minerals Is Critical to National Security, Minnesota's Education Funding, as Well as to the National, State, and Local Economies.

The base and precious metal deposits in the Duluth Complex are among the very largest and most valuable in the world. (Hays Aff. ¶ 5, Ex. A at 2 (observing that the Duluth Complex is one of the largest and most valuable, undeveloped copper-nickel resources in the world).) Current estimates suggest that, depending on the cutoff grade used in the calculations, the Duluth Complex may contain as much as 20 billion tonnes (and perhaps more) of copper-nickel resources. Consequently, this strategic natural resource provides a tremendous opportunity to advance many national policies, which encourage the mining of mineral resources by the private sector as long as financial, environmental, and social risk considerations are appropriately addressed. (Hays Aff. ¶ 7, Ex. A at 12.) Thus, in addition to federal mineral policy, mineral development within the SNF advances economic, educational, and national security policies.

1. Economic Policy

Mining of copper, nickel, cobalt, gold and other hardrock minerals in the Rainy River watershed advances sound national economic policies because this mineral development will contribute substantially to the national, state, and local economies, reduce supply chain and manufacturing risks, decrease the U.S. trade imbalance, and promote technological innovation. (Hays Aff. ¶ 7, Ex. A at 11-14.) Minerals are "fundamental to the U.S. economy, contributing to the real gross domestic product at several levels, including mining, processing, and manufacturing finished products." United States Department of Interior and United States

Geological Survey, *Mineral Commodity Summaries 2017*, 7 (2017). The United States relies heavily on "foreign sources for raw and processed mineral materials." *See id.* By maintaining a net import reliance for critical metals (e.g., aluminum, copper, iron, and steel), the United States remains dependent on favorable trade relations with other countries to ensure an adequate supply of metals for key domestic industries. *Id*. at 6.-7. Given the high rates of mineral consumption, the rise in economic nationalism, and infrastructure expansion in other countries, the development of a stable domestic supply of these metals will enable the United States to reduce its reliance on foreign imports and have metals available for export to other countries. *See id.*

On a state and local level, mineral exploration and mining activities in the SNF in the past have had and will continue to have a tremendous impact on Minnesota's economy. (Hays Aff. ¶ 8, Ex. A, at 14-17; Brice Aff. ¶¶ 31-32.) Minnesota is uniquely situated to become the primary source of certain valuable metals for the United States. Indeed, given the projected amount of minerals on state lands, including various state trusts, in the SNF, the State of Minnesota and local governmental units will benefit substantially from increased tax revenues, royalties, educational funding, and other direct and indirect contributions due to mineral exploration and development in the SNF. (Brice Aff. ¶¶ 31-32; Hays Aff. ¶ 8, Ex. A, at 14-17.) Finally, mineral exploration and development in SNF will provide a critical step in revitalizing the economically depressed communities in northern Minnesota by creating thousands of local jobs, by resulting in billions of dollars in projected capital expenditures, by improving infrastructure and public services, and by attracting businesses and investment.

The proposed Withdrawal and Plan Amendment, however, may adversely affect or stop all exploration and mining in the SNF, within the Rainy River watershed, and even along the entire Duluth Complex outside the watershed. Surface lands and minerals within the Rainy River watershed and the SNF are owned in a checkerboard pattern in which tracts of state, private, and federal surface and minerals are intermingled with each other. (*See* Brice Aff. ¶ 25, Figures 9-10.) Figure 8 shows a representative portion of the SNF, which includes this patchwork of federal, state, and private mineral interests. Withdrawal of federally-owned lands will impair, and may even effectively preclude, state and private owners from exploring and developing their minerals. The unavoidable fact is that, because of the commingled ownership pattern, the federal, state, and private minerals owners must coordinate closely regarding access, geology, design, environmental protection, siting of infrastructure and economic considerations. (Brice Aff. ¶ 25.) The proposed Withdrawal and Forest Plan Amendment will prevent that cooperation, ensuring that hundreds of thousands of acres of state and private minerals will become effectively landlocked and practically unavailable for exploration and development. (*Id.*)

The negative consequences of losing state and private mineral opportunities will be severe. The proposed federal actions of BLM and USFS will have major adverse effects on state, regional and local economic stability and growth, employment, household incomes, property values, public services, business sustainability, and other economic considerations, including population stability; housing construction and improvements; transportation, energy and other infrastructure; health care availability and innovation; and education and other governmental services. (Hays Aff. ¶ 8, Ex. A, at 14-17; Brice Aff. ¶¶ 32-37.)

2. Educational and Local Government Funding

Under Minnesota's constitution and statutes, the Minnesota Department of Natural Resources ("DNR") is responsible for managing approximately 2.5 million acres of school and university trust lands and an additional 1 million acres of mineral rights (collectively, "School Trust Lands"). (Brice Aff. ¶¶ 27-34.) The State contributes any funds generated from school trust lands to the permanent school fund ("School Trust"), which is managed by the State Board of Investment. The stated goal of this School Trust is to:

> secure the maximum long-term economic return from the school trust lands consistent with the fiduciary responsibilities imposed by the trust relationship established in the Minnesota Constitution, with sound natural resource conservation and management principles, and with other specific policy provided in state law.

Minn. Stat. § 127A.31.

Minnesota holds approximately 400,000 acres of School Trust Lands with mineral potential within the SNF (approximately 100,000 of which are within the Withdrawal Lands), and many parcels contain valuable copper-nickel deposits. (Brice Aff., Fig. 6.) When these minerals are recovered, the State receives, on behalf of the School Trust, royalties that escalate over a period of time. Because these funds are dedicated to Minnesota's schools, the State's education system benefits immensely from mineral development on state leased land. In fact, Doctor William Brice, a former Director of the DNR Lands and Minerals Division, observes in his affidavit filed in support these Comments that minerals have provided the majority of the income to the corpus of the permanent School Trust fund (valued at over $1 billion in 2015). DNR in 2011 projected that the potential total royalty income to the School Trust from copper-nickel development on School Trust lands is approximately $2.4 billion. (Brice Aff. ¶ 33.) As Dr. Brice notes, virtually all of this income would be generated in the Rainy River watershed and the Superior National Forest. (*Id.*) The proposed Withdrawal would make much of the state minerals inaccessible due to the absence of direct access and lack of federal cooperation, and/or other practical impediments discouraging or preventing state mineral development. (*Id.* ¶ 36.) The potential loss of this educational funding due to restrictions on development of state minerals within the Rainy River watershed would be devastating.

Under Minnesota law, DNR also manages tax-forfeited lands containing mineral interests for the benefit of the counties. Approximately 7,000 acres of tax-forfeited mineral lands are currently under state mineral lease in the SNF, 80 percent of which accrue to the local taxing districts of S. Louis, Lake, and Cook Counties. (*Id.* ¶ 30.) There are additional tax-forfeited mineral lands not yet under lease. (*Id.* ¶¶ 27-28) Once more, the proposed federal actions would directly deprive these local governmental units of funding by effectively preventing exploration and development of the copper-nickel resources within the Rainy River watershed. (*Id.*)

3. National Security

The minerals present in the SNF are essential to the national security interests of the United States. (*See* Hays Aff. ¶ 6, Ex. A, at 6.) First, because metals are critical for the

production of national-defense equipment and vital technologies, the development of a stable source of domestic minerals is necessary to ensure that the United States has adequate resources for its military and security efforts. Second, dependence on other countries for these metals compromises the federal government's ability to achieve strategic goals and enables foreign governments to capitalize on this dependence. By reducing dependence on foreign sources of key minerals and developing domestic sources for such minerals, the United States can best achieve uncompromised access to those metals that are essential for its national security.

The actions proposed by USFS and BLM will prohibit or, at a minimum, unnecessarily impede and delay, exploration and development, and will also increase the already growing expense of exploration and mining. Neither the United States nor Minnesota can afford to risk the effects of burdening this critical industry. (*See* Hays Aff. ¶ 6 (noting that U.S. dependence on foreign mineral resources is a national security risk, which is heightened by the proposed Withdrawal).)

PART 3 – WILDERNESS LAWS, ENVIRONMENTAL LAWS AND MODERN MINING PRACTICES WILL PROTECT FOREST AND ENVIRONMENTAL RESOURCES.

VI. THE WILDERNESS ACT AND BWCAW ACT OF 1978 ENSURE THE BWCAW WILL BE ADEQUATELY PROTECTED FROM ANY IMPACTS OF MINERAL EXPLORATION AND DEVELOPMENT.

In proposing to withdraw more than 200,000 acres of federal minerals from exploration and development, USFS and BLM effectively seek to turn the Rainy River watershed into a buffer zone from the BWCAW. Under existing federal and Minnesota law, however, sufficient protections for the BWCAW already exist, including two different buffer zones established under federal law (the MPA) and state law (the Mineral Management Corridor). (Figure 1.).

These existing federal and state buffer zones protect the BWCAW from environmental impacts by preventing mining within those zones. The BWCAW spans 1.09 million acres and is generally surrounded by the 230,000-acre MPA and a 200,000 acre state Mineral Management Corridor. Collectively, 1.5 million acres of national forest land already have been withdrawn from mineral entry despite the presence of extremely valuable mineral resources. Expanding these buffer zones to prohibit mining on an additional 230,000 acres is both unnecessary and inconsistent with federal law (as discussed above) and previous agreements of the DOI and the USDA in deciding to set aside lands for designation as the BWCAW while allowing mineral development to proceed in the rest of SNF.

A. The DOI and USDA Reached Agreement Decades Ago on Defining and Preserving BWCAW as a Wilderness Area While Allowing Resource Development to Proceed in the Rest of the SNF; This Agreement Should Be Honored.

Roughly one year after the passage of the Wilderness Act of 1964, then USDA Secretary (and former Minnesota Governor) Orville Freeman formed a committee to evaluate the management of the Boundary Waters Canoe Area. *See Izaak Walton League v. St. Clair*, 353 F. Supp. 698, 706 (D. Minn. 1973) *overruled on other grounds by* 497 F.2d 849 (8th Cir. 1974). After soliciting extensive public input, the committee developed the recommendation that later

gave rise to many of the restrictions currently applicable to the BWCAW under federal law. In addition, the committee directly evaluated mining activities and determined that an agreement was necessary to balance the various competing interests. The general architecture of this agreement was as follows:

> (1) within the Boundary Waters Canoe Area (a substantially smaller area than the current BWCAW), federal minerals would be excluded from development and the federal government should acquire, if possible, private and state minerals to prevent their development and
>
> (2) "[f]ull mineral development should be continued on the portion of the Superior National Forest outside the BWCA."

Correspondence from Boundary Waters Canoe Area Review Committee to Secretary Orville Freeman (Dec. 15, 1964); *see also* Statement by Secretary Freeman on the Report of the Review Committee for the Boundary Water Canoe Area.

Consistent with these recommendations, that same year, Secretary of Interior Stewart Udall and the Secretary of Agriculture "formulated a joint policy" with respect to "the disposition of applications for mineral leases and explorations permits" within SNF. DOI Secretary's Memorandum to BLM Director, *Mineral Exploration and Leasing – Superior National Forest (Minnesota)* (Feb. 16, 1965) ("DOI's BWCA Memorandum"). In describing this joint policy, the Secretary of the Interior noted:

> Mineral development in the Superior National Forest has been encouraged by the passage of the Minnesota National Forest Leasing Act of 1950. Because the Mining Act of 1872 and Mineral Leasing Act of 1920 were not applicable to the northern Minnesota national forests, special legislation was passed by Congress. The pressing need for minerals resulting from the Korean War emergency gave rise to passage of this legislation.

Id. The Secretary of Interior recognized that, within SNF, "two principle zones of management" were established: (1) the BWCA (within which no extensive mining had historically taken place and which was being preserved under various laws) and (2) the remainder of the SNF. *Id*. Both DOI and USDA "have drawn a clear distinction between the national forest lands within the [BWCA] and those outside." *Id*. For federal minerals within the BWCA, including those subject to previously-issued prospecting permits, the two departments agreed to withdraw approvals for and no longer approve mineral exploration and development activities. *Id*. For all other lands within the SNF, however, DOI and USDA agreed "that full mineral development should be encouraged, consistent with the concept of multiple use." *Id*. Both departments acknowledged that the "encouragement of mineral development in this area will doubtless contribute materially to the economy of Northern Minnesota." DOI's BWCA Memorandum; DOI Deputy Assistant Secretary's Memorandum to BLM Director, *Mineral Exploration and Leasing – Boundary Waters Canoe Area – Superior National Forest, Minnesota*, (Feb. 2, 1965) (enclosing copy of letter from Secretary of DOI to Secretary of USDA, dated February 16, 1965). Such mineral development would remain subject to USFS regulations regarding surface disturbance. The

Secretary of Interior went on to note that BLM had already "accumulated sufficient data" to implement this policy. *Id.*

These policy decisions made by Congress, and appropriately implemented by President Johnson's cabinet, remain fully applicable today and are not subject to second-guessing by either BLM or USFS. The agencies' effort to modify, more than 50 years later, the agreed-upon and appropriate boundaries of wilderness created through a previous withdrawal of minerals, is an alarming exceedance of BLM's and USFS's authorities.

