

UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA
ST. PAUL DIVISION

FRIENDS OF THE BOUNDARY WATERS
WILDERNESS, CENTER FOR
BIOLOGICAL DIVERSITY, and
MINNESOTA CENTER FOR
ENVIRONMENTAL ADVOCACY,

Case No.: 19-cv-02493

COMPLAINT FOR DECLARATORY AND
INJUNCTIVE RELIEF

Plaintiff,

v.

U.S. ARMY CORPS OF ENGINEERS and
RYAN D. MCCARTHY, acting Secretary of
the Army,

Defendant.

INTRODUCTION

1. The Northmet Mining Project, proposed by Polymet Mining Corporation (“Polymet”), would be a large open-pit copper-sulfide ore mine and processing plant (the “Mine”) located within the Lake Superior watershed in a vast body of contiguous, biologically diverse, high quality wetlands that form the headwaters of the Partridge River, a major tributary to the St. Louis River. If it proceeds, the Mine will destroy at least 930 acres of these wetlands and cause degradation and destruction of thousands more acres. This is the largest permitted destruction of wetlands in Minnesota’s history. This case challenges the Corps’ issuance of a Clean Water Act Section 404 permit and Record of Decision for the Mine for violations of the substantive and procedural requirements of the Clean Water Act, 33 U.S.C. § 1344, and the procedural requirements of NEPA, 42 U.S.C. § 4332(C).

2. The Corps violated these laws in issuing permits for the Mine because it failed to conduct an adequate environmental review under NEPA and failed to comply with its own public notice and comment procedures for Section 404 permits. After the Corps issued the Final Environmental Impact Statement (“Final EIS”) in November 2015, it significantly changed the plan for mitigating wetland impacts, adopting a new plan to purchase mitigation credits from the Lake Superior Mitigation Bank. The Corps adopted the new plan without further public notice as required by its own Section 404 regulations, and without preparation of a supplemental environmental impact statement (“Supplemental EIS”) as required by NEPA. The Corps also failed to address in a Supplemental EIS substantial new evidence documenting that the Mine poses significant and previously unexamined environmental risks, including changes in the size of the Mine, and the risk of catastrophic dam failure posed by the Mine.

3. Plaintiffs also challenge the adequacy of the Corps’ identification of wetlands, assessment of impacts to wetlands, and its failure to mitigate for secondary wetland impacts in advance of permit approval

JURISDICTION AND VENUE

4. This case states claims under the Administrative Procedure Act, 5 U.S.C. § 701 *et seq.* (“APA”), which authorizes a federal court to find unlawful and set aside any final agency action that is “arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law.” *Id.* § 706. Jurisdiction arises under 28 U.S.C. § 1331 (federal question jurisdiction); § 2201 (declaratory relief); § 2202 (injunctive relief).

5. Venue in this district is appropriate under 28 U.S.C. § 1391(e) because it is the district in which the Defendants do business and where “a substantial part of the events or omissions giving rise to the claim occurred.”

PARTIES AND STANDING

6. Plaintiffs are three environmental and conservation non-profit organizations dedicated to protection of Minnesota's lands, waters, and wildlife, and the health of its citizens. Plaintiffs are collectively referred to herein as the "Conservation Groups."

7. Friends of the Boundary Waters Wilderness ("Friends") is a Minnesota nonprofit corporation founded in 1976. The mission of the Friends is to protect, preserve and restore the wilderness character of the Boundary Waters Canoe Area Wilderness ("BWCAW") and the larger Quetico-Superior Ecosystem. The Quetico-Superior Ecosystem encompasses the northern arrowhead region of Minnesota and portions of the province of Ontario in Canada, including the BWCAW, the Superior National Forest, and Voyageurs National Park in Minnesota. Friends is composed of over 3,000 members who share a belief in maintaining the wilderness character of the region and protecting the water quality of the Quetico-Superior Ecosystem and BWCAW. Friends has members from nearly all fifty states. Friends' members include owners of property in or near the Superior National Forest who acquired their property because of the area's natural attributes. Friends and its members have an interest in maintaining the water, air, and wilderness quality of the Quetico-Superior Ecosystem and BWCAW, which will be adversely affected by copper sulfide mining in and around this region.

8. The Center for Biological Diversity ("the Center") is a nonprofit organization committed to the preservation, protection, and restoration of native species and the ecosystems upon which they depend through science, policy, education, and environmental law. The Center has offices throughout the United States, including in Duluth and Minneapolis, Minnesota, as well as Arizona, the District of Columbia, California, Florida, Colorado, Oregon, and Washington. The Center has approximately 70,000 members. The Center strives to defend its members' and supporters' recreational, aesthetic, scientific, and educational interests in

protecting and preserving imperiled species and biological diversity for current and future generations through its numerous organizational programs. This includes confronting land uses that significantly harm wildlife species and ecosystems on or in proximity to our federal public lands, including large-scale mine projects such as Polymet's NorthMet Mine proposal.

9. The Minnesota Center for Environmental Advocacy ("MCEA") is a non-profit organization incorporated under the laws of Minnesota. A central aspect of MCEA's mission is to preserve the public lands of Northern Minnesota and prevent harmful water pollution throughout Minnesota. MCEA's advocacy has led to numerous legislative, administrative, and judicial decisions to keep Minnesota's waters clean and public lands protected from unwise development. MCEA is committed to ensuring compliance with our environmental and public lands management laws, including the Clean Water Act. MCEA has approximately a thousand active members across the state of Minnesota. MCEA and its members have a strong interest in preserving water quality throughout Minnesota, and especially in Northern Minnesota and the Lake Superior watershed where this wetland destruction will occur.

10. The Conservation Groups stand in the shoes of their members who live, work, and recreate in places threatened by the Northmet Mine and who use, study, and cherish the land, wildlife, and other resources that may be irrevocably damaged by the project, especially in and around the headwaters of the Saint Louis, Embarrass, and Partridge Rivers. Conservation Groups' members and supporters live near and/or have cabins near the Mine Site. Conservation Groups' members also fish, hunt, hike, observe wildlife, boat, and recreate in the headwaters region, and have concrete specific plans to return to those areas to pursue such activities this summer and fall. Conservation Groups' members strive to protect the unique ecology and wildlife that will be injured and harmed by the Mine. The Mine threatens these individuals' use

and enjoyment of this headwaters region, and the economic value of their property and/or livelihoods, based on a properly functioning ecosystem.

11. Further, as discussed *infra*, ¶¶ 121-147, the Corps failed to comply with its own regulations that required the agency to provide notice and opportunity for public comment after Polymet made substantial changes to the Mine project. In light of these changes and new information regarding significant environmental impacts from the project, the Corps was required to supplement the Final EIS with additional analysis. *See infra* ¶¶ 121-138. The Corps' failure to provide notice and prepare a supplemental EIS deprived Conservation Groups of their right to comment intelligently on these changes to the project, and to a full and informed public process in light of substantial new information and changed circumstances.

12. The Corps' approval of the Northmet Mine, based on a plainly inadequate environmental review and inadequate consideration of mandatory factors under the law, injures the health, recreational, economic, professional, scientific, and aesthetic interests of Plaintiffs' and their members. The relief requested in this lawsuit will redress such injuries.

13. The U.S. Army Corps of Engineers is charged with, and authorized under, the Clean Water Act, to issue Section 404 permits, after notice and opportunity for public hearing, for the discharge of dredged or fill material into navigable waters at specified disposal sites. 33 U.S.C. § 1344(a). District Engineer Colonel Samuel L. Calkins signed the challenged permits and authorizations.

14. Ryan D. McCarthy is the acting Secretary of the Army, the Chief Officer of the Corps, and is the federal official ultimately responsible for the Corps' administration and implementation of its duties and authorities under the Clean Water Act, Section 404 and for the

Corps' NEPA obligations related to the Mine proposal. Secretary McCarthy is sued in his official capacity.