B. Federal Laws Provide Sufficient Protection for the BWCAW from Any Mining Activities in the SNF.

The Wilderness Act of 1964 prohibited any commercial enterprise, including logging, within any designated wilderness area. 16 U.S.C. § 1133(c). While the Wilderness Act designated the BWCA as a wilderness, it also excluded the BWCA from certain protections.

When Congress enacted the BWCAW Act of 1978 ten years later, it expanded and confirmed the protections afforded the BWCAW as a wilderness area. Pub. L. No. 95-495, 92 Stat. 1649 (1978) (superseding designation of the BWCA in 1964). Additionally, recognizing both the incredible value of the federal minerals in the SNF and that mining was authorized throughout out the rest of the SNF, Congress elected to create the MPA along the border of the wilderness to further protect the BWCAW. *See* Pub. L. No. 95-495 §§ 9-10, 11(b)(1), 92 Stat. at 1655-56. Consistent with the committee's previous recommendation and the agreement of DOI and USDA, the designation of a ***Mining*** Protection Area presupposes that mining will occur in the rest of the SNF. Thus, the SNF now had three categories of USFS-managed land:

(1) BWCAW – managed as a wilderness

(2) Mining Protection Area – managed as a buffer zone to protect BWCAW from mining activities

(3) Remainder of SNF – available for mineral exploration and development, subject to appropriate environmental review and permitting.

This categorization allows BLM and USFS to meet their responsibilities under the applicable statutes. The agencies can protect the wilderness character of the BWCAW by prohibiting mining in the BWCAW and MPA, but meet their obligations to "permit" mineral exploration and development in the remainder of the SNF.

VII. IN OTHER NATIONAL FORESTS, USFS AND BLM HAVE DEVELOPED APPROACHES FOR PROPERLY BALANCING MINING AND OTHER FOREST USES IN A MANNER CONSISTENT WITH FEDERAL LAW.

USFS's and BLM's proposed actions to withdraw federal minerals and amend the SNF Plan effectively treat mineral development as an all-or-nothing proposition, suggesting that mineral development necessarily will result in adverse environmental effects on the BWCAW. Applying this approach, USFS and BLM are focused on prohibiting such mineral development rather than determining the best path for regulating it. Not only is this approach unlawful, as

discussed throughout these comments, it is also inconsistent with how USFS and BLM have jointly managed other mineral leasing programs in other national forests.

For example, in the Mark Twain National Forest ("MTNF") in Missouri, federal hardrock minerals are leased under the same minerals leasing regulations as are applicable in the SNF, with USFS acting as the surface management agency and with BLM responsible for administering the federal minerals. In that national forest, BLM and USFS have developed an effective approach for regulating exploration and mineral development in a manner that both promotes the recovery of valuable mineral resources (as required by law) and protects the environment.

As in the SNF, the MTNF contains designated wilderness areas subject to heightened protection. These wilderness areas include Hercules Glades, Bell Mountain, Piney Creek, Rock Pile Mountain, Devils Backbone, Paddy Creek, and Irish. U.S. Forest Serv., MTNF Forest Plan, Ch. 3 at 3-13 (2005). In these designated wilderness areas, the MTNF Forest Plan specifies that, subject to valid existing rights, surface-disturbing mineral exploration is not permitted, and mineral development is prohibited. *Id*. at 3-24.

Furthermore, similar to the SNF Plan, the MTNF Forest Plan establishes that its goals (concise statements that describe a desired condition) include providing for, outside of the designated wilderness areas, "mineral prospecting and mineral development while complementing other resource management objectives." *Id*. at 1-1, Goal 2.5. Additionally, in Appendix C to the MTNF Forest Plan, USFS included specific (1) stipulations applicable to all plans of operation relating to mineral exploration; (2) stipulations applicable to preference right leases issued for hardrock mineral development; and (3) conditions for mining operations within the forest. *Id*., App. C. By developing these standard stipulations and conditions, USFS and BLM have established in the MTNF a system that creates predictability for mining companies investing in the region by providing consistent and understandable direction on how to proceed with exploration and development. The MTNF Forest Plan also minimizes adverse effects to surface resources while fostering transparent and understandable decision-making to inform the public.

VIII. FEDERAL AND STATE WILDERNESS AND ENVIRONMENTAL LAWS PROTECT THE BWCAW.

In its Application, USFS states that development of copper-nickel deposits on the Withdrawal Lands "could ultimately result in the creation of permanently stored waste materials and other conditions upstream of the BWCAW and the MPA with the potential to generate and release water with elevated levels of acidity, metals, and other potential contaminants." (Application at 3.) USFS continues to justify its Application by claiming that its "concerns are exacerbated by the fact that perpetual maintenance of waste storage facilities along with the perpetual treatment of water discharge emanating from the waste storage facilities and the mines themselves would likely be required to ameliorate these adverse effects." (Application at 3.)

In making these sweeping statements, USFS fails to acknowledge, among other relevant environmental protections, the effect of federal and state laws limiting the siting of permanent waste disposal facilities, applicable laws regarding management of process and other mine-

related waters, and modern mining and environmental-protection technologies. Furthermore, the State of Minnesota, along with mining companies and other stakeholders, for over 40 years have been evaluating copper-nickel development in northeast Minnesota, and working together to create a robust regulatory regime to protect environmental and natural resources while encouraging mineral exploration and development. (Brice Aff. ¶ 8.) Collectively, these laws and practices already ensure that the adverse effects described by USFS on the BWCAW and MPA cannot occur. (Brice Aff. ¶¶ 20-21.)

A. Federal and State Siting Restrictions, Including the Two Existing Buffers, Already Protect the BWCAW

Congress established restrictive siting conditions that preclude mineral development in the BWCAW and the MPA, and DNR previously expanded this buffer to include the Minnesota Mineral Management Corridor. Collectively, these 400,000 acres of buffer land provide sufficient protection from mining activities that occur outside the BWCAW's borders in the SNF.

In addition to these buffers, USFS routinely imposes conditions on the siting of facilities within the national forests and has implemented regulations, policies, and various stipulations and conditions regarding siting restrictions. These siting restrictions, particularly when based on site-specific proposals and data, are a more nuanced and effective tool for protecting surface resources than a blanket mineral withdrawal. Examples of these siting restrictions include USFS's limitations on the siting of waste storage facilities on federal land, occupancy restrictions for certain soil types and for wetlands, limits on siting certain processing facilities, and specified buffers and setbacks from nearby landowners or environmental receptors.

Similarly, Minnesota law mandates that mining "be conducted on sites that minimize adverse impacts on natural resources and the public." Minn. R. 6132.2000, subp. 1. The applicable Minnesota nonferrous metallic mineral permit to mine rule includes detailed siting restrictions, which generally fall into four categories:

- Lands on which mining is outright prohibited (e.g., BWCAW, MPA, state wilderness areas, and other sensitive areas), Minn. R. 6132.2000, subp. 2;

- Lands on which surface disturbing activities are prohibited (e.g., Mineral Management Corridor, within specified distances from specified surface resources), *id*., 6132.2000, subp. 3;

- Lands on which mining activities can occur if no prudent and feasible siting alternative exists (e.g., wildlife protection areas and certain waters), *id*.. 6132.2000, subp. 4.; and

- Lands subject to general siting criteria (e.g., facilities with flexible siting), id.. 6132.2000, subp. 5.

(*See* Brice Aff. ¶38 (discussing general siting criteria and other relevant statutes and regulations under Minnesota law).) These established siting criteria promote DNR's ability to effectively

manage mineral development so as to protect water and surface resources, create predictability for company planning and investment, and foster transparency in decision-making.

B. EIS and Permitting Processes Generate Site-Specific Controls and Financial Assurance Requirements that Will Allow Mining to Proceed in a Manner that Protects the Environment.

Any mining of hardrock minerals in Minnesota requires the operator to obtain a permit to mine from DNR, which is obligated to prepare an EIS on the proposed mine. Accordingly, the No Action Alternative in the Withdrawal EIS should assume that the appropriate agencies will conduct site-specific EIS on actual proposals for mining operations and implement a robust federal and state permitting process. This project-focused environmental review and permitting process would ensure that the agencies had sufficient data and analyses to develop appropriate conditions by which mineral development could occur in the SNF without adversely or unlawfully impacting the BWCAW. Notably, during this process, the federal and state agencies would provide multiple opportunities for the public to be informed about and influence the substance of these documents by soliciting comments, holding public hearings and/or meetings, and revising drafts to address public comments.

Minnesota's nonferrous metallic mineral permit to mine rules also specifically require that mining be conducted in a manner that will reduce impacts to the extent practicable, mitigate unavoidable impacts, and ensure that the mining area is left in a condition that protects natural resources and minimizes to the extent practicable the need for maintenance. (*See* Brice Aff. ¶ 17.) The substantive and procedural requirements established in the Minnesota nonferrous rules, as well as other media-specific regulations administered by the DNR and Minnesota Pollution Control Agency, are substantial and highly-protective of the environment. Consequently, the permit to mine and the various media permits required for mining operations will include specific conditions to avoid and mitigate potential environmental impacts.

The environmental issues that typically create the most comment in connection with copper-nickel mining are potential generation of acid rock drainage (ARD) and metals leaching (ML) and their potential for water quality impacts. The science underlying these issues – including geology, geochemistry, hydrology, and hydrogeology - have been extensively studied and are well understood. (Golder Associates Inc., Memorandum, *Twin Metals Minnesota Project – Acid Rock Drainage White Paper*, at 1-3 (August 9, 2017) ("Golder Report").) In particular, these matters have been studied for decades in the Duluth Complex. The MineraLogic Report, Golder Report, and Brice affidavit collectively describe various aspects of the testing, studies, and policy/regulatory actions taken in Minnesota to create an understanding of the relevant scientific and environmental conditions, including the potential for ARD/ML, and the available options to prevent, minimize, and mitigate concerns. (*See, e.g.*, MineraLogic LLC, Memorandum, *Summary of Select Public Information on Environmental Geochemistry of Duluth Complex Rock*, at 6-12 (Aug. 2017) ("MineraLogic Report").)

Based on her experience as a leading geochemist in Minnesota with extensive knowledge concerning the current state of the science in the Duluth complex and its historic roots, Doctor Tamara Diedrich succinctly concludes:

> Considered collectively, the available data, analyses, and studies indicate that the geochemical characteristics of Duluth Complex rock are predictable and attributable to established geochemical mechanisms. Therefore, this rock is amenable to industry mitigation measures, as overseen by federal and state permitting, that can prevent or minimize impacts associated with acid drainage or metals. This available data and analyses provides the federal agencies with an abundance of existing information with which to assess potential impacts from mining activities in the proposed mineral withdrawal area.

(MineraLogic Report, at 4.)

Similarly, the Foth Report demonstrates, based on preliminary hydrogeologic evaluations, that the potential for water quality impacts can first be readily assessed, and then avoided. The Foth Report specifically notes that the relevant information collected to date shows "an absence of a groundwater migration pathway from the ore body where mining will take place to surface water" so as to impact the BWCAW. (Foth Report at 15.) The Foth Report also describes hydrologic modeling techniques that are used in modern mining to predict possible impacts to water resources and to assess receptor risks so that robust engineering and environmental controls will be developed (Foth Report at 8-15). The Golder Report provides additional analysis of site-specific and project-specific design and engineering activities that can be utilized to ensure that copper-nickel mines constructed in the Rainy River watershed in fact will not create water quality risks. (Golder Report at 6, 19.)

In addition to the availability of appropriate siting, environmental-control, and mitigation requirements under the relevant laws, the federal and state financial assurance requirements applicable to mineral development are designed to ensure that the responsible agencies could access sufficient funds to ensure completion of all reclamation (including closure and post-closure) requirements and contingencies in the event that a mine operator, for any reason, would be unable to fulfill its permit obligations. To obtain a permit to mine, the DNR requires all nonferrous metallic mineral mining operations to provide financial assurance to cover the mining and reclamation plan imposed by the permit, and corrective action in the event of noncompliance. The financial assurance would have to be continuously maintained and updated each year based on the DNR's review of the annual report, including cost estimates. The financial assurance must be: (1) sufficient to cover all reclamation and corrective action costs; (2) available and made payable to the DNR when needed; (3) fully valid, binding, and enforceable under state and federal law; and (4) unable to be discharged through bankruptcy. Minn. R. 6132.1200.

Finally, the mining industry has demonstrated that mines can operate and close successfully without harming the environment. For example, in Wisconsin, the Flambeau Mine was successfully operated, closed, and reclaimed without significant adverse environmental impacts. Similarly, the Eagle Mine in Michigan is operating in compliance with applicable environmental laws and without any significant environmental impacts. Accordingly, the mining industry has demonstrated the feasibility and efficacy of various mining methods to prevent ARD/ML and other potential environmental harms. (*See* MineraLogic Report at 12 (observing that Duluth Complex waste rock is amenable to effective environmental controls and mitigation

measures); Golder Report at 7-22 (discussing state-of-the art mining designs, engineering controls, and practices).)

PART 4– IF SUCCESSFUL, THE WITHDRAWAL AND PLAN AMENDMENT WILL UNLAWFULLY PREVENT OR IMPEDE EXPLORATION AND DEVELOPMENT OF STATE AND PRIVATE MINERALS.

Given the immense value of the state and private minerals located in the Rainy River watershed and the SNF, it is possible that, notwithstanding the Withdrawal and Amendment, development of these minerals will proceed. If so, the Withdrawal will be rendered futile. The alternative possibility is that the Withdrawal isolates the state and private minerals such that access to and development of these valid existing rights is no longer physically possible and/or economically feasible. This latter result runs afoul of applicable law.

IX. FEDERAL LAW REQUIRES THAT USFS PROVIDE ACCESS TO DEVELOP OUTSTANDING AND RESERVED PRIVATE MINERALS, AND THE FEDERAL GOVERNMENT CANNOT DEPRIVE THE STATE THE ABILITY TO ACCESS STATE MINERALS.

Although state and private mineral holders' access rights across federal surface lands may, in appropriate circumstances, be subject to reasonable stipulations, these stipulations cannot be so "prohibitively restrictive as to render the land incapable of full economic development." *Utah v. Andrus*, 486 F. Supp. 995, 1009-10 (D. Utah 1979). Accordingly, the agency does "not have the authority, short of effectuating a taking" to prevent a party from exercising its rights to develop state and private minerals within the SNF. *See Nat'l Parks Conservation Ass'n*, 177 F.Supp.3d at 16. Rather, USFS has "only the limited authority to determine the reasonable use of the federal surface." *See Nat'l Parks Conservation Ass'n v. United States*, 177 F.Supp.3d 1, 16 (D.D.C. 2016); *see also Duncan Energy Co. v. U.S. Forest Service*, 50 F.3d 584 (8th Cir.1995) (holding that USFS "has limited authority" to regulate access to privately held minerals underlying federal surface lands). Access to a public natural resource "is a precondition to use or enjoyment of that resource," and USFS's proposed actions prejudice mineral rights on state and private lands contiguous to the federal leases. *See* Coggins & Glicksman, 2 Pub. Nat. Resources L. § 15:1 (2nd ed.).

A. Because Private and State Minerals Are Distributed Throughout the SNF, the Withdrawal, if Successful, Will Effectively Preclude the Development of State and Private Minerals.

Although a company is limited to so much of the surface as is reasonably necessary to explore, develop, and transport the minerals, USFS's authority to regulate access to privately held mineral rights does not effectively give it veto power over such mineral development. *See National Parks Conservation Ass'n v. U.S. Forest Serv.*, 177 F. Supp. 3d 1, 15 (D.D.C. 2016); *see also Minard Run Oil Co. v. U.S. Forest Service*, 670 F.3d 236, 253-54 (3d Cir. 2011), (concluding that USFS "does not have the broad authority it claims over private mineral rights owners' access to surface lands."). Accordingly, even with the Withdrawal, USFS must provide private mineral owners the right to access federal surface overlying their mineral rights.

MiningMinnesota appreciates USFS's apparent recognition that it does not have statutory authority to regulate exploration and development of private minerals subject to valid existing

rights, including outstanding and reserved mineral rights. While these two types of private mineral rights derive from different circumstances and are subject to different legal authority, USFS has no authority to impose new regulations or planning requirements on either outstanding and reserved mineral rights.

Turning first to reserved mineral rights, these valid existing rights are the result of negotiated contracts between the federal government and the private parties. Consistent with the origin of such rights, federal law expressly limits USFS's authority to those regulations that were incorporated into the conveyance document. *See* 16 U.S.C. § 518 (stating that exercise of reserved mineral rights are subject to USFS regulation to the extent "such rules and regulations shall be expressed in and made part of the written instrument conveying title to the lands of the United States"); 36 C.F.R. § 251.15 (stating that conveyances continue to be subject to the previously enacted regulations); *United States v. Srnsky*, 271 F.3d 595, 601 (4th Cir. 2001). Indeed, in its directives, USFS has acknowledged that it must "[a]dminister mineral reservation according to the applicable Secretary's rules and regulations as stated in the deed." FSM § 2831.

Unlike reserved mineral rights, outstanding mineral rights are "those rights owned by a party other than the surface owner at the time the surface was conveyed to the United States." *See* FSM § 2830.5. While these valid existing rights are not the product of any "contractual or legal relationship between the United States and the owner of outstanding mineral rights," USFS regulations nonetheless "do not apply to the administration of outstanding mineral rights." FSM §§ 2830.1, 280.5, 2832.

Unfortunately, individual land management units too often seek to impermissibly exceed this statutory authority by imposing forest-wide restrictions on the exploration and development of valid existing rights. Such conduct can have substantial impacts on valid existing rights for private minerals, particularly given the SNF's land composition. Specifically, many of the national forest lands in the SNF were acquired under the Weeks Act of 1911 and comparable statutes. When the federal government acquired these lands, it generally elected to acquire only the surface estate and left the mineral estate with the private owners. The resulting severance of the surface and mineral estates created over 740,000 acres of land in which private parties have outstanding or reserved mineral rights under USFS-controlled surface. Federal Hardrock Mineral Prospecting Permit EIS at 3 (2012).

1. Depending on the Scope of the Withdrawal and Plan Amendment, State and Private Minerals May Become Landlocked.

The State of Minnesota and its lessees have a legal right of access to state mineral interests where land access to the relevant parcel is possible only by crossing federal surface. *See Utah v. Andrus*, 486 F. Supp. 995, 1002-10 (D. Utah 1979) (noting that as a common law property matter, the state is entitled to access because it lacks power to condemn federal property). *Id*. at 1002. Again, USFS can reasonably regulate the exercise of that so long as it is not "prohibitively restrictive." *Id*. at 1009-10 (concluding that federal agency "may not . . . prevent the state or its lessee from gaining access to its land, nor may it be so prohibitively restrictive as to render the land incapable of full economic development.").

As discussed above, private mineral holders have comparable rights as established by established federal caselaw, federal regulations, and USFS manuals and handbooks. Similarly,

the SNF Plan has consistently reflected the primacy afforded private and state minerals within the SNF. *See*, e.g., SNF EIS at 2-11 (stating that "[o]wners of privately held minerals must either be granted reasonable access and use of Federal land to explore and extract their minerals or the Federal government must acquire the minerals"). For example, under the current SNF Plan, USFS acknowledges certain limits on its authority to restrict access to private minerals within the SNF:

> Standard S-MN-11**:** "A permit is not required for occupancy of federal surface for exploration or development of the underlying mineral estate unless the chain of title indicates one is appropriate."
>
> Standard S-MN-12: "The protection of federal surface will be accomplished through negotiating with the mineral owner or operator and implementing applicable State and federal laws."
>
> Standard S-MN-13: "Where a federal permit is required, mitigation measures and management requirements will be established to minimize and mitigate adverse environmental effects."

SNF Plan, at 2-10. Indeed, USFS has previously acknowledged that "[i]t would be inconsistent with public laws to discourage mineral exploration and development" and that "[s]uch development capability is guaranteed by deeds on about 40 percent of National Forest lands where minerals are owned by others." SNF EIS, App. F-54. Thus, notwithstanding the Withdrawal, if it were to take effect, USFS will need to continue granting reasonable access across federal surface so as to develop state and private minerals. Figure 9 shows a representative example of state and private minerals within the SNF and the federal surface over which companies would need access for such minerals. Figure 10 shows those split estate lands for which companies will need access to federal surface to develop underlying state and private minerals.

If USFS complies with its legal obligation to provide such access, it is possible mineral development will proceed for these non-federal minerals and thus defeat the apparent purpose of the Withdrawal: to stop mineral development in the Rainy River watershed in the SNF. Conversely, if USFS is successful in obstructing *any* mineral development in the SNF, the adversely affected members of industry will certainly have claims against the federal government.

2. Economics May Not Support the Investment of the Necessary Capital to Develop Isolated Parcels of State or Private Minerals

Developing isolated blocks of ore on discrete parcels of state and private land scattered among withdrawn federal minerals may not be economically or technically feasible. (*See* Brice Aff. ¶ 25.) To the extent that the Withdrawal and Plan Amendment were to sufficiently isolate state and/or private minerals so as to render their development infeasible, the proposed actions may be "so restrictive as to constitute a taking." *See Utah v. Andrus*, 486 F. Supp. 995, 1011 (D. Utah 1979). It is well established that "when regulation reaches the point of seriously impinging on 'investment-backed expectations,' it can constitute a taking." *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922); *Goldblatt v. Hempstead*, 364 U.S. 590 (1962).

X. ANY WITHDRAWAL OF THE SNF FEDERAL MINERALS OR AMENDMENT OF THE SNF PLAN CONSTITUTES AN UNLAWFUL TAKING OF STATE AND PRIVATE MINERALS.

A party establishes a taking by showing (1) a physical taking; (2) a *Lucas*-type *per se* taking based on total deprivation of all economically beneficial use of property; (3) a taking under the three-part test set forth in *Penn Central*; or (4) a land-use exaction that violates the standards set forth in the *Nollan* and *Dolan* cases. *See Lingle v. Chevron U.S.A. Inc*., 544 U.S. 528, 548 (2005). The Withdrawal and Plan Amendment meet this standard for showing a taking of state and private minerals on two grounds: total economic deprivation and the *Penn Central* test.

Regulations that work a severe deprivation of economic use or that have effects similar to physical operations are vulnerable to attack as compensable takings. *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992). Under this analysis, a withdrawal that renders state and private mineral interest operations unprofitable constitutes a taking under *Lucas'*s holding that the government may not regulate property so as to deny an owner all economic use. The federal agencies' proposed Withdrawal and Plan Amendment might make developing state and private lands infeasible from an economic or access standpoint so as to create "a substantial question of a taking" *See Utah v. Andrus*, 486 F. Supp. 995, 1011 (D. Utah 1979).

Additionally, a takings claim could also be evaluated under the *Penn Central* framework, which identifies three factors to be considered: (1) the economic impact of the government action on the claimant; (2) the extent to which the action interfered with reasonable investment-backed expectations; and (3) the character of the governmental action. *Penn Central Transp. Co. v. City of New York*, 438 U.S. 104, 124 (1978). Mining companies has made substantial investments to explore and define copper, nickel and PGM resources in northeast Minnesota on state, federal and private lands. The proposed Withdrawal and Plan Amendment would extinguish these companies' reasonable backed expectations and vitiate their financial investments in exploration and development activities.

PART 5 – NEPA SCOPING COMMENTS

XI. ANY ANALYSIS OF WHETHER TO ALLOW EXPLORATION AND DEVELOPMENT OF SNF FEDERAL MINERALS IS DUPLICATIVE AND INCONSISTENT WITH PREVIOUS ENVIRONMENTAL ANALYSES OF MINING IN SNF.

NEPA "demands timely and reasoned agency action." *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 558 (9th Cir. 2000). "[T]he comprehensive 'hard look' mandated by Congress and required by [NEPA] must be timely, and it must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made." *Metcalf v. Daley*, 214 F.3d 1135, 1142 (9th Cir. 2000). "NEPA seeks to ensure that agencies conduct environmental analyses in timely and objective fashion by prohibiting them from predetermining the outcome of their review." *Committee of 100 on Federal City v. Foxx*, 87 F. Supp. 3d 191, 206 (D.D.C. 2015).

Consistent with this mandate, the statute "encourages simple, straightforward, and concise reviews and documentation that are proportionate to and effectively convey the relevant

considerations in a timely manner to the public and decision makers while comprehensively addressing the issues presented." Draft Guidance on Improving the Process for Preparing Efficient and Timely Environmental Reviews under the National Environmental Policy Act, 76 FR 77492-02. "NEPA's purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action." 40 C.F.R. § 1500.1.

Under NEPA, an environmental review must have "a point at which the review process ends." *Sierra Club v. Froehlke*, 534 F.2d 1289, 1299 (8th Cir. 1976) (discussing appropriate end of NEPA analysis in context of supplemental EIS). Otherwise, NEPA would become "an endless loop of creating and recreating draft statements." *Habitat Educ. Center, Inc. v. U.S. Forest Serv.*, 673 F.3d 518, 528 (7th Cir. 2012).