STATUTORY AND REGULATORY BACKGROUND

I. THE CLEAN WATER ACT:

15. Congress enacted the Clean Water Act in order to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). To accomplish this goal, the Clean Water Act prohibits the discharge of any pollutant, including dredged spoil or other fill material, into waters of the United States unless authorized by a permit. *Id.*, § 1311(a). Unless statutorily exempt, all discharges of dredged or fill material into waters of the United States must be authorized under a permit issued by the Corps. *Id.*, §§ 1344(a)–(e).

16. The Corps may issue two types of permits under Section 404: individual permits and general permits. *Id.* The Corps issues individual permits under Section 404(a) on a case-by-case basis. *Id.*, § 1344(a). Such permits are issued after a review involving, among other things, site-specific documentation and analysis of waters and wetlands and potential effects to them, public notice and opportunity for a hearing, public interest analysis, and a formal determination pursuant to the statutory and regulatory criteria. 33 C.F.R. § 322.3; Parts 323, 325.

17. Permits issued by the Corps also must comply with guidelines issued by EPA that restrict the circumstances under which a permit to conduct dredge and fill in waters of the United States may be granted (collectively the “Guidelines”). 33 U.S.C. § 1344(b)(1); 40 C.F.R. §§ 230.1, *et seq.* These Guidelines provide that “degradation or destruction” of wetlands is “among the most severe environmental impacts[,]” and “may represent an irreversible loss of valuable aquatic resources.” 40 C.F.R. § 230.1(d). Dredged or fill material “should not be discharged into

the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact[.]” *Id.* § 230.1(c).

18. In making such a determination, the Corps must consider changes to the hydrologic regime, cumulative effects to aquatic ecosystems, and secondary effects on the aquatic ecosystem associated with a discharge of dredge or fill materials caused by the Project. 40 C.F.R. § 230.11(b), (e), (h). “[W]hen disruptions in flow and circulation patterns occur, apparently minor loss of wetland acreage may result in major losses through secondary impacts.” 40 C.F.R. § 230.41.

19. If the proposed dredge and fill activity will significantly adversely affect wetlands, the Corps cannot approve it. The Guidelines expressly prohibit a discharge if it will “cause or contribute to significant degradation of the waters of the United States.” 40 C.F.R. § 230.10(c). Such degradation includes significant “adverse effects of the discharge of pollutants on . . . special aquatic sites[.]” and significant “adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability.” *Id.* at §230.10(c)(1), (c)(3); *see id.* at § 230.3 (defining aquatic ecosystems as including jurisdictional wetlands); *id.* (defining pollutant broadly to include “dredged spoil, solid waste, . . . rock, sand, . . . discharged into water.”).

20. The Corps must mitigate for “significant resource losses which are specifically identifiable, reasonably likely to occur, and of importance to the human or aquatic environment.” 33 C.F.R. § 320.4(r)(2).

II. NATIONAL ENVIRONMENTAL POLICY ACT

21. NEPA seeks to ensure that federal agencies take a hard look at environmental concerns to ensure that an agency, in reaching its decision, carefully considers detailed information concerning environmental impacts. NEPA requires an agency to fully disclose all potential adverse environmental impacts of its decisions before deciding to proceed. 42 U.S.C. §

4332(C). NEPA also requires agencies to use high quality, accurate scientific information and to ensure the scientific integrity of the analysis. 40 C.F.R. §§ 1500.1(b), 1502.24. If an agency action will cause “significant” adverse effects, the agency must prepare an environmental impact statement (“EIS”). 40 C.F.R. § 1501.4.

22. NEPA guarantees that relevant information concerning environmental impacts will be made available to a larger audience, including the public, that may play a role in the decision-making process and implementation of the decision.

23. NEPA’s governing regulations define what “range of actions, alternatives, and impacts [must] be considered in an environmental impact statement.” 40 C.F.R. § 1508.25. This is known as the “scope” of the EIS. The EIS must consider direct and indirect effects. The direct effects of an action are those effects “which are caused by the action and occur at the same time and place.” 40 C.F.R. § 1508.8(a). The indirect effects of an action are those effects “which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. § 1508.8(b). An environmental effect is “reasonably foreseeable” if it is sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.

24. Under NEPA, whether impacts are “significant” requires consideration of both “context” (i.e., the various scales, regions, and interests affected by the action) and “intensity” (i.e., the “severity of the impact”). 40 C.F.R. § 1508.27. “[I]n the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole.” 40 C.F.R. § 1508.27(a). With respect to “intensity,” the regulations lay out ten factors an agency must consider, including: “the degree to which the proposed action affects public health or safety”; “unique characteristics of the geographic area . . . [;]” the degree to which the

effects on the environment are “highly uncertain” or “involve unique or unknown risks”; “the degree to which the action may ... cause loss or destruction of significant scientific, cultural, or historical resources”; and other criteria. 40 C.F.R. § 1508.27(b). Even an impact that is, on balance, beneficial may nevertheless be significant. 40 C.F.R. § 1508.27(b)(1).

25. An agency must also analyze and address the cumulative impacts of a proposed project. 40 C.F.R. § 1508.25(c)(3). Cumulative impacts are the result of any past, present, or future actions that are reasonably certain to occur. Such effects “can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7.

26. Even after preliminary approval, if major federal action is yet to occur, agencies must continue to take a hard look at the environmental effects of a planned action to determine whether significant new circumstances or information require a supplemental environmental review. NEPA requires agencies to prepare a supplement to either a draft or final EIS when the agency “makes substantial changes” to the proposed action, or “significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts” come to light. 40 C.F.R. § 1502.9(c)(1). Regulations for the Army Corps incorporate these requirements by reference. *See* 33 C.F.R. § 230.13(b).

FACTUAL BACKGROUND

I. THE MINE

27. The proposed Northmet Mining Project (“Mine”) is a copper-sulfide ore open-pit mine and processing plant located in a vast area of wetlands that form the headwaters to the Partridge and Embarrass Rivers, major tributaries of the St. Louis River—itsself a principal source of fresh water for Lake Superior.

28. The Mine proponent is a Canadian company, Polymet Mining Corporation (“Polymet”).

29. Sulfide mines or sulfide ores refer to the properties of the rock that bear minerals such as gold, platinum, nickel, copper, or other non-ferrous minerals. The sulfide ores, and often the rock containing and surrounding them, are reactive, meaning they will form acids when exposed to water and air resulting in what is commonly referred to as “acid mine drainage” where there is runoff or leaching from mine surfaces and/or waste rock or tailings. The pollutants in this runoff are highly damaging to fish, vegetation, and water quality generally. Moreover, the sulfates in runoff or wastewater from mining sulfide ore are highly damaging to wild rice.

30. The wetlands that will be destroyed and degraded by the Mine are part of a large, contiguous, mixed, and connected wetland complex that provides important ecosystem functions to the Lake Superior Watershed and the Great Lakes Basin including downstream water quality, flood control, biodiversity, and unique, connected habitat for a variety of wildlife, including moose and lynx.

31. The Mine Site includes a portion of the area called the One Hundred Mile Swamp at the Partridge River’s headwaters, which is designated as a site of high biodiversity significance under state law. EPA also designated wetlands affected by the Mine as an aquatic resource of national importance.

32. The Mine Site was part of the Superior National Forest until the Forest Service entered into a land exchange with Polymet to facilitate the project. The Mine is just south of the watershed border of the St. Louis River/Lake Superior and Rainy River/Boundary Waters Wilderness watersheds.

33. In its Section 404 Permit application materials and in the Final EIS for the Mine, Polymet proposed to extract one-third of the non-ferrous mineral deposit it determined is present at the site, for up to a maximum of 32,000 tons of ore per day.

34. As proposed, mining will occur at this rate for a total of twenty years out of three open pits. The East and West pits will be mined simultaneously for the first eleven years of the mine, after which mining in the East pit will cease. Mining in the West Pit will continue for an additional nine years, for a total of 20 years, and the Central Pit will be mined between years 11 and 16. Waste rock will be hauled to stockpiles located on the Mine Site. After completing mining in the East Pit within the first 11 years of production, waste rock will be directly disposed in this pit.