In contravention with these NEPA principles, the proposed EIS on the Withdrawal and Amendment is effectively a programmatic EIS that will not be an effective tool for realistically analyzing mining activities that would occur under the No Action Alternative. As a result, it will both create (1) a flawed and indefensible final EIS that does not effectively analyze the potential environmental harm from mining activities on the Withdrawal Lands and (2) the need to conduct additional rounds of environmental review on actual mining proposals. Given the extensive litany of environmental studies conducted by the federal government, the State of Minnesota, industry, and other stakeholders on mining activities in this region, the alleged scientific, fact-based justification for yet another EIS rings hollow. (Brice Aff. ¶¶ 8-10.) At some point, the environmental analysis on hypothetical mining scenarios must end, and the agencies must shift to analyzing specific project proposals to determine how best mining can proceed.

A. The Proposed Action Is Effectively that of a Programmatic EIS with a Predetermined Outcome – an Ineffective Approach that DOI and USDA Previously Considered and Rejected for the SNF.

In 2013-2014, USFS initiated an unsuccessful effort to conduct a programmatic EIS regarding mineral development in the SNF. In many ways, the current proposed action is a renewed attempt to conduct the same programmatic EIS, but in a more problematic manner given the apparent predetermined outcome and flawed assumptions.

Like the programmatic EIS previously considered and rejected, the proposed withdrawal EIS must evaluate a hypothetical mining scenario over a large geographic area and for a period of twenty years. The only difference is that, whereas this scenario previously was the proposed action under evaluation, it is now the No Action Alternative. Moreover, USFS apparently assumes that projects will propose the siting of permanent waste storage facilities in the Rainy River watershed and operation of these facilities in a manner that adversely impacts the BWCAW.

Whether conducted in furtherance of a broad-scale leasing and mining analysis or withdrawal of the same minerals, an EIS that relies on a hypothetical mining scenario is premature and offers limited value. NEPA requires federal agencies to conduct environmental review on activities once they have caused an irretrievable commitment of resources. 42 U.S.C. § 4332(C)(v); *Minn. Pub. Interest Research Group v. Butz*, 541 F.2d 1292, 1306 (8th Cir.1976). "Ground disturbing activity and the final irretrievable commitment of resources occur only when

a decision approves a surface use plan of operations." USFS 2005 Planning Rule at 1039. Similarly, USFS recognized as early as 1986 that the "only irretrievable commitment of resources anticipated under any alternative would be the *extraction* of mineral resources." *See* 1986 SNF EIS at xv.

As one court put it, "USFS is not required to conduct a speculative, forest-wide analysis on . . . cumulative effects." *See Heartwood, Inc. v. Agpaoa*, 611 F.Supp.2d 675 (E.D. Ky. 2009); *see also Wilderness Society v. Salazar*, 603 F.Supp.2d 52 (D.D.C. 2009) (stating agency "is not required to engage in speculation in EIS"). Nothing in NEPA requires, or permits, "an agency to consider the possible environmental impacts of less imminent actions when preparing the impact statement on proposed actions." *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n. 20 (1976). Instead, once these future actions "reach the state of actual proposals, [environmental review] on them will take into account the effect of their approval upon the existing environment." *Id*.

Because the hypothetical No Action Alternative occurs over a large geographic area and over a span of 20 years, these "two facts alone raise a question whether all of them can be regarded as so related that they are cumulative or synergistic." *See Peshlakai v. Duncan*, 476 F.Supp. 1247, 1258 (D.D.C. 1979). In such circumstances, it is "impossible to analyze the environmental consequences and the resources commitments involved in, and the alternatives to, such activity." *Id*.; *see also Piedmont Envtl Council v. Fed. Energy Regulatory Comm'n*, 558 F.3d 304, 316 (4th Cir. 2009) (stating that "without such information a programmatic EIS would not present a credible forward look and would therefore not be a useful tool for basic program planning").

Along the same lines, USFS headquarters has previously acknowledged that programmatic EISs, such as those used to support land and resource management plans, provide inaccurate assessments because many "hypothetical projects and activities could not be accurately predicted and never occurred." NEPA Documentation for Developing, Revising, or Amending Land Management Plans; Categorical Exclusion, 71 Fed. Reg. 75,481, 75,483 (Dec. 15, 2006). As a result, the use of a programmatic approach for "complying with NEPA was impractical, inefficient, and sometimes inaccurate" and is "an inefficient use of resources." National Forest System Land Management Planning, 70 Fed. Reg. 1023, 1031 (Jan. 5, 2005). In the absence of detailed information about what projects and activities will be proposed over a span of several years, the number of projects that will be approved, the location of such projects, and the design of such projects, USFS "can only speculate." *Id*. By contrast, USFS "can most efficiently and appropriately evaluate and analyze the environmental consequences of an array of potential projects and activities when those matters reach the status of a proposal." *Id* at 1041**.**

Based on this federal caselaw and USFS's observations regarding programmatic EISs, MiningMinnesota believes that the federal agencies should not proceed with this EIS. MiningMinnesota's members are concerned that it will have limited utility in future decision-making on those matters within BLM's and USFS's authority to regulate and administer. Thus, this EIS would delay mineral development in the region (and the associated economic benefit for families in northern Minnesota) and potentially place at risk hundreds of millions of dollars in investment without any credible scientific or legal basis. The federal agencies should instead wait until they receive a specific project proposal; conduct a site-specific environmental review;

develop appropriate mitigation measures, stipulations, and conditions; and consider broader application of its approach.

B. Previous Environmental Analyses Have Already Addressed Whether Mineral Exploration and Development Can Be Conducted in the SNF in a Manner Consistent with Protection of Environmental Resources.

The wealth of environmental, engineering, economic, and other studies relating to the development of the Duluth Complex is staggering. (*See* Brice Aff. ¶8.) Yet USFS and BLM seem to disregard these resources in proposing to undertake this EIS. This perspective is troublesome for two primary reasons.

First, these studies render the EIS unnecessary because no further regional analysis is warranted. The NEPA process is intended to help "public officials make decisions that are based on understanding of environmental consequences." *See* 40 CFR 1500.1(b). But the public officials already have an understanding of the environmental consequences of mining within the Rainy River Watershed because federal and state agencies have spent decades studying the issue.

Second, the agencies should, at an absolute minimum incorporate this information into the EIS process to ensure that material information is not excluded from consideration and to promote efficiencies in this process. "NEPA reviews should coordinate and take appropriate advantage of existing documents and studies, including through adoption and incorporation by reference." Draft Guidance on Improving the Process for Preparing Efficient and Timely Environmental Reviews under the National Environmental Policy Act, 76 FR 77492-02; *see also* 40 C.F.R. § 1500.4(k) ("Agencies shall reduce excessive paperwork by . . . [i]ntegrating NEPA requirements with other environmental review and consultation requirements."). "NEPA does not limit tiering to analyses still on the scientific cutting edge. Nothing in the law requires agencies to reevaluate their existing environmental analyses each time the original methodologies are surpassed by new developments." *Theodore Roosevelt Conservation P'ship v. Salazar*, 616 F.3d 497, 512 (D.C. Cir. 2010).

The EIS should incorporate and analyze the available environmental and economic studies to ensure that the public is fully informed of the comprehensive studies and other evaluations associated with SNF and mineral exploration and development in the forest, including specifically the Rainy River watershed. (*See* Brice Aff. ¶ ¶ 9-16; Hays Aff. Ex. A, at 13.) These studies include, among others:

Regional Copper-Nickel Study

On October 8, 1974, the State of Minnesota imposed a moratorium on copper nickel mining activity in the SNF by refusing to consider any site-specific EIS for a copper/nickel project until completion of a comprehensive regional study designed to inform decision-making on more site-specific proposals. That report, entitled “The Regional Copper-Nickel Study 1976-1979,” by the Minnesota Environmental Quality Board, State Planning Agency, of the State of Minnesota, was a comprehensive scientific effort costing $4.3 million (in 1970s dollars, which would be equivalent to nearly $40 million in current dollars). (Hays Aff. Ex. A, at 2.) The final

report was issued August 31, 1979 and consists of 5 volumes and 36 chapters. The bibliography of over 180 technical reports prepared as part of the study consists of 25 pages.

With the issuance of the report, the state's five-year moratorium (on nonferrous leasing and project development) was lifted by the following language in the Preface:

> A 'regional study' was commissioned because it was believed that conventional site-specific environmental impact statements (EISs) and the corresponding regulatory process were inadequate to deal with the broader issues involving this unexploited resource. In addition, specific policy guidance for the site-specific process and a re-examination of existing laws, rules and regulations was envisioned before action on specific copper-nickel development proposals is initiated by the state. Comprehensive technical information is now available for this policy activity and regulatory review. **The completion of the Regional Study, and the MEQB's acceptance thereof, marks the end of the copper-nickel development moratorium in Minnesota. Development applications from mining companies are expected within the next year and it is now time to prepare for this new resource management.**

1 MEQB, *The Minnesota Regional Copper-Nickel Study*, at i (Aug. 31, 1979) (emphasis added).

Given the Regional Copper-Nickel Study's extensive analysis of the environmental impacts associated with mineral exploration in the SNF, the EIS should utilize (or at least reference) the roughly 180 technical reports that supported the comprehensive environmental study. If nothing else, discussion of the Study would provide guidance and information to members of the public who are concerned about whether the impact of mineral development has been fully considered, resolve any misperceptions that federal and state agencies are rushing forward with mineral development, and allow a more informed discussion of the relevant issues.

Mining Simulation Project

The State of Minnesota and other stakeholders completed a Mining Simulation Study in 1990. This interdisciplinary study focused on the environmental review and permitting processes for metallic minerals mining and specifically included a potential copper-nickel mining project. The project was intended to evaluate and improve the environmental review and permitting procedures applicable to mining in Minnesota. (Brice Aff. ¶ 15; MN Department of Natural Resources, et al., *The Report on the Mining Simulation Project* (DNR, 1990).)

2012 Federal Hardrock Prospecting Permit EIS

In 2006, USFS withdrew its agreement to three plans of operations previously approved by BLM and instead decided an EIS was necessary to evaluate the impacts of mineral exploration. USFS issued a scoping notice for the EIS three years later, issued a draft Federal Hardrock Prospecting Permit EIS in 2011, and issued a final EIS with a BLM Record of Decision in 2012. Like the proposed EIS, the 2012 Prospecting Permit EIS took a regional approach to analyzing mineral exploration and, as a result, developed significant information

regarding the surface resources in the SNF. It also served as a vehicle to develop standard stipulations applicable to mineral exploration activities in the SNF.

NorthMet Project EIS

Together with the United States Army Corps of Engineers ("USACE") and DNR, USFS was a lead agency the preparation of the EIS for the NorthMet project, a nonferrous mining development currently in the permitting stage in Minnesota. After more than ten years of environmental review and analyses, the final EIS for the NorthMet project was completed in 2016. The FEIS includes substantial data, studies, and analysis regarding the development of copper-nickel deposits in this region. This comprehensive evaluation would be relevant to the Withdrawal and Forest Plan Amendment even though the NorthMet project is not located on the Withdrawal Lands. If USFS and BLM insist on pursuing the proposed regulatory actions, the EIS should incorporate the federal and state agencies' previous work in connection with the NorthMet project.

Kawishiwi EA

In November 2007, USFS issued the Decision Notice and FONSI for Environmental Assessment for Kawishiwi Minerals Exploration ("Kawishiwi EA"), which included an analysis of the environmental impacts associated with three operating plans for companies engaging in mineral exploration in the SNF. Significantly, after consideration of such environmental impacts, including noise impacts, the Kawishiwi EA concluded that no significant impacts resulted from the proposed mineral exploration. Members of the public would benefit from reviewing the analysis contained in the Kawishiwi EA so as to better appreciate the degree to which USFS, in addition to state agencies, has engaged in an analysis of environmental impacts.

Labovitz Economic Report

In March 2009, the Bureau of Business and Economic Research, Labovitz School of Business and Economics with the University of Minnesota Duluth completed a study titled “The Economic Impact of Ferrous and Non-Ferrous Mining on the State of Minnesota and on the Arrowhead Region and Douglas county, WI.” The university updated the report in 2012 (collectively, the 2009 and 2012 reports are referred to as the “Labovitz Economic Report”). As discussed in more detail in the attached expert report of Dr. Ronald Hays, the Labovitz Economic Report provides a detailed analysis of the economic benefits of mineral exploration and development on the Minnesota economy. Those benefits are substantial. Like the environmental studies discussed above, it provides significant information regarding the economic and social impact of mineral development on Minnesota’s economy. (*See* Hays Aff. Ex. A, at 14-15, 17 (discussing Labovitz Economic Report and other economic studies).)

DNR’s Continuing Analysis on Waste Rock Characterization

DNR and the Minnesota Pollution Control Agency ("MPCA") have conducted extensive analyses since the 1970s on water, rock characterization, and reclamation as they relate to copper-nickel mining. (MN Department of Natural Resources (DNR, 2012). *Duluth Complex Rock Dissolution and Mitigation Techniques: A Summary of 35 Years of DNR Research,* February 2012). MiningMinnesota is providing, as part of these Comments, copies of the reports

prepared for many of these studies as Attachments to the MineraLogic Report and as part of Exhibit B to the Brice Affidavit.

For more that forty years, the State of Minnesota, industry members, and interested stakeholders has been engaged in the analysis of Duluth Complex rock. (MineraLogic Report at 3.) These programs include "investigation of full-scale waste rock stockpiles at an operating mine; field leach test piles with a program duration of over 38 years; numerous laboratory dissolution tests on samples analogous to the field-based programs; and extensive solids characterization on samples from test programs." (*Id*.) Thus, the "environmental geochemistry of rock from the Duluth Complex is well understood." (*Id*.)

Among the conclusions reached in the various studies are: (1) samples with less than 0.22% sulfate concentration have not produced acid drainage; (2) at sufficiently low sulfur concentrations, rock drainage meets water quality standards without the need for treatment of mitigation; (3) constructed wetlands have been an effective passive, or semi-passive, treatment option for metals, (4) even for rock with high concentrations of sulfur (over 0.4%), any potential adverse condition would take significant time to develop; and (5) sulfate release rates decrease significantly over time. (MineraLogic Report at 4.) Furthermore, these studies indicate that the "geochemical characteristics of Duluth Complex rock are predictable and attributable to understood geochemical mechanisms." (*Id*. at 12.) As a result, "this rock would be amenable to industry mitigation measures, as overseen by federal and state permitting, that can prevent or minimize impacts associated with acid drainage or metals." (*Id*.)

XII. Even If BLM and USFS Were to Proceed with a NEPA Analysis of Mineral Development in the SNF, Such Analysis Address Reasonable Alternatives.

The USFS notice indicates that the proposed EIS would evaluate the impacts of the proposed Withdrawal and a No Action Alternative because no additional alternatives have been identified at this time. This conclusion is without merit given the readily apparent range of reasonable alternatives, and calls into question the fundamental fairness of the process proposed by the federal agencies. If USFS and BLM decide to proceed with this EIS for any reason, they have an obligation to evaluate reasonable alternatives, a number of which exist in these circumstances.

NEPA requires that federal agencies use the environmental review process "to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment." 40 C.F.R. § 1500.1(e). The agency must "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(E). Indeed, the alternatives section is "the heart of the environmental impact statement" and must "[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." 40 C.F.R. § 1502.14.

"While an agency is not obliged to consider every alternative to every aspect of a proposed action, reviewing courts have insisted that the agency consider such alternatives to the proposed action as may partially or completely meet the proposal's goal." *City of New York v.*

U.S. Dept. of Transp., 715 F.2d 732, 742 (2d Cir. 1983) (citations and internal quotation marks omitted); *see also City of Richfield, Minn. v. E.P.A.*, 152 F.3d 905, 907 (8th Cir. 1998) ("An alternative is unreasonable if it does not fulfill the purpose of the project."). An agency must "study all alternatives that appear reasonable and appropriate for study at the time of drafting the EIS, as well as significant alternatives suggested by other agencies or the public during the comment period." *Roosevelt Campobello Int'l Park Comm'n v. E.P.A.*, 684 F.2d 1041, 1047 (1st Cir. 1982) (citations and internal quotation marks omitted).

In this case, the stated purpose for the EIS is to prevent adverse environmental effects on the BWCAW that USFS fears may result from mineral development, particularly the siting of permanent waste storage facilities in the Rainy River watershed. In addition to the proposed action, reasonable alternatives should include, at a minimum, alternative sites or siting restrictions; alternative technologies, modified scale or magnitude, and alternatives that incorporate reasonable mitigation measures. *See, e.g.*, Minn. R. 4410.2300(G) (identifying five categories of alternatives required to be analyzed in a Minnesota state EIS).

While these alternatives are obvious, USFS and BLM have failed to identify a single alternative action and instead present the issue as an all-or-nothing choice: completely preclude hardrock mineral development in the Rainy River watershed in contravention of applicable law or take no action and, according to the agencies, allow tailings storage facilities to be sited in proximity to the BWCAW so as to adversely affect water quality. This framing of the issues creates a false dichotomy that stokes fears in a manner entirely at odds with NEPA's mandates. Given that USFS regulations already preclude the siting of waste disposal facilities on federal land, it is apparent that this concern is not based on scientific evidence or credible concerns. In reality, USFS and BLM both have, as discussed in these comments, a variety of regulatory tools available to them to inform how mining proceeds so as to appropriately protect the BWCAW.

These comments do not purport to offer every possible alternative or variation available to the federal agencies, but identify a few alternatives that USFS and BLM are obligated to evaluate as part of the EIS. Potential alternatives include:

- Lease Stipulations and Conditions on Operations: USFS and BLM should first consider, to the extent authorized by law, stipulations and conditions intended to protect surface resources. Site-specific conditions are the agencies' best instrument for regulating mining operations. To the extent that general, industry-wide restrictions are deemed necessary to protect the BWCAW, USFS and BLM can use existing regulatory tools, which BLM and USFS have routinely used in regulating exploration in the SNF and managing mineral development in other forests. These tools should be analyzed in the EIS as an alternative.

- Siting Restrictions: USFS, as the surface management agency, could propose appropriate restrictions on the siting of certain mining facilities in geographic areas where, based on available data and scientific studies, the siting of such facilities would create a heightened risk of environmental harm. This approach would be consistent with USFS regulations and policies as well as Minnesota's thoughtful framework in the DNR nonferrous rules and other applicable statutory and regulatory provisions. (Brice Aff. ¶ 38.) USFS already restricts solid waste or the disposal of hazardous substances. 36 C.F.R. §§ 251.54(e)(1)(ix), 251.54(e)(2) Both BLM and USFS are also accustomed to using

lease stipulations to restrict use and occupancy when necessary to protect surface resources. These stipulations may include geographic, seasonal, or operational restrictions.

- Need for Site-Specific Data: To evaluate the potential impact of hardrock mining on the BWCAW due to potential hydrologic potential pathways for constituents of concern, the federal agencies must have site-specific hydrologic characterization data, a hydrologic model developed in accordance with accepted industry standards, and a proposed mine plan. (Foth Report at 2.) USFS and BLM have not conducted this analysis and therefore have no defensible basis for presuming that mining in the SNF will impact the BWCAW. (Foth Report at 2.) MiningMinnesota believes that the appropriate analysis would develop the requisite site-specific analysis and use the resulting information to develop appropriate mitigation measure and environmental controls based, in part, on industry standard practices. This approach requires site-specific or project-specific environmental review proceedings rather than the programmatic approach proposed by USFS and BLM.

- Engineering and Environmental Controls: The need for site-specific data also inform the development, selection, and implementation of engineering and environmental controls, and other avoidance and mitigation techniques, that must be considered as part of any EIS analysis. The Golder Report submitted on behalf of Twin Metals Minnesota ("TMM") in its response to the proposed actions of BLM and USFS is illustrative. (Golder Report at ES-1.) As Golder's Report describes, the potential geochemical considerations associated with ARD and ML are highly dependent on site characteristics that will influence the engineering options to prevent, minimize, and mitigate ARD and ML concerns; these engineering options are readily available and well understood. (*Id.*) The Golder report summarizes actions that a mining company may undertake to, among other things, evaluate sulfur content in ore and tailings; develop and implement a mine materials characterization program; study, design and implement environmental controls from available alternatives (*e.g.*, use of lined collection facilities, subaqueous tailings storage, utilization of tailings and development rock for underground backfill, etc.). (Id. at ES-1–ES-2, 7-22.) The Golder Report demonstrates that proper analysis of the critical considerations surrounding design and engineering again requires site-specific or project-specific information and environmental review proceedings, rather than the proposed programmatic approach.

- Narrowing the Scope of Withdrawal: Federal agencies are required to use the scoping process to, not only "identify significant environmental issues deserving of study, but also to deemphasize insignificant issues, narrowing the scope of the environmental impact statement process accordingly." 40 C.F.R. § 1500.4(g). Rather than arbitrarily withdrawing *all* federal minerals within the Rainy River watershed for the *maximum* period allowable by law, USFS and BLM should evaluate the science to determine whether a far more restrictive withdrawal area is sufficient to meet the purported need for this EIS. MiningMinnesota still believes that even a more narrow and focused withdrawal would be unlawful, but the EIS at least needs to consider such reasonable alternatives.

XIII. If the Agencies Proceed with an EIS on Mining Within the SNF, They Must Abide by NEPA's Various Mandates Regarding Coordination, Efficiency, and Tiering.

A. NEPA Requires BLM and USFS to Coordinate with the State and Private Parties to Promote Efficiencies, Avoid Duplication, and Provide Appropriate Procedural Framework for Public Participation and Agency Decision-Making.

NEPA mandates that federal agencies cooperate with state and local agencies "to the fullest extent possible to reduce duplication." 40 CFR 1506.2(b). This cooperation includes, among other things, joint environmental research and planning processes. *Id*. Given Minnesota's decades of analysis of the potential environmental impacts associated with mineral exploration and development of hardrock minerals in the Rainy River watershed, USFS and BLM need to coordinate closely with DNR and MPCA to avail themselves of the state's expertise, data, and analyses.

Similarly, agencies need to coordinate with industry regarding data, information, and assumptions so as to promote an accurate NEPA analysis that incorporates reasonable flexibility for operational refinements. Companies have gathered extensive data regarding the environmental setting and potential environmental impacts associated with potential mineral development and are best positioned to provide information regarding any potential projects that may be proposed for site-specific review. (Brice. Aff. ¶¶ 8-10; MineraLogic Report at 3.) The federal agencies should solicit, review, and incorporate this data into any NEPA analysis of mineral development.

B. USFS and BLM Must Prepare the EIS So As to Promote Informed Decision-Making on Actual Project Proposals, Which Requires Developing an Analysis that Promotes Effective Tiering in Subsequent Site-Specific Reviews.

NEPA specifies that tiering is an efficient way to address environmental review of site-specific actions when a broader, programmatic EIS has already been developed. 40 C.F.R. § 1508.28. Tiering a subsequent site-specific EAs to a programmatic EIS allows USFS to "eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review." *See id.* § 1502.20. Indeed, to address issues that may not be "ripe" at this stage (*i.e.*, the specific receptors impacted by a specific operating plan), any subsequent environmental review (to the extent such review is required) "need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and . . . concentrate on the issues specific to the subsequent action." 40 C.F.R. § 1502.20.

Because USFS and BLM lack the legal authority to categorically prevent hardrock mining in the SNF, the scope of any environmental review can, at most, only address appropriate revisions to the SNF Plan to establish a framework for conducting exploration and development activities. As such, any EIS prepared in these circumstances will necessarily be programmatic in nature, and will not be the proper vehicle to conduct environmental review of site-specific impacts or impose site-specific stipulations or restrictions. *See California v. Block*, 690 F.2d 753, 761 (9th Cir. 1982) ("When a programmatic EIS has already been prepared, we have held that site-specific impacts need not be fully evaluated until a "critical decision" has been made to

act on site development."); *see also Pacific Rivers Council v. United States Forest Serv.*, 2008 WL 4291209 (E.D. Cal. Sept. 18, 2008). Similarly, any concerns that USFS or other commentators may have regarding the impact of a specific proposal for mineral exploration in the SNF is best addressed in a site specific review. *See N. Alaska Envtl. Ctr. v. Lujan*, 961 F.2d 886, 890-91 (9th Cir. 1992) (concluding that broad-scale EISs addressing hypothetical mining need not address detailed impacts as future tiered environmental review documents will address such issues if need be); *Salmon River Concerned Citizens v. Robertson*, 32 F.3d 1346, 1357 (9th Cir. 1994) (recognizing that it was appropriate for USFS to analyze the cumulative impacts of herbicide exposure for particular projects in future, site-specific environmental review tiered to regional EIS). Therefore, to the extent that site-specific environmental review is necessary for a particular mineral authorization (e.g., lease application or operating plan), USFS should streamline the environmental review process by leveraging existing analysis, including any information developed in this EIS. This approach will reduce unnecessary duplication and ensure the timely review of future mineral authorizations.

CONCLUSION

For the foregoing reasons, MiningMinnesota respectfully requests the following: (1) with respect to the proposed Withdrawal, USFS cancel its Application, and/or BLM deny the Application, and (2) with respect to the proposed Plan Amendment, USFS refrain from pursuing any amendment, and instead, retain the current management direction for minerals, and develop appropriate stipulations and conditions based on site-specific analyses. If BLM and USFS instead decide to proceed with the Withdrawal, Plan Amendment, and supporting EIS, the federal agencies should, at a minimum, ensure that the EIS incorporates available data and studies, analyzes reasonable alternatives, and creates a foundation for subsequent tiering.