35. Mined ore will be transported to the Plant Site by train for crushing and processing. Tailings left over from this process will be transferred by slurry to an existing tailings basin, which already contains mine tailings from a prior iron ore mine.

36. Tailings waste will be stored behind a dam, built up over time to contain it within the tailings basin. This waste will be stored using the “wet tailings” method, such that the wet mining wastes, including heavy metals and reactive wastes will be slurried from the processing facility and dumped directly into the tailings pond.

37. Before starting construction and mining activities, the Mine requires numerous state and federal permits. Major federal actions concerning the Mine included: issuance of a Section 404 dredge and fill permit by the Army Corps, challenged herein, and issuance of a permit to discharge pollutants into waters of the United States under the Clean Water Act’s National Pollutant Discharge Elimination System. The U.S. Forest Service also acted, deeding the surface estate of the Superior National Forest Mine Site to Polymet in exchange for other

lands in the region. Congress originally set aside the lands the Forest Service transferred to PolyMet to protect the headwaters of the Partridge and Embarrass Rivers from degradation.

II. THE FINAL ENVIRONMENTAL IMPACT STATEMENT

38. The Corps, along with state lead agencies, published the Draft Environmental Impact Statement (“Draft EIS”) for the Mine on November 2, 2009, and requested public comment.

39. The U.S. Environmental Protection Agency (“EPA”) rated the Draft EIS as “environmentally unsatisfactory” finding that the adverse environmental impacts from the Mine were of such a magnitude that the action could not proceed as proposed. The EPA also found the Draft EIS presented inadequate information to assess environmental impacts that must be avoided or mitigated to fully protect the environment. In particular, the project threatened to exceed water quality standards, degrade groundwater quality, and failed to adequately mitigate for wetland impacts, particularly secondary effects.

40. In light of changes to the project, and a directly related proposed land exchange between the U.S. Forest Service and Polymet, the lead agencies published a Supplemental Draft Environmental Impact Statement (“Supplemental Draft EIS”) on December 9, 2013, and accepted public comment on this draft for a 90-day period.

41. The Supplemental Draft EIS considered and discussed Polymet’s proposal to mitigate for destruction of wetlands by preserving and restoring wetlands at the Aitkin, Zim, and Hinckley sites.

42. EPA gave the Supplemental Draft EIS the rating of “Environmental Concerns - Insufficient Information (EC-2)[.]” This rating indicated that environmental impacts from the project could be further mitigated or avoided. EPA provided detailed comments on the

Supplemental Draft EIS, and with regard to wetlands, found that the Corps failed to adequately assess or mitigate for secondary effects.

43. In November 2015, the Corps, jointly with the U.S. Forest Service and Minnesota Department of Natural Resources, issued a Final Environmental Impact Statement (“Final EIS”) for the proposed Northmet Mine Project.

44. The proposed Mine has been the subject of significant public interest and controversy, with the Corps receiving approximately 3,800 comments on the Draft Environmental Impact Statement, 57,700 comments on the Supplemental Draft Environmental Impact Statement, and 30,400 comments on its November 2015 Final EIS.

III. WETLAND IMPACTS

A. Direct Destruction of Wetlands by Dredge and Fill Activities

45. Over ninety-percent of the wetlands directly destroyed by dredge and fill activity at the Mine Site are high quality, meaning they are undisturbed, have high ecological function, and support a high level of biological diversity.

46. In the Final EIS for the Mine, the Corps determined that the Mine would cause the permanent loss of 913.8 acres (the equivalent of almost 700 football fields or 1.5 square miles) of high quality wetlands due to dredge and fill activity.

47. The Final EIS also estimated the Mine would cause fragmentation of wetlands, resulting in the loss of an additional 26.9 acres of wetland functions. Direct fill and dredging of wetlands will also cause fragmentation of wetlands, in particular, the continuous and connected wetland ecosystem that is the Hundred Mile Swamp, by splitting a wetland resource area into multiple disconnected parts. This isolates the fragmented parts, causing an overall loss of function in the remaining wetland fragments.

B. Secondary Impacts to Wetlands

48. The Final EIS also described large-scale secondary loss through degradation of wetlands caused by mining activity. To access mineral deposits, Polymet proposes to pump excess water that accumulates in mine pits into the Water Treatment Facility. This pumping activity will change the hydrology in and around the Mine Site by drawing down the groundwater table, creating a cone of depression that depletes water levels in groundwater-fed wetlands as well as seeps, springs, and streams. Approximately two-thirds of the wetlands in areas affected by changes to groundwater hydrology are minerotrophic—meaning they rely on groundwater and/or flow from local streams and rivers (as opposed to ombrotrophic wetlands that are fed by precipitation or snow melt).

49. Changes in groundwater levels or quality can adversely affect wetlands by drying out the soils or peats, which in turn affects type and quality of vegetation, type and quality of water that seeps from or runs off from the wetland, size and type of the wetland and/or seasonal changes.

50. The EIS recognizes that pumping activity will likely cause secondary loss of thousands of acres of wetlands by altering groundwater hydrology across the area. Further, the Mine will cause secondary loss of wetlands from changes in groundwater hydrology at the Plant Site.

51. The Mine will also cause secondary loss of wetland functions through deposition of dust and/or spillage from Mine activities.

52. Contamination of groundwater by leakage through lined pits at waste rock stockpiles, and through seepage from pits, will likely also degrade hundreds of acres of wetlands adjacent to the Partridge River.

53. The Final EIS used two different methods to estimate total secondary wetland loss. Depending on which method it used, the Corps calculated that, cumulatively, the Mine would likely degrade and destroy either 7,694.2 acres or 6,568.8 acres of wetlands, an area approximately three to four times the size of Central Minneapolis, or 10.26 to 12.02 square miles.

54. While the Final EIS identifies the total number of wetlands secondarily degraded or destroyed by mining activity, it failed to identify or analyze specifics of location, wetland type, or the quality of the wetlands in terms of lost ecosystem function and biological diversity, and failed to detail the type and magnitude of loss.

C. Inadequate Identification of Wetland Impacts

55. Numerous commenters, including Conservation Groups, challenged the adequacy of the Corps' identification of direct and secondary impacts to wetlands.

56. The Corps failed to provide sufficient evidence to support its determination of the type of wetland loss, as large areas of wetlands lacked observed data of the plant communities at the site to support identification of wetland type at the site. Even considering the data obtained, the Corps' identification of wetland type is unsupported in many locations when compared to the Minnesota Native Plant Communities Key.

57. The Corps also underestimated the quantity of secondary wetland loss because it underestimated the number of minerotrophic, or groundwater-fed, wetlands in the Mine area, thereby underestimating the number of wetlands susceptible to degradation from the drawdown of the water table by mining activities, including pumping of the mine pits.

58. Further, the Corps never identified the type or quality of wetlands that the Mine will likely degrade or destroy as a secondary consequence of mining activities.

D. Mitigation for Degradation and Destruction of Wetlands

1. *Polymet Changes the Mitigation Plan for Wetland Loss*

59. In the FEIS, Polymet proposed to provide compensatory mitigation only for the loss of wetlands directly excavated and filled, and some acres of wetlands secondarily lost through fragmentation impacts from that destruction.

60. In the Final EIS, Polymet proposed to mitigate only for the direct loss of 940.7 wetland acres by restoring and preserving 1,799.8 acres of wetlands at three sites, the Aitkin, Hinckley, and Zim sites. Polymet identified these sites as locations it had purchased or would purchase to mitigate for wetlands impacts. The Corps calculated that restoration and preservation activities at these wetlands sites would generate 1,562.5 wetland mitigation credits.

61. The November 2015 notice described in general terms the compensatory mitigation proposed at the Zim, Hinckley and Aitkin sites. The public notice stated the mitigation would “generat[e] approximately 1,562.6 wetland mitigation credits” at those three sites to compensate for wetland loss caused directly by dredge and fill activities and secondarily by fragmentation of wetlands.

62. The vast majority of these mitigation credits were for restoration, and occurred outside the Lake Superior and St. Louis River watersheds. Only at the Zim Site did Polymet propose to restore wetlands within the St. Louis Watershed.

63. In late fall of 2017, Polymet submitted a revised application for a Section 404 permit. This application changed the Mine by (1) decreasing the Mine footprint, thereby decreasing the number of directly affected wetlands acres, and (2) proposing a new method for mitigating wetland loss due to dredge and fill activities and wetland fragmentation. Polymet eliminated its proposal to preserve and restore wetlands at the Zim, Hinckley and Aitken

mitigation sites, extensively discussed in the Final EIS. Instead, Polymet proposed a new plan to purchase 1,800 wetland mitigation credits from the Lake Superior Wetland Bank.

64. The Corps did not provide public notice or an opportunity to comment on the revised permit application.

65. Conservation groups inadvertently learned of the changes to the mitigation plan in December 2017, from the revised permit to mine published by the state of Minnesota, which briefly described in a paragraph the terms of the new plan.

66. Prior to issuance of the Record of Decision (“ROD”), Conservation Groups submitted several letters requesting that the Corps provide notice of changes to its mitigation plan and an opportunity for public comment, and requested the Corps prepare a Supplemental EIS analyzing the environmental effects of this change.

67. Conservation Groups also submitted an expert report to the Corps explaining the deficiencies and omissions in the proposal to allow Polymet to use the Superior Bank as its new mitigation plan for the Mine (the “Bank Expert Critique”). The Bank Expert Critique raised numerous criticisms and concerns that the Bank failed to provide sufficient evidence in support of its identification of wetland type, and failed to provide long-term wetland restoration.

68. The Corps did not provide a public notice requesting comment on these significant revisions to the 404 permit.

69. The Corps also did not prepare a Supplemental EIS in light of either the substantial changes to the mitigation plan, or new information showing the Corps underestimated the number of wetlands affected directly and indirectly by the Mine.

70. The public first received notice of changes to the mitigation plan for wetland impacts on March 21, 2019, when the Corps issued the ROD for the final Section 404 permit for the Mine.

2. *The Lake Superior Wetland Bank*

71. Although part of the larger Lake Superior watershed, the Lake Superior Wetland Bank (“Bank”) is located outside the St. Louis River watershed. The Bank is operated by Ecosystem Investment Partners Credit Company, LLC (“EIP”).

72. On August 6, 2013, the Corps issued an entirely separate public notice requesting comment on the proposal to open the Lake Superior Wetland Bank for sale of mitigation credits. The public notice for this proposal provided no information as to how or whether the Corps would review environmental impacts for the Mine pursuant to NEPA, and did not disclose or analyze use of the Bank by any particular project, including the Mine.

73. During the public comment period for the Bank, the Center for Biological Diversity and other advocacy organizations submitted numerous objections. These objections included that the Bank was not eligible for wetland preservation credits under the Corps’ 404 guidelines because wetlands in the Bank Site were not actually at risk of degradation or destruction by any currently proposed or reasonably foreseeable future project. The Center also objected to the lack of environmental review under NEPA.

74. On August 3, 2015, the Corps approved the mitigation bank instrument for the Bank (“Bank Instrument”).

75. The Corps conducted no environmental review pursuant to NEPA prior to approving the Bank.

76. Contrary to the public notice for the Bank issued by the Corps, the final Bank instrument states that the Bank will protect 23,223 acres of bog wetlands.

77. To award wetland mitigation credit, the Bank Instrument divided the total credit area of 23,223 acres into 8 smaller construction areas. Within each construction area, the Corps allowed for mitigation credits depending upon the amount of restoration activities conducted within the area. The baseline for awarding credit starts at 15% per acre and increases to 20% per acre for degraded wetlands where the most restoration activities will occur.

78. Of the total credit acres, 19,383 acres are native undisturbed wetlands that EIP proposed to preserve. This means the primary conservation benefit derived from these wetlands is protecting them from some future, as-yet-identified, adverse modification. EIP proposes to restore the remaining 2,917 acres of wetlands.

79. The Bank Instrument does not describe any future projects or proposals that threaten to adversely modify wetlands. The Final Application for the Bank, included by reference as Appendix A to the Bank Instrument, describes the mitigation bank plan, and contains information about threats of adverse modification.

80. The Final Application lists two primary threats to wetlands allocated for preservation credits: the presence of drainage ditches, and possible mining activities. The final application presented no evidence of mineral deposits that would place these lands at risk of development for mining activities, nor any current or planned exploration or leasing activities that would demonstrate an actual threat from mining. The application does point to the possibility of peat mining at the site, but prior peat mining occurred on a small portion of the total land area, and again, there is no evidence of an actual project or proposal for peat mining.

81. The Bank Expert Critique, submitted by the Conservation Groups, pointed out that the Bank failed to adequately document existing wetland conditions. The Bank Expert Critique found that due to the sparse and incomplete evidence provided by the Bank, the

wetlands identified by the Bank as coniferous bog could just as easily be classified as fens or swamps based on the plant communities, soil type and canopy cover that were reported. This lack of information means the Bank cannot accurately identify the type, quality and functions of wetlands restored and mitigated for which the Bank Plan proposes to provide wetland mitigation credit.

82. The Expert Critique also found that in areas slated for restoration activities, the Bank proposed to remediate and restore wetland hydrology by installing ditch plugs that obstruct flow through the ditch. However, this restoration methodology fails to provide long-term wetland restoration. The Bank uses sub-standard materials to construct ditch plugs that will degrade over—preventing restoration of flows in the long-term. These ditch plugs also fail to adequately address subsidence damage to the wetlands resulting from the decades of ditch drainage. Consequently, EIP’s restoration method will not restore historic water flow patterns, and as a consequence will not actually restore wetlands.

83. The Bank’s monitoring and performance standards of only five years also will not assure long-term success because the Bank’s evidence of baseline data is sparse, making it difficult to compare with future performance over such a short period of time. This is particularly important in peat environments that take decades or longer to accumulate and reach full wetland functions.

84. Furthermore, the performance standards fail to identify concrete and objective metrics, such as revitalization of particular plants or community types, to indicate restoration of wetland conditions.

3. *Adequacy of Mitigation for Wetland Destruction Caused by the Mine.*

85. On March 21, 2019, the Corps issued the Record of Decision (“ROD”) and final Section 404 permit for the Mine.

86. In the ROD, the Corps required Polymet to mitigate for wetland losses directly caused by dredge and fill activities, and for fragmentation impacts, by purchasing 1278.36 acres of wetland mitigation credits from the Bank. The Corps eliminated the earlier requirement to provide direct mitigation for wetland loss and damage of 1,562.6 acres at the Aitkin, Hinckley, and Zim sites. The Corps stated that purchasing almost 300 fewer credits from the Bank, “will be more effective” at replacing lost wetland functions than the originally proposed mitigation plan.

87. The ROD also provided incentive credits for in-kind wetland mitigation, even though the permit does not require Polymet to mitigate for particular types of wetland loss. In the ROD, the Corps explained that dredge and fill activity will destroy many different wetland types, including conifer bogs, coniferous swamp, sedge/wet meadow, shrub swamp, shallow marshes, hardwood swamp, open bog, and deep swamp. These kinds of wetlands are not biologically fungible. Each is unique and serves unique ecological purposes with variance in vegetation and/or hydrology and/or soils or chemistry all of which serve to create a particular environment and habitat.

88. However, the Permit does not require Polymet to purchase credits for particular wetland types, e.g. bogs and deep swamps. The ROD provides no information on the type of wetland credits Polymet must purchase, and merely states that Polymet will purchase credits from the Bank. Rather, the Permit merely requires Polymet to purchase wetland mitigation credits of an unspecified type from the Bank. Neither the ROD nor the Permit explains how or why the purchase of Bank wetland credits for unspecified kinds of wetland acres will mitigate for loss of a range of different types of wetlands.

89. Nevertheless, the Corps provided an in-kind allowance that required fewer acres of mitigation through the Bank, reducing the total number of wetland credits because Polymet purchased credits at the Bank “characterized predominantly by high quality bog[.]” Even if most of the wetland credits purchased through the Bank are high quality bog, the Corps has failed to explain why this is appropriate mitigation for the loss of a number of other kinds of wetlands, or why the amount of credits is sufficient to offset the adverse effects of the Mine.