Sincerely,

Frank Ongaro
Executive Director
MiningMinnesota
Box 16666
Duluth, MN 55816
(218) 393-2301

List of Figures

BWCAW / Buffer Map

Boundary Waters Canoe Area Wilderness

USFS Mining Protection Area

State Mineral Mngt. Corridor

Proposed Withdrawal Lands

Rainy River Watershed

Lake Superior Watershed

Superior National Forest

16 Miles

Ely

Cook

Tower

Chisholm

Buhl

Virginia

Eveleth

0 10 20 40
Miles

0 20 40 80
Kilometers

N W E S

Data Source: MN DNR, MN DOT, BLM, USFS, SEDAR 2014 DML NI 43-101 Digitized Geodata

Legend

- City
- River
- Roads
- Lakes
- Watershed
- SNF Boundary
- BWCAW
- State Mineral Mngt. Corridor
- Federal Mining Protection Area
- USFS Proposed Withdrawal Lands

FIGURE 1

Deposits and Mineralization

Legend

- City
- Exploration Collar Location
- Roads
- Lakes
- SNF Boundary
- Watershed
- Mining Features
- Mineral Deposits
- BWCAW
- USFS Mining Protection Area
- State Mineral Mngt. Corridor
- Duluth Complex

Boundary Waters Canoe Area Wilderness

USFS Mining Protection Area

State Mineral Mngt. Corridor

Superior National Forest

Lake Superior Watershed

Rainy River Watershed

Ely

Cook

Tower

Chisholm

Buhl

Virginia

Eveleth

1 53 73 169 135 37 61 2

T70 T69 T68 T67 T66 T65 T64 T63 T62 T61 T60 T59 T58 T57 T56 T55 T54 T53

R22 R21 R20 R19 R18 R17 R16 R15 R14 R13 R12 R11 R10 R09 R08 R07 R06 R05 R04 R03 R02 R01 R01 R02 R03 R04 R05

N W E S

0 10 20 40 Miles

0 20 40 80 Kilometers

Data Source: MN DNR, MN DOT, BLM, USFS, SEDAR 2014 DML NI 43-101 Digitized Geodata

FIGURE 2

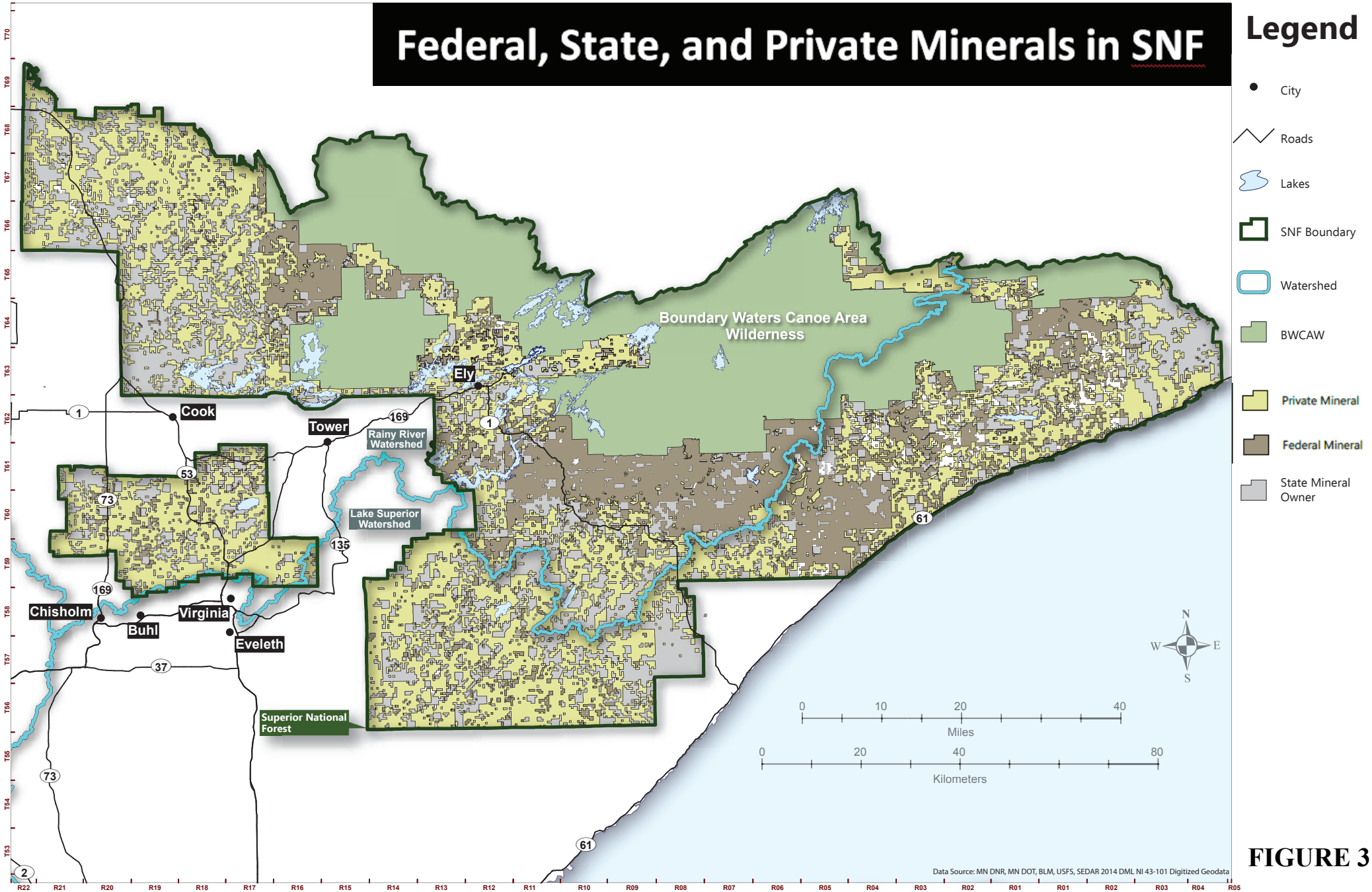

Federal, State, and Private Minerals in SNF
Legend
City
Roads
Lakes
SNF Boundary
Watershed
BWCAW
Private Mineral
Federal Mineral
State Mineral Owner
Boundary Waters Canoe Area Wilderness
Ely
Cook
Tower
Rainy River Watershed
Lake Superior Watershed
Chisholm
Buhl
Virginia
Eveleth
Superior National Forest
1
169
53
73
135
61
37
2
N
W
E
S
0 10 20 40
Miles
0 20 40 80
Kilometers
Data Source: MN DNR, MN DOT, BLM, USFS, SEDAR 2014 DML NI 43-101 Digitized Geodata

FIGURE 3

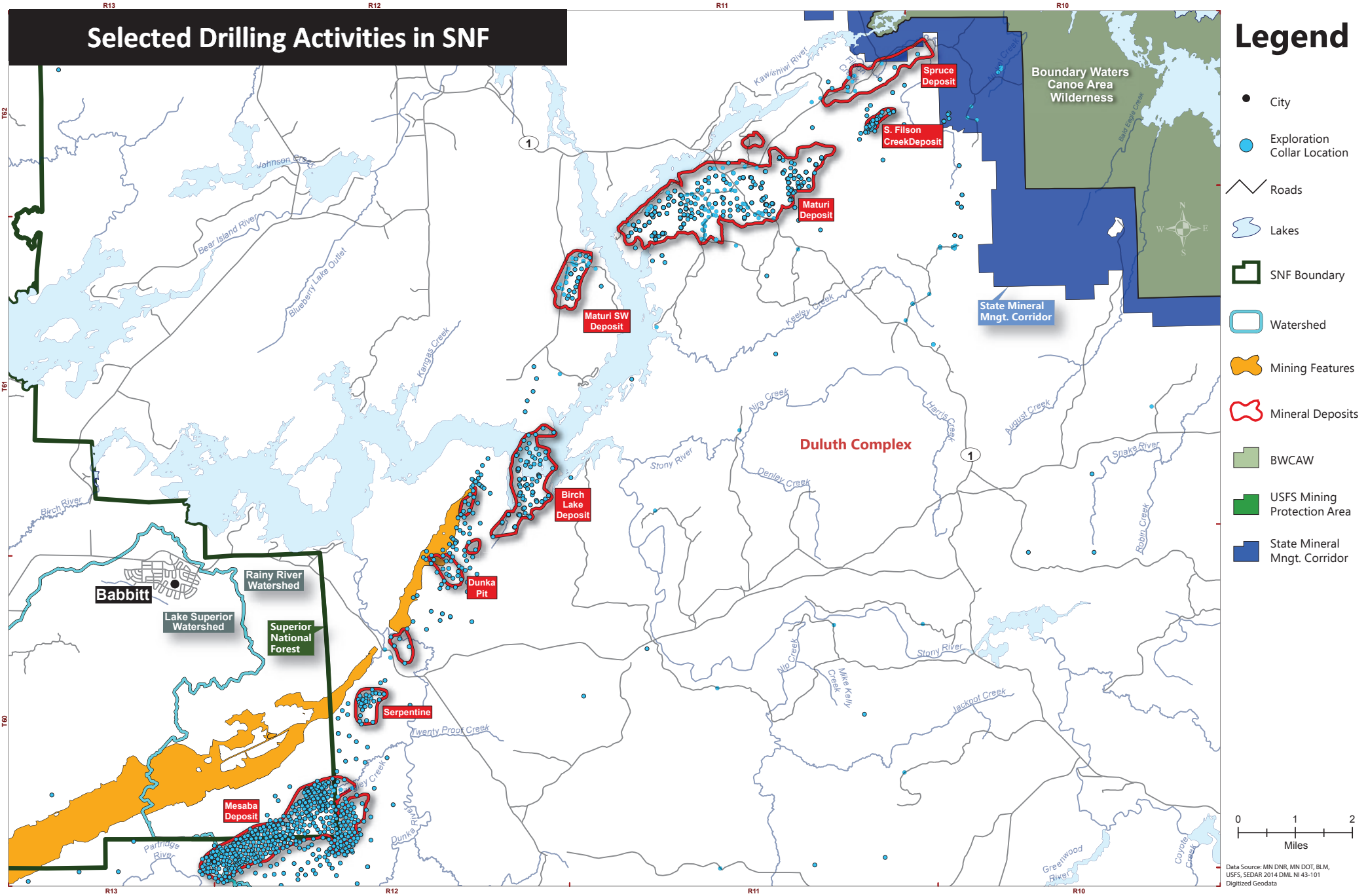

Selected Drilling Activities in SNF
Legend
City
Exploration Collar Location
Roads
Lakes
SNF Boundary
Watershed
Mining Features
Mineral Deposits
BWCAW
USFS Mining Protection Area
State Mineral Mngt. Corridor
Boundary Waters Canoe Area Wilderness
Spruce Deposit
S. Filson CreekDeposit
Maturi Deposit
Maturi SW Deposit
State Mineral Mngt. Corridor
Duluth Complex
Birch Lake Deposit
Dunka Pit
Serpentine
Mesaba Deposit
Babbitt
Rainy River Watershed
Lake Superior Watershed
Superior National Forest
Kawishiwi River
Johnson Brook
Bear Island River
Blueberry Lake Outlet
Kangas Creek
Keeley Creek
Nra Creek
Harris Creek
August Creek
Stony River
Denley Creek
Snake River
Robin Creek
Birch River
Twenty Proof Creek
Partridge River
Dunka River
Greenwood River
Coyote Creek
Jackpot Creek
Mike Kelly Creek
Bald Eagle Creek
R13
R12
R11
R10
T62
T61
T60
0 1 2
Miles
Data Source: MN DNR, MN DOT, BLM, USFS, SEDAR 2014 DML NI 43-101 Digitized Geodata