90. With regard to secondary wetland impacts, in the Final EIS, the Corps determined that, at minimum, the Mine will likely degrade and destroy 6,568.8 acres of wetlands. The Corps mapped the locations where these losses would occur, and ranked wetlands according to the severity of loss. Secondary losses to wetlands are identifiable, and reasonably likely to occur.

91. Yet in the ROD, the Corps does not require Polymet to mitigate for secondary wetland loss in advance of project approval or even in advance of commencing mining, and before destruction or degradation of the thousands of acres of wetlands from these secondary impacts occurs. Rather, the Corps requires Polymet to monitor for wetland loss, and report results to the Corps. Only after the fact, if the Corps determines that wetland degradation or destruction has occurred, would Polymet be required to propose any mitigation plan for those additional wetland impacts and there is no analysis of whether such extensive mitigation is even available if it were to be required.

92. For the first time in the Permit, the Corps does require Polymet to retain an option to purchase 529 mitigation credits with the Bank for four years—a small number in comparison to the thousands of acres that will likely be degraded by mining activities. Presumably, once the Corps observes wetland loss using Polymet’s reporting data, these credits could be used to offset some small fraction of the losses. However, if wetland losses exceed this amount, or occur after

the option to purchase lapses, the Permit allows Polymet to propose a new as-yet-unspecified mitigation plan for compensation for the losses without assessing whether this would even be possible.

E. Finding of Non-significance for Overall Wetland Impacts.

93. For the first time in the ROD, the Corps also found that direct and secondary loss of thousands of wetland acres was not a significant impact on the environment. This is despite the fact that the Mine would result in the largest permitted destruction of wetlands in the state's history. The Corps never made such a non-significance determination in the Final EIS.

94. The Corps did not rely on the wetland mitigation plan to make a mitigated finding of non-significance. Rather, the Corps decided to assess the wetland loss as a percentage of two entire watersheds, the Partridge and Embarrass Rivers, and found that on a two-watershed scale, 901 acres of direct loss is an "insignificant" percentage. The Corps further found that secondary wetland impacts were also too small a percentage on a watershed scale to be significant. There is no explanation of why a comparison of wetland losses to an entire watershed is either relevant or rational.

95. In making this calculation, the Corps also ignores its own findings in the Final EIS that the Mine could result in the potential secondary loss through degradation or destruction of an additional 5,628 to 6,754 acres of high quality wetlands; findings that specify that secondary loss of wetlands *alone* could cumulatively affect up to 12% of the Partridge and Embarrass River watersheds.

IV. METHYLMERCURY IN AREA WATERS ASSOCIATED WITH THE PROJECT

96. Mercury in the environment can take three different chemical forms: elemental mercury, ionic mercury, and methylmercury (sometimes referred to as methylated mercury). Elemental mercury can be converted to methylmercury through chemical processes.

Methylmercury is the type of mercury of most concern because it is “bioavailable,” meaning it can be taken up by organisms such as plants, fish, shellfish, and insects through the food chain. It also “bioaccumulates” meaning that as the mercury moves up the food chain into larger organisms such as fish, the mercury content in the organism increases and accumulates at each level of the food chain, including in humans that consume fish, and shellfish that have already accumulated this mercury.

97. The Partridge, Embarrass, and St. Louis Rivers in Minnesota are all listed by the State of Minnesota as impaired with respect to mercury, meaning they do not meet Minnesota’s Water Quality Standards for mercury.

98. Wetlands that will be affected by the Mine are within the headwaters of each of these rivers, and water from those wetlands feeds these rivers through groundwater connections, surface connections, and runoff.

99. Peat wetland environments in Northern Minnesota, such as the wetlands at issue in this case, are a source of methylmercury. The peat environment fosters the chemical processes that contribute to increased mercury methylation.

100. The addition of sulfates into those peat wetland environments, directly from a water source or through air deposition such as the deposition of dust from mining or mine processing, acts as a catalyst that increases the process of methylation of mercury in the peat wetland environments, and thereby increases the amount of methylated mercury in waters in, and connected to, those wetlands.

101. The increase in methylated mercury in those peat wetlands from added sulfate has also been shown to further increase the export of mercury into waters when the peat goes through drying and re-wetting cycles such as when the water table fluctuates.

102. The Final EIS disclosed that sulfate deposition will increase in wetlands near to the Mine causing a corresponding increase in mercury in the rivers. However, the FEIS does not analyze the extent of the increase or the attendant impacts on water quality standards and fish tissue or human health, stating only that the effect of increased methylated mercury will “decrease with distance downstream....”

V. DOUBLING OR TRIPLING PRODUCTION RATES AT THE MINE.

103. While the Corps considered and rejected a mine alternative smaller than the one Polymet proposed during the environmental review process, the Corps never evaluated the possibility of mine expansion and acceleration, larger and faster than that proposed and examined in the Final EIS or Draft EIS.

104. In comments during environmental review of the Mine, Conservation Groups and others questioned the adequacy of the environmental review because it failed to address the possibility and potential impacts of mine expansion. Lead agencies rejected these comments as speculative.

105. In June 2018, Conservation Groups submitted a new report, an Updated Form NI 43-101 Technical Report to the Corps, that had been prepared by Polymet consultants and made public in March of 2018 (the “Technical Report”), showing that the Mine as proposed by Polymet is just the first stage in a much larger mining operation. The Conservation Groups requested a Supplemental EIS based upon this additional evidence that showed the scope of the Mine was different than originally disclosed to the public and reviewed in the Final EIS.

106. In the Technical Report that Polymet submitted to the Canadian government and with the United States’ Security and Exchange Commission in 2018, Polymet acknowledged that the Mine as proposed and examined in the Final EIS provided only marginal economic returns to the company, at a “subeconomic” rate—meaning the risk exceeded the return on investment.

The Technical Report found that the Mine as proposed in the Final EIS and the Section 404 Permit application would provide an internal rate of return of only 9.6%. Expert evidence submitted to the Corps with the Technical Report demonstrated that ordinarily, companies will give approval for a mining project only if it has an internal rate of return of 30% or even 40%.

107. The Technical Report further found that if Polymet doubled or tripled production rates, then the rate of return would increase substantially. Doubling the rate of ore throughput increased the internal rate of return to 18.5%, and tripling the rate increased this rate to 23.6%. The company described these two scenarios as “potential expansion opportunities.”

108. The 2018 Technical Report evaluated changes Polymet would need to make to accommodate these expansion and acceleration opportunities, and determined that: “much of the existing infrastructure at the [processing] Plant would be of sufficient size, if retrofitted, to accommodate the layout of new state-of-the-art equipment required for all three throughput scenarios.”

109. The Technical Report recommended, before Polymet had even received all of its permits necessary for the Mine as proposed, that Polymet design an expansion and acceleration of the Mine. The consultant recommended “that additional engineering and environmental studies be performed at a prefeasibility study level to further refine the costs, valuations and environmental requirements for the potential 59,000 STPD and 118,000 STPD production scenarios.”

110. In media coverage of the Technical Report, Polymet’s CEO argued that “[t]here’s significant additional economic potential for the remainder of the resource, for relatively low additional capital costs.”

111. The Technical Report, recent statements by company executives to the media, coupled with previous statements by the company indicates an intent to mine the entire mineral resource, and to do so at a much faster rate, not just mine one-third of the resource as currently proposed for the Mine and analyzed in the FEIS. This evidence makes it reasonable foreseeable that Polymet will expand mining activities at the site by extracting mineral ore at a faster rate and in larger quantities than proposed and examined in the Section 404 Permit application and the Final EIS.

112. Despite this evidence, the Corps did not prepare a supplemental EIS or analysis of any kind to examine an expansion or acceleration of the Mine, let alone seek public comment on such an expansion or acceleration. Rather, the Corps concluded in the ROD for the final Section 404 permit that because Polymet has not yet proposed mine expansion, it is not a reasonably foreseeable outcome.

VI. RISK OF CATASTROPHIC DAM FAILURE

113. On January 31, 2019, the Conservation Groups notified the Corps of the tailings dam failure and disaster at the Corrego do Feijao mine in southeastern Brazil that occurred six days prior.

114. Conservation Groups pointed out that the operators at the Corrego do Feijao mine used the “upstream” tailings dam method—a method of tailings storage now banned in Brazil. Conservation Groups raised concern that the “Olson Method” was relied on to determine material strength, liquefaction, and slope stability of the Corrego do Feijao dam to predict that it would not be susceptible to liquefaction and failure.

115. The Olson Method was developed by Dr. Olson, an expert retained by Polymet to analyze liquefaction potential and dam failure of the Polymet Mine.

116. Polymet also used the Olson Method to design and model the safety of the tailings basin dam for the Mine, and relied on this analysis to determine the Mine posed minimal risk of dam failure. Polymet did not use any other method for estimating liquefaction potential for its proposed tailings dam. The tailings dam for the Mine is an “upstream” tailings dam.

117. There are multiple industry-accepted methods of calculating tailings dam stability. In light of the Corrego do Feijao mine failure, the Conservation Groups argued that the Agencies should reassess and reanalyze the upstream tailings dam design and provide the public an opportunity to review and comment on the new information via a remand to the state agencies involved.

118. The Corps did not prepare a Supplemental EIS, or conduct any additional environmental review in light of this significant new information.

FIRST CAUSE OF ACTION
FAILURE TO PREPARE A SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT
(NEPA 42 U.S.C. § 4332; 40 C.F.R. § 1502.9)

119. Conservation Groups re-allege and incorporate each of the preceding paragraphs.

120. If new information or circumstances demonstrate that “the remaining action” will significantly affect the environment to an extent not previously considered, then a supplemental EIS must be prepared. 40 C.F.R. § 1502.9(c)(1); *see* 33 C.F.R. § 230.13(b).

121. A change to the proposed project is substantial enough to require preparation of a Supplemental EIS if it presents a different picture of the environmental impact of the agency's actions that was not within the range of alternatives or impacts discussed in the Final EIS.

122. The Corps must also consider a reasonably foreseeable expansion or significant shift in the scope of the proposed project because the scope of an EIS must include an analysis of connected actions, cumulative actions, and reasonably foreseeable similar actions. 40 C.F.R. § 1508.25 Likewise, phased actions within a project must be considered in a single EIS. *Id.*

123. Prior to issuing the permit, the Corps was required to consider whether changes to the mitigation plan proposed by Polymet to the Mine in its September 2017 application and/or new information raised by the Conservation Groups warranted or required preparation of a Supplemental EIS.

124. The Final EIS extensively analyzed Polymet's plan to mitigate the wetlands impacts of the Mine at the Aitken, Zim, and Hinckley sites to determine whether they adequately compensated for direct loss and secondary wetland loss due to fragmentation effects of thousands of acres of wetlands.

125. The Corps' new mitigation plan for wetland impacts to purchase mitigation credits at the Bank is a substantial change to the Mine because it changes the number of acres to be mitigated, changes calculations of credit (due to use of the Bank), changes location of mitigation including moving mitigation out of the watersheds where impacts will occur, and changes the type of mitigation. The new plan presents a wholly new approach for mitigating wetland impacts that was not considered or even discussed in the 2015 Final EIS or in the 2014 Section 404 Permit application, the only two opportunities for the public to review and comment on these significant impacts to Minnesota's waters and wetlands in the Lake Superior watershed.

126. By changing the plan for compensatory wetland mitigation, the entire analysis in the Final EIS regarding the adequacy of mitigation to address wetland degradation and destruction no longer applies to the 404 Permit that the Corps actually issued.

127. The Corps conducted no environmental review of whether the new plan to mitigate for wetland loss by buying credits from the Bank adequately compensated for lost ecosystem functions. Nor can the Corps rely on environmental review of the Bank to satisfy its obligation under NEPA because the Corps conducted no such review of the Bank.

128. The Corps also never considered a faster rate of extraction or expansion of the Mine or a phased approach resulting in a larger overall Mine project, even after Conservation Groups provided evidence from Polymet's own consultants showing that the Mine must be larger and mined faster than the size and scope examined in the Final EIS in order to be financially viable.

129. Doubling or tripling production at the Mine will have a significant added impact on the environment.

130. Even though an expansion scenario is not yet proposed, such a mining scenario is foreseeable based on admissions by Polymet. Nevertheless, the Corps refused to prepare a Supplemental EIS for this reasonably foreseeable version of the Mine.

131. The ROD for the Section 404 permit does not respond to or address the new evidence provided by Conservation Groups, regarding the 2019 failures of the Corrego do Feijao dam in Brazil, a tailings dam constructed with the same design planned for Polymet.

132. The risk of a tailings dam failure is a potentially significant catastrophic environmental impact, and new information presented by Conservation Groups to the Corps undermines the adequacy of the analysis in the Final EIS regarding the risk of a catastrophic tailings dam failure. By deciding to ignore this information and proceed with approval of the Mine, the Corps acted arbitrarily by failing to consider an important aspect of the problem.

133. At minimum, the Corps should have required independent review of the design of the impoundment dam in light of concerning new information regarding the Olson Method for calculating the stability of tailings dams. *See* 33 C.F.R. § 320.4 (authorizing the Corps to require "in appropriate cases" an independent review of dam safety).

134. Each of the issues concerning the changed wetland mitigation plan, the reasonably foreseeable acceleration and expansion of the Mine, and the new information concerning tailings dam design and construction, alone and certainly together, requires the preparation of a Supplemental EIS for the Mine.

135. Based on the foregoing and 42 U.S.C. § 4332, *et seq.*, and 5 U.S.C. § 706 (2)(A), (2)(D), the Corps authorization of permanent and temporary impacts to wetlands in this Permit is arbitrary, capricious and contrary to law for failing to supplement the EIS.

136. The Corps' failure to supplement the EIS despite significant new information and substantial changes to the Mine also constitutes agency action unlawfully withheld and unreasonably delayed. 5 U.S.C. § 706(1).

137. Conservation Groups are entitled to an order declaring the Corps in violation of NEPA, vacating the Section 404 Permit as issued in violation of NEPA and federal regulations, and requiring compliance with NEPA.

SECOND CAUSE OF ACTION
FAILURE TO PROVIDE ADEQUATE PUBLIC NOTICE AND COMMENT
(33 U.S.C. § 1344(A); 33 C.F.R. 325.3, AND 42 U.S.C. § 4332)

138. Conservation Groups re-allege and incorporate each of the preceding paragraphs.

139. The public notice issued by the Corps must include "sufficient information to give a clear understanding of the nature and magnitude of the activity to generate meaningful comment." 33 C.F.R. § 325.3(a). The public notice is required to include "any other available information which may assist interested parties in evaluating the likely impact of the proposed activity, if any, on factors affecting the public interest." 33 C.F.R. § 325.3(a)(13).

140. The regulations are particularly prescriptive with respect to notice regarding mitigation. 33 C.F.R. § 332.4. A public notice for a proposal must describe the "amount, type,

and location of any proposed compensatory mitigation, including any out of kind compensation, or indicate an intention to use an approved mitigation bank or in lieu fee program.” *Id.*

§ 332.4(b)(1).

141. The last public notice published by the Corps in November 2015, discussed in detail Polymet’s proposed plan to mitigate for destruction of wetlands at the Mine by restoring wetlands at the Zim, Aitkin, and Hinckley mitigation sites. It did not mention any plan to mitigate for wetland impacts by purchasing credits from the Bank.

142. The Corps provided no notice or opportunity to comment on Polymet’s new plan that changed the location, amount, and type of mitigation.

143. With respect to secondary impacts to wetlands, the Corps did not identify any plan for mitigating these impacts in the Final EIS. The Corps’ failure to propose mitigation for secondary degradation of wetlands made it impossible for Conservation Groups to comment on this issue during the public comment period. Further, the indefinite future mitigation for possible future secondary impacts provides no public comment opportunity prior to the damage being done.