FIGURE 4

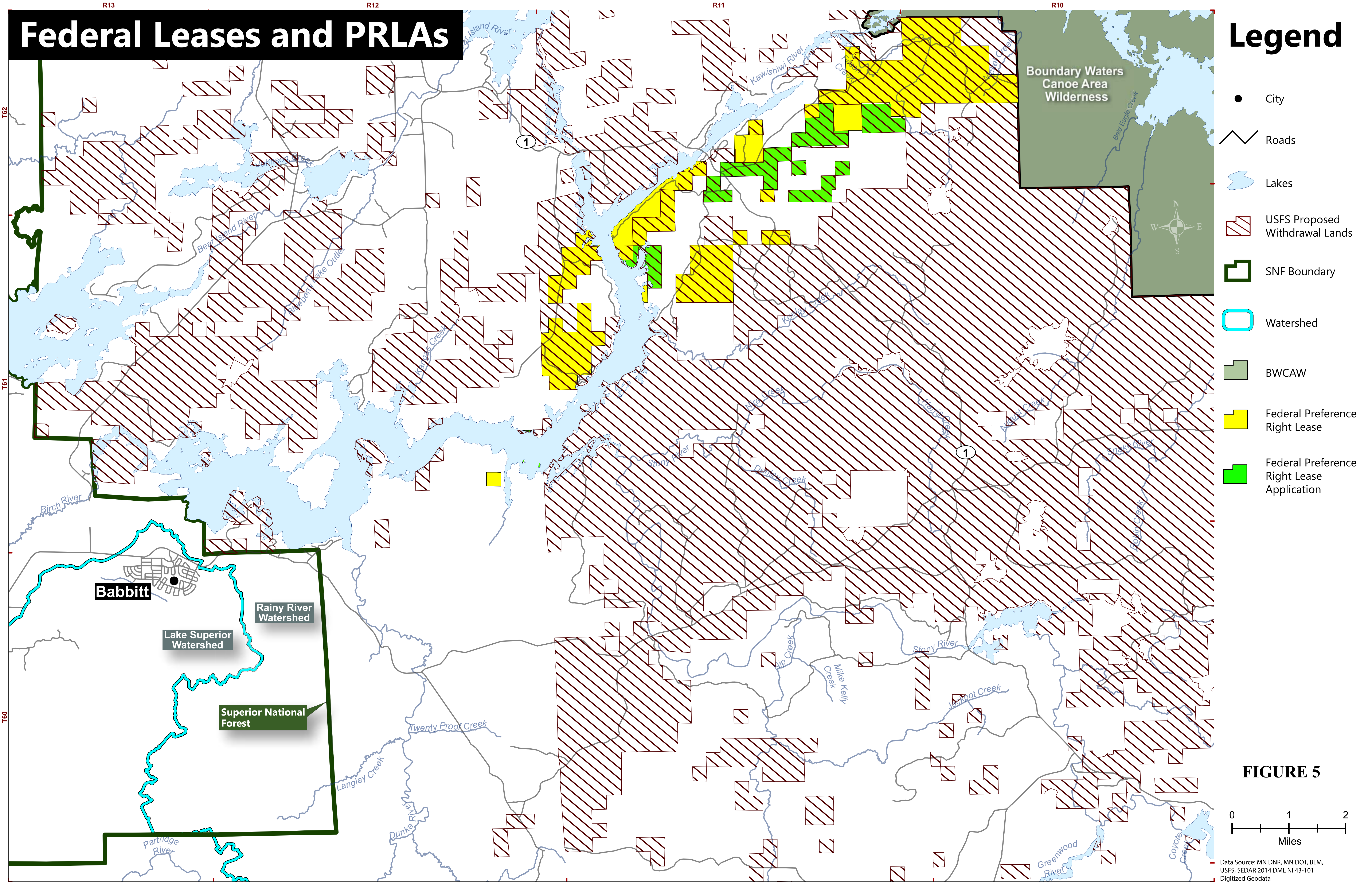
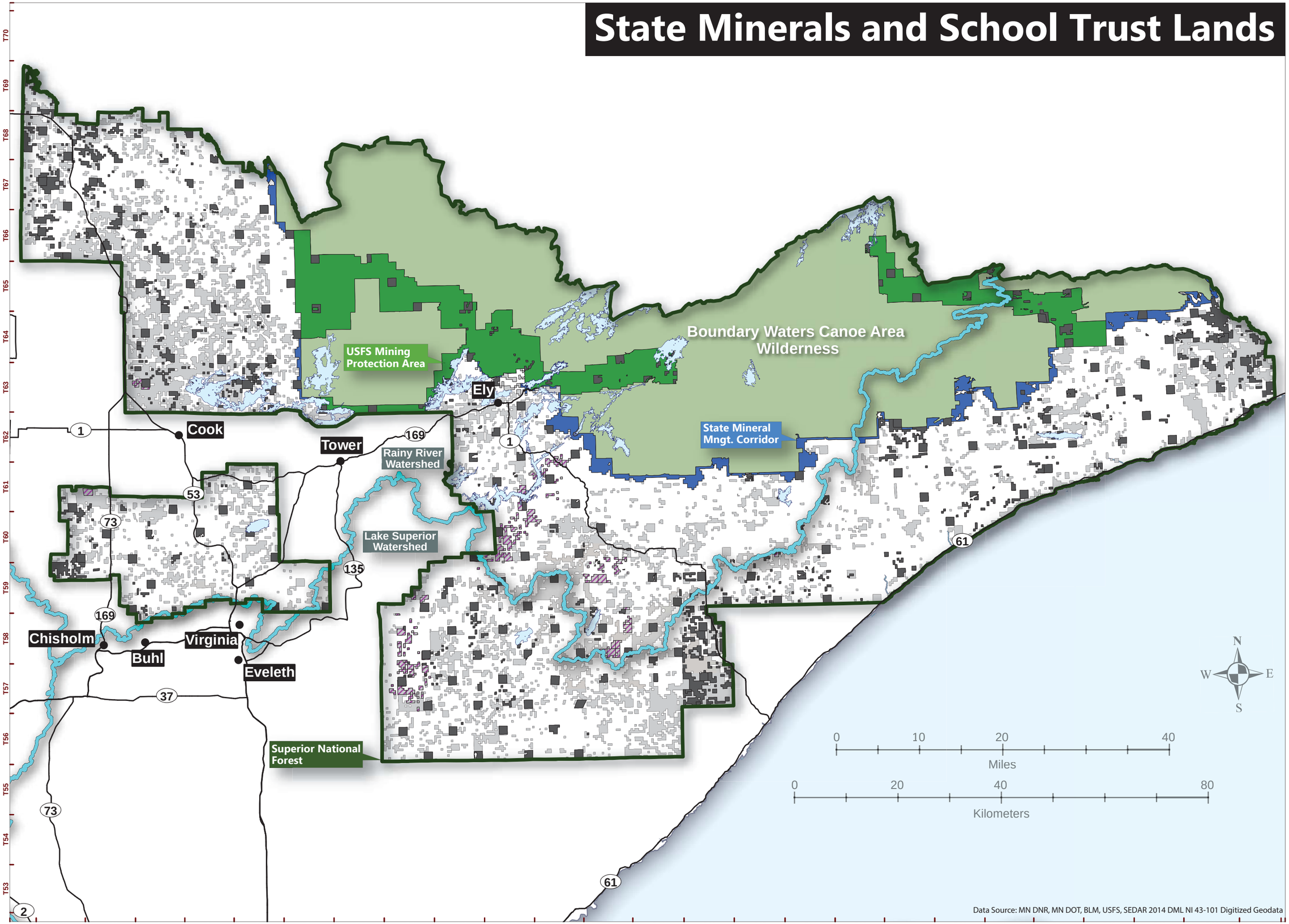

Federal Leases and PRLAs
R13
R12
R11
R10
T62
T61
T60
Boundary Waters Canoe Area Wilderness
Babbitt
Rainy River Watershed
Lake Superior Watershed
Superior National Forest
Birch River
Kawishiwi River
Stony River
Twenty Proof Creek
Langley Creek
Dunka River
Mike Kelly Creek
Partridge River
Greenwood River
Coyote Creek
Bald Eagle Creek
Legend
City
Roads
Lakes
USFS Proposed Withdrawal Lands
SNF Boundary
Watershed
BWCAW
Federal Preference Right Lease
Federal Preference Right Lease Application
0
1
2
Miles
Data Source: MN DNR, MN DOT, BLM, USFS, SEDAR 2014 DML NI 43-101
Digitized Geodata

FIGURE 5

State Minerals and School Trust Lands



Legend

- City
- Roads
- Lakes
- SNF Boundary
- Watershed
- BWCAW
- State Mineral Mngt. Corridor
- State Active Mineral Lease
- State Mineral Owner
- School Trust Lands
- USFS Proposed Withdrawal Lands

FIGURE 6

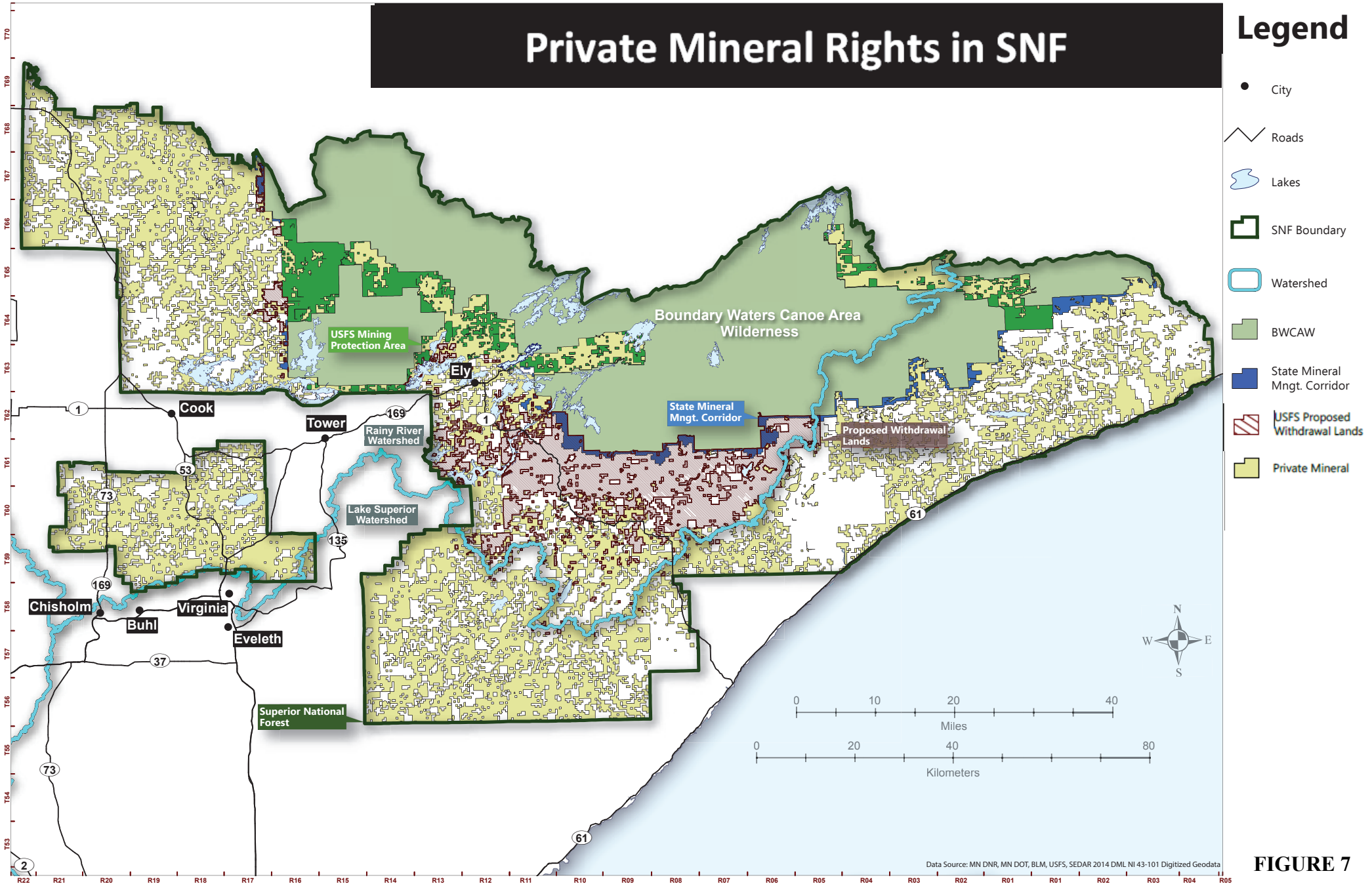

Private Mineral Rights in SNF
Legend
City
Roads
Lakes
SNF Boundary
Watershed
BWCAW
State Mineral Mngt. Corridor
USFS Proposed Withdrawal Lands
Private Mineral
Boundary Waters Canoe Area Wilderness
USFS Mining Protection Area
Ely
Cook
Tower
Rainy River Watershed
State Mineral Mngt. Corridor
Proposed Withdrawal Lands
Lake Superior Watershed
Chisholm
Buhl
Virginia
Eveleth
Superior National Forest
1
169
53
73
135
61
37
2
N
W
E
S
0 10 20 40
Miles
0 20 40 80
Kilometers
Data Source: MN DNR, MN DOT, BLM, USFS, SEDAR 2014 DML NI 43-101 Digitized Geodata