144. The failure of the Corps to provide the public any opportunity to comment on the changed mitigation plan to purchase credits from the Bank violated the letter, spirit, and intent of the Clean Water Act and NEPA public participation requirements, as well as the Corps’ own Section 404 permitting regulations.

145. Based on the foregoing and 33 U.S.C. § 1344 (a)-(c), 42 U.S.C. § 4332, *et seq.*, and 5 U.S.C. § 706 (2)(A), (2)(D), the Corps’ authorization of permanent and temporary impacts to wetlands, without adequate public notice and comment, is arbitrary, capricious, and contrary to law.

146. Conservation Groups are entitled to an order declaring the Corps in violation of the Clean Water Act and its own regulations, and NEPA, for failure to provide public notice and opportunity to comment on changes to the wetland mitigation plan for the Mine, vacating the Section 404 permit, and remanding for compliance with notice and comment requirements.

THIRD CAUSE OF ACTION
FAILURE TO ADEQUATELY ASSESS WETLAND IMPACTS
(33 U.S.C. § 1344 and 40 C.F.R. § 230)

147. Conservation Groups re-allege and incorporate each of the preceding paragraphs.

148. Prior to issuing a permit, the Corps “shall determine in writing the potential short-term or long-term effects of a proposed discharge of dredged or fill material on the physical, chemical, and biological components of the aquatic environment[.]” 40 C.F.R. § 230.11. This includes determining “the nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms.” 40 C.F.R. § 230.11(e).

149. Regulations governing compensatory mitigation require identification of the type and quantity of affected wetlands acres to replace lost ecosystem functions and services. *See* 40 C.F.R. § 230.93(b)(1). In documenting impacts to wetlands, the Corps must explain how impacts associated with the Mine will be avoided, minimized, and compensated for. 40 C.F.R. § 230.94(b)(1).

150. The Minnesota Routine Assessment Method (“MnRAM”) requires the applicant to assess impacts to existing wetlands, as the first step in determining the feasibility of compensatory mitigation. *See Comprehensive General Guidance for Minnesota Routine Assessment Method Evaluating Wetland Function (“MnRAM Guidance”)*, at 1-2 (Sep. 15, 2010), http://www.bwsr.state.mn.us/wetlands/mnram/MnRAM_Comprehensive_Guidance.pdf.

151. Collectively, these regulations and guidance documents require the Corps to assess the type, quality, and quantity of wetland acres adversely affected by the proposed action, and the permanence of those affects.

152. With regard to wetlands directly affected by Mine dredge and fill activities, the Corps relied on sparse and incomplete data, to support the agency's identification of wetland type, and even considering the data obtained by the agency, wetland identification deviated from standard practice identified in the Minnesota Plants Key, and therefore the Corps' wetland identification was contrary to the evidence before the agency.

153. With regard to secondary impacts, the Corps never assessed the type or quality of wetlands secondarily affected by the Mine.

154. The Corps also failed to gather sufficient evidence to support its estimate of the amount of minerotrophic wetlands secondarily affected by drawdown of the groundwater table. The Corps thereby underestimated adverse impacts to wetlands from changes to the hydrology.

155. The Corps' mitigation plan proposes to compensate for the degradation or destruction of secondarily affected wetlands only after the harm occurs. However, at that point it will be too late for the Corps to identify what is actually lost. Plant communities will be dead or dying and the contours may have changed due to changed hydrology. Hence, the Corps would be unable to identify wetland type using plant communities, or document the original extent and quality of the affected wetland. Moreover, there is no evidence that *post hoc* mitigation would even be available.

156. The absence of this information prevents the Corps from adequately compensating for secondary wetland loss because the Corps failed to document baseline conditions. This approach is also contrary to the Corps' own guidance, which requires wetland

assessment prior to approval of the Section 404, not after mining destroys wetlands. *See MnRAM Guidance* at 2.

157. Failing to adequately document baseline conditions including the type and quantity of wetlands threatened with degradation or loss by the Mine violates the Corps' own permitting requirements. 40 C.F.R. § 230.11.

158. Requiring monitoring and then compensating for the degradation and destruction of secondarily affected wetlands only after the harm occurs also fails to minimize these anticipated impacts, and fails to insure that adequate compensatory habitat will be available.

159. Based on the foregoing, 33 U.S.C. § 1344 (a)-(c) and its implementing regulations, as well as 5 U.S.C. § 706 (2)(A), (2)(D), the Corps' authorization of permanent and temporary impacts to wetlands is arbitrary, capricious, and contrary to law for its failure to adequately identify wetland impacts from the Mine.

160. Conservation Groups are entitled to an order declaring the Corps in violation of Clean Water Act for its inadequate identification of wetlands, vacating the Section 404 permit, and remanding for compliance with requirements for proper identification of wetlands affected by the Mine.

FOURTH CAUSE OF ACTION
ARBITRARY FINDING OF INSIGNIFICANCE
(5 U.S.C. § 706)

161. Conservation Groups restate and re-allege all preceding paragraphs.

162. Under the Clean Water Act, if the Corps determines that adverse impacts to wetlands will cause significant degradation to waters of the United States, then the Section 404 permit cannot be issued. 40 C.F.R. § 230.10(c).

163. In making such a determination, the Corps must consider the nature and degree of any significant change to the hydrologic regime, 40 C.F.R. § 230.11(b), “determine the nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms,” 40 C.F.R. § 230.11(e), and must consider secondary effects on the aquatic ecosystem associated with a discharge of dredge or fill materials, 40 C.F.R. § 230.11(h), including “when disruptions in flow and circulation patterns occur, apparently minor loss of wetland acreage may result in major losses through secondary impacts.” 40 C.F.R. § 230.41.

164. The goal of the Section 404 regulatory program is no net loss of the nation’s remaining wetlands. U.S. Env’tl. Prot. Agency, *MOU Between the Department of the Army & EPA*, (1990), <https://www.epa.gov/cwa-404/memorandum-agreement>. “Most wetlands constitute a productive and valuable public resource, the unnecessary alteration or destruction of which should be discouraged as contrary to the public interest.” 33 C.F.R. § 320.4(b). Unmitigated wetland loss is a significant adverse impact to waters of the United States.

165. The Mine will foreseeably cause the loss of thousands of acres of wetlands, portions of which include the One Hundred Mile Swamp, an interconnected complex of wetlands and forested area designated as an aquatic resource of national significance and designated by Minnesota as a site of high biodiversity significance. These wetlands rank high in terms of biodiversity and ecosystem function, and form the headwaters of a major source of drinking water for millions of people. Their loss as a result of the Mine will irrevocably fragment the entire area of connected and contiguous wetland ecosystems, destroying its status as a high quality wetland and natural area.

166. The Final EIS found that compensatory mitigation was required for significant wetland loss caused by the Mine.

167. The Corps cannot approve the Section 404 permit without requiring adequate mitigation for direct and secondary loss of thousands of wetland acres from the Project. The Corps' misuse of watershed scale percentages in the ROD to minimize the significance of this loss is contrary to the evidence before the agency, contrary to the mandates of the Clean Water Act, and contradicts the Corps' findings in the Final EIS.

168. Further, the Corps failed to sufficiently mitigate for direct and indirect impacts to wetlands. *See infra*, ¶¶ 187-200. By approving the Section 404 permit that inadequately mitigates for wetland loss, the Corps unlawfully permitted an action that will cause significant adverse impacts to waters of the United States.

169. The Corps also cannot approve the Section 404 Permit where it is demonstrated that the Permit will have or allow a significant adverse effect on the environment, such as the increased methylation of mercury in area wetlands and the increase in mercury contamination in area rivers and streams.

170. Based on the foregoing, 33 U.S.C. § 1344 (a)-(c), 42 U.S.C. 4332, *et seq.*, and implementing regulations, as well as 5 U.S.C. § 706 (2)(A), the Corps' authorization of permanent and temporary impacts to wetlands and significant degradation of waters of the U.S. is arbitrary, capricious, and contrary to law.

171. Conservation Groups are entitled to an order declaring the Corps in violation of the Clean Water Act for its improper and unsupported findings of insignificance of environmental impacts from the Mine both to wetlands and as to mercury effects, vacating the Section 404 permit and remand for analysis and findings consistent with the applicable law.

FIFTH CAUSE OF ACTION
SUPERIOR BANK FAILS TO MEET REGULATORY REQUIREMENTS FOR
MITIGATING WETLAND LOSS FROM THE MINE
(33 C.F.R. §§ 332.1-332.8)

172. Conservation Groups restate and re-allege all preceding paragraphs.

173. The Corps is responsible for reviewing and approving the final mitigation bank instrument. 33 C.F.R. 332.8(d)(8). Once approved, the mitigation bank may sell compensatory mitigation credits to permittees, but authorization to sell credits is contingent on compliance with all terms of the instrument. 33 C.F.R. 332.8(l). Approval of the final mitigation bank instrument is a final agency action because it is the consummation of the review process by the Corps, and legal consequences flow from approval—specifically, the bank can sell compensatory mitigation credits.

174. The Corps approved the mitigation bank instrument for the Lake Superior Bank (“Bank Instrument”) on August 3, 2015, within the six-year statutory period for challenging final agency action. *See* 28 U.S.C. § 2401(a).

175. Mitigation banks must comply with the Corps’ regulations in 33 C.F.R. §§ 332.1-332.8, if they are to provide compensatory mitigation credit for activities authorized by dredge and fill permits. 33 C.F.R. § 332.8(a)(3).

176. Preservation credits are disfavored because they “do[] not result in the gain of aquatic resource area or functions.” 33 C.F.R. § 332.2. Preservation credit for wetland mitigation may be awarded only if “[t]he resources are under threat of destruction or adverse modifications[.]” 33 C.F.R. § 332.3(h)(iv).

177. The threats listed in the Final Application, included by reference as Appendix A to the Bank Instrument, include the presence of drainage ditches, and possible mining activities. The existing drainage ditches are not a threat of future adverse modification, and the record

contains no evidence of mineral deposits or applications to mine in the wetlands at the Bank Site. Peat mining is identified as a possible threat, but peat mining occurred only on a small portion of the total land area, and again, there is no evidence of an actual project or proposal for peat mining.

178. The Corps' decision to approve preservation credits at the Bank to mitigate for wetlands damaged or destroyed from the Mine project, despite the absence of a credible threat of degradation or destruction to wetlands, was arbitrary and contrary to law.

179. Even if preservation is authorized for credit, the number of acres preserved must be significantly greater than the acres degraded or lost. 33 C.F.R. § 332.3(f)(2). This is because preservation is disfavored as a mitigation method because it leads to net wetland loss. According to the Corps' guidance, wetland acres set aside for preservation can only receive up to 12.5% of wetland mitigation credit allocation, meaning that it takes 8 acres of preserved wetlands to generate 1 mitigation credit.

180. The Corps' approval of the Bank was arbitrary because the Corps permitted the Bank to receive higher mitigation ratios for the damage from the Mine for acres of land set aside for preservation than allowed for in the Corps' own guidance. Credit allocation for preservation of wetlands at the Bank starts at a baseline of 15% of wetland mitigation credit allocation, which exceeds the Corps' maximum allowed amount of credit of 12.5%. In effect, this means the Bank is preserving fewer acres of wetlands than required by the Corps' guidance documents. By approving such a plan, the Corps acted arbitrarily.

181. "Ecological performance standards must be based on the best available science that can be measured or assessed in a practicable manner." *See* 33 C.F.R. § 332.5; *see also id.* § 332.6.

182. The Corps also acted arbitrarily by authorizing wetland mitigation credit for restoration activities at the Bank because the Bank's plan to restore wetland hydrology by installing substandard ditch plugs will fail to achieve restoration of wetlands. Additionally, the performance goals and monitoring established for the Bank fail to require the identification and gathering of sufficient data to determine whether restoration activities will successfully restore wetlands, contrary to the Corps' own regulation.

183. Based on the foregoing, 33 U.S.C. § 1344 (a)-(c), 42 U.S.C. 4332, et seq., and implementing regulations, as well as 5 U.S.C. § 706(2)(A), the Corps' authorization of the bank instrument for the Lake Superior Bank is arbitrary, capricious, and contrary to law.

184. Conservation Groups are entitled to an order declaring the Corps in violation of the Clean Water Act for its approval of the Bank Instrument, and an order vacating the Bank Instrument.

SIXTH CAUSE OF ACTION
INADEQUATE MITIGATION FOR WETLANDS LOSS
(40 C.F.R. § 230; 33 C.F.R. § 332 and § 320.4)

185. Conservation Groups restate and re-allege all preceding paragraphs.

186. The Corps may issue a permit despite destruction or degradation of wetlands only if it compensates for wetland loss. 33 C.F.R. § 332.1(c)(1); 33 C.F.R. § 320.4(r)(1)(ii); 40 C.F.R. § 230.10(c).

187. Compensatory mitigation is required to "offset environmental losses resulting from unavoidable impacts to waters of the United States authorized by [dredge and fill] permits." 33 C.F.R. § 332.3(a). The Corps must take "appropriate and practicable steps . . . which will minimize potential adverse impacts of the discharge on the aquatic ecosystem." 40 C.F.R. § 230.10(d). "[T]he amount of required compensatory mitigation must be, to the extent

practicable, sufficient to replace lost aquatic resource functions.” 40 C.F.R. § 230.93(f)(1). If there is a lack of appropriate and practicable compensatory mitigation options, the Corps may determine the permit cannot be issued. 40 C.F.R. § 230.91(c)(3).

188. The Corps must mitigate for “significant resource losses which are specifically identifiable, reasonably likely to occur, and of importance to the human or aquatic environment.” 33 C.F.R. § 320.4(r)(2) (emphasis added).

189. In determining whether compensatory mitigation adequately replaces lost functions and services, there are three key considerations: amount, type, and location. The amount and type of compensatory mitigation required necessarily depends upon the amount and type of wetland acres degraded or destroyed. 33 C.F.R. § 332.3(f)(1).

190. The minimum mitigation ratio of acres lost to acres compensated is one-to-one. 33 C.F.R. § 332.3(f)(1). The regulations require more than a one-to-one ratio when distance between affected wetlands and the compensation site is considerable, and when a one-to-one ratio will not adequately replace the functions of lost wetlands. 33 C.F.R. § 332.3(f)(2).

191. If the Corps uses a mitigation bank to provide compensatory mitigation, the special conditions for the permit “must indicate” the use of a bank and “the number and resource type of credits the permittee is required to secure.” 33 C.F.R. § 332.3(k)(4).

192. Proposed mitigation at the Bank fails to offset the loss of high quality, and biologically diverse wetlands directly destroyed by dredge and fill activity at the Mine, and secondarily lost through fragmentation of wetlands.

193. The Corps’ decision to approve the Lake Superior Bank as mitigation for the Polymet mine fails to conform to the Corps’ own requirements, *see supra* ¶¶ 174-186, and results in net loss of wetlands. By authorizing use of the Bank for mitigation of the wetland destruction

caused by the mine, the Corps is allowing Polymet to provide less mitigation per acre of wetland loss than required by Corps regulations. It also allows destruction of high quality wetlands without compensating for lost ecosystem functions and services, as required by the Corps' regulations, by mitigating in-kind for wetland loss. Finally, the Mine will cause net wetland loss because restoration at the Lake Superior Bank for wetland loss is not verifiable and not likely to restore wetlands. The Corp's mitigation plan results in the Corps permitting significant degradation to waters of the United States.

194. Further, the Corps relied on "in kind" mitigation of wetlands, claiming wetland credits at the Bank are of the same type as wetlands destroyed by the mine, in order to allow Polymet a smaller required replacement ratio for lost wetlands. However, the Corps does not disclose in either the ROD or the Section 404 permit the type of wetland credits Polymet must purchase from the Bank. These documents merely require Polymet to purchase 1,278 mitigation credits of an unspecified type.

195. The Section 404 permit also does not require Polymet to mitigate for secondary impacts, but