FIGURE 7

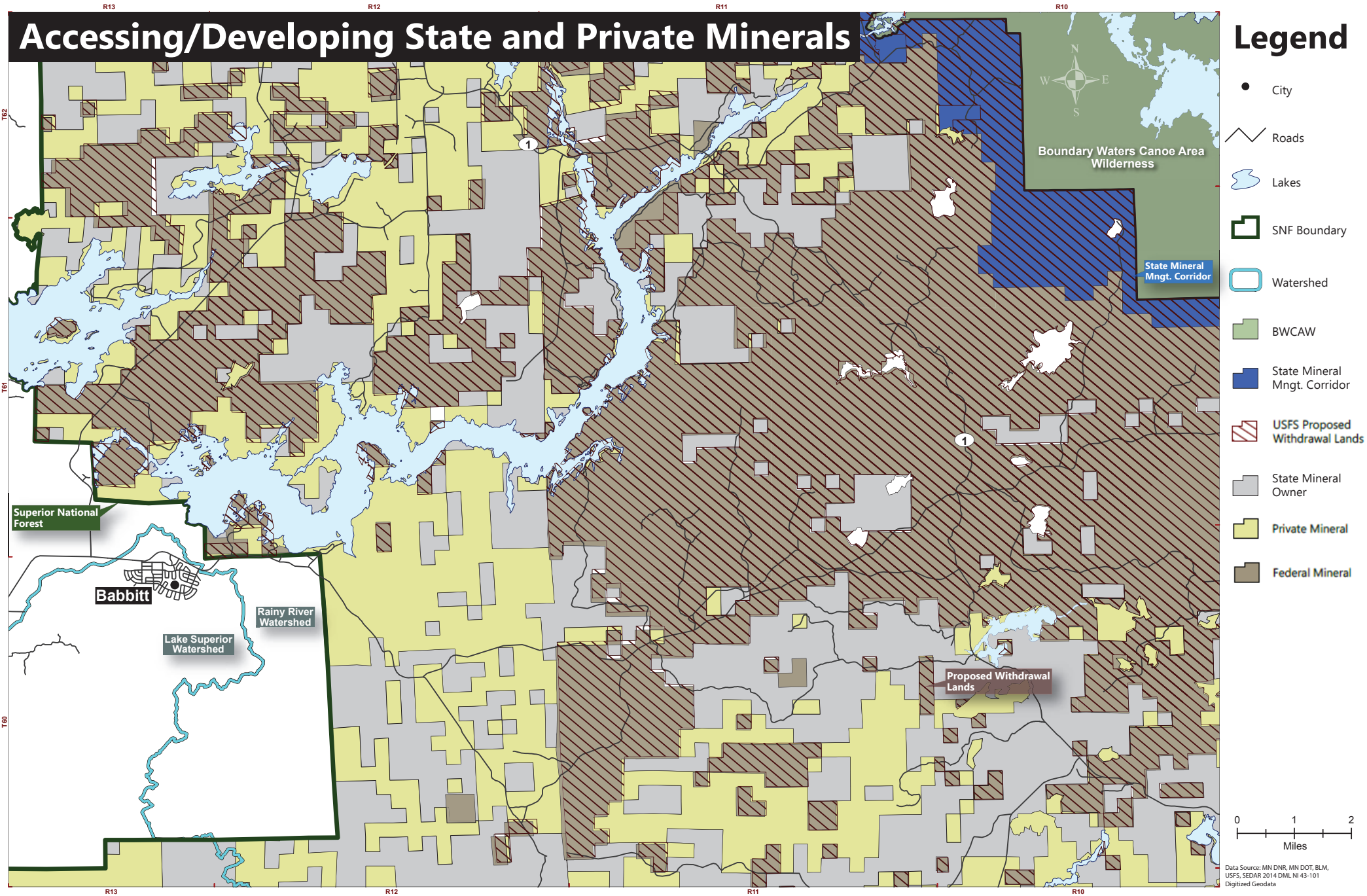

Accessing/Developing State and Private Minerals
R13
R12
R11
R10
T62
T61
T60
Boundary Waters Canoe Area Wilderness
State Mineral Mngt. Corridor
Superior National Forest
Babbitt
Rainy River Watershed
Lake Superior Watershed
Proposed Withdrawal Lands
1
Legend
City
Roads
Lakes
SNF Boundary
Watershed
BWCAW
State Mineral Mngt. Corridor
USFS Proposed Withdrawal Lands
State Mineral Owner
Private Mineral
Federal Mineral
0
1
2
Miles
Data Source: MN DNR, MN DOT, BLM, USFS, SEDAR 2014 DML NI 43-101 Digitized Geodata

FIGURE 8

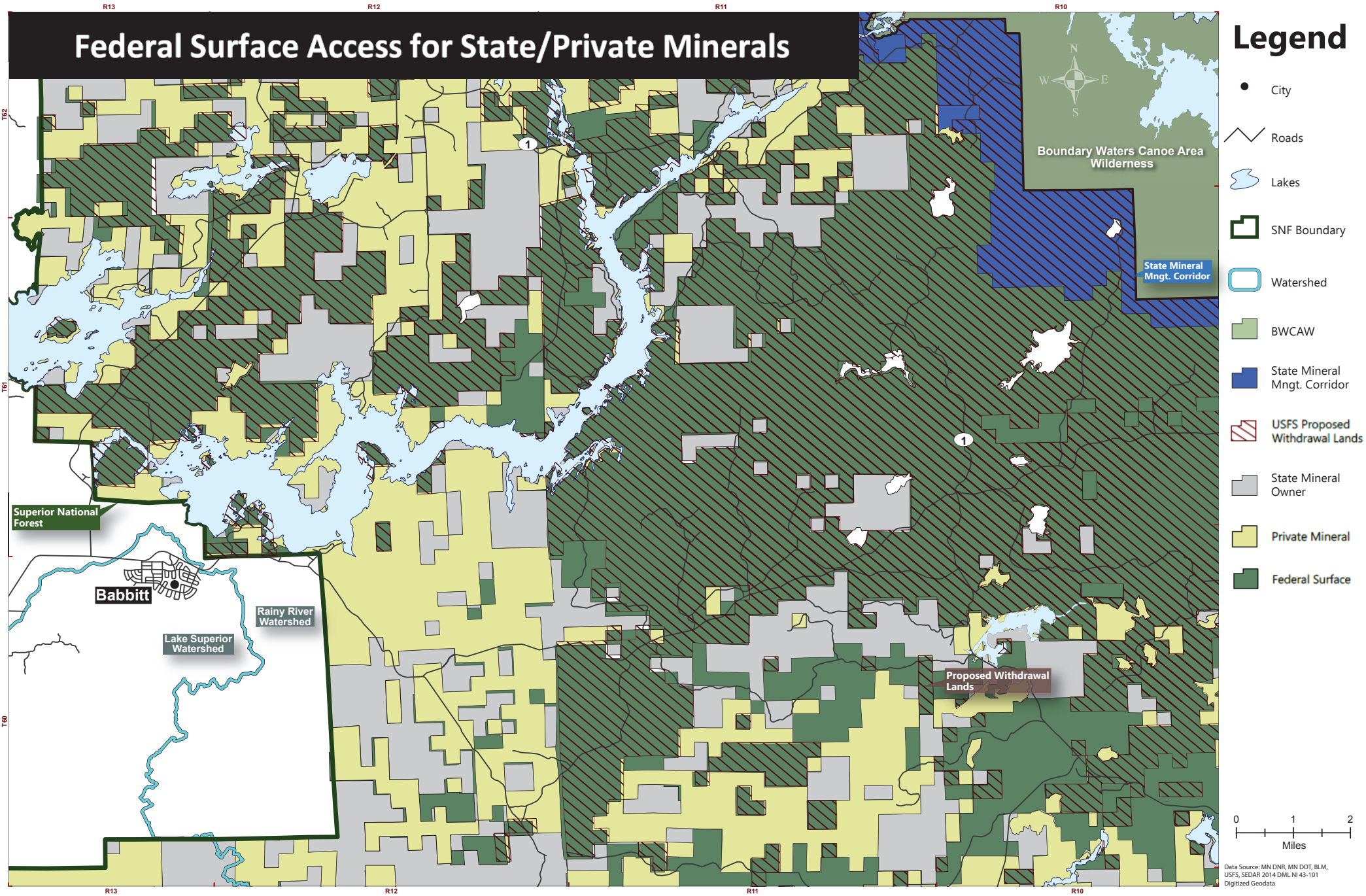

Federal Surface Access for State/Private Minerals
R13
R12
R11
R10
T62
T61
T60
Boundary Waters Canoe Area Wilderness
State Mineral Mngt. Corridor
Superior National Forest
Babbitt
Rainy River Watershed
Lake Superior Watershed
Proposed Withdrawal Lands
1
Legend
City
Roads
Lakes
SNF Boundary
Watershed
BWCAW
State Mineral Mngt. Corridor
USFS Proposed Withdrawal Lands
State Mineral Owner
Private Mineral
Federal Surface
0
1
2
Miles
Data Source: MN DNR, MN DOT, BLM, USFS, SEDAR 2014 DML NI 43-101 Digitized Geodata

FIGURE 9

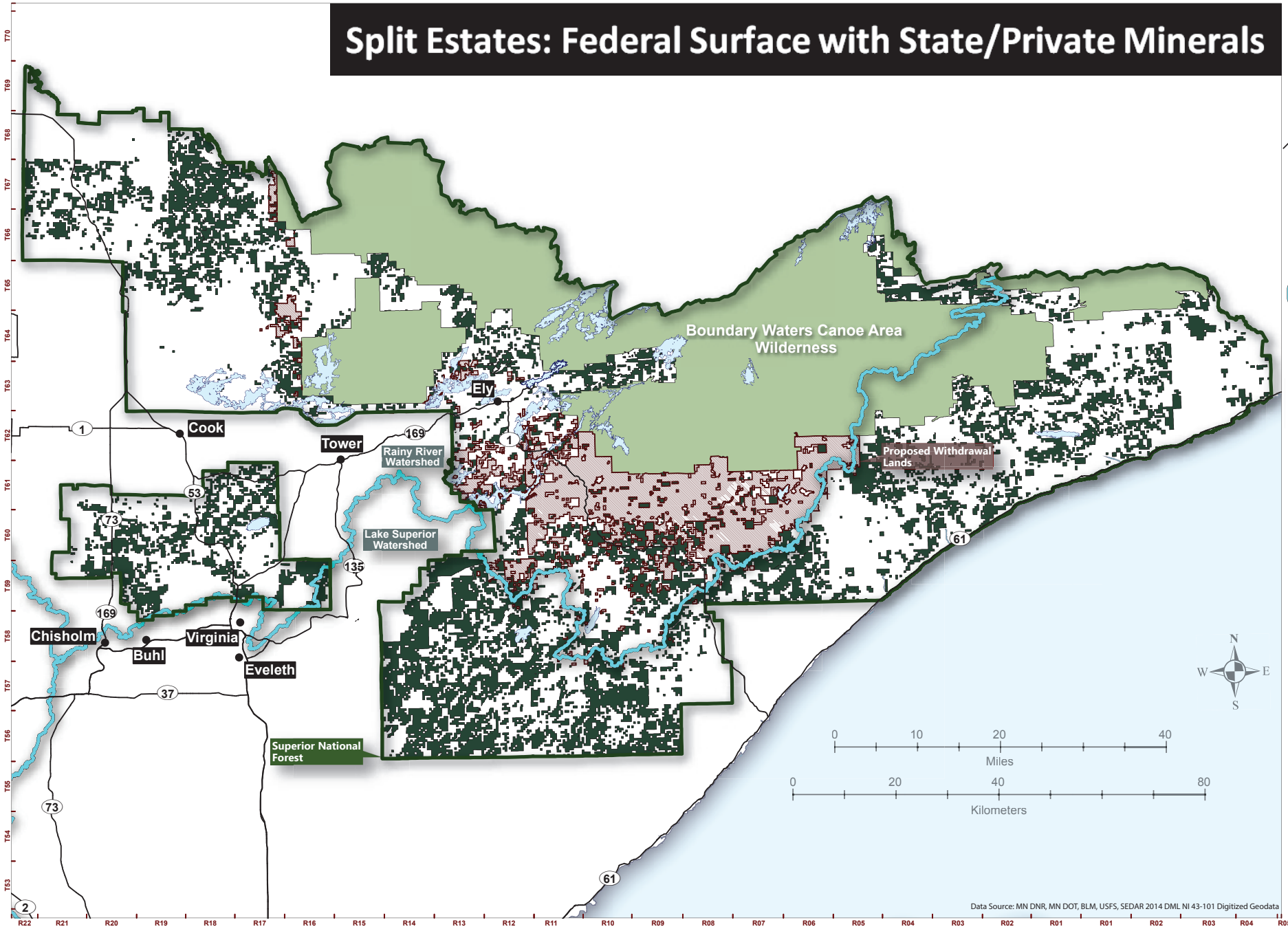

Split Estates: Federal Surface with State/Private Minerals
Legend
City
Roads
Lakes
SNF Boundary
Watershed
BWCAW
USFS Proposed Withdrawal Lands
Federal Surface & Private or State Mineral
Boundary Waters Canoe Area Wilderness
Ely
Cook
Tower
Rainy River Watershed
Lake Superior Watershed
Proposed Withdrawal Lands
Chisholm
Buhl
Virginia
Eveleth
Superior National Forest
0 10 20 40
Miles
0 20 40 80
Kilometers
N
W
E
S
Data Source: MN DNR, MN DOT, BLM, USFS, SEDAR 2014 DML NI 43-101 Digitized Geodata

FIGURE 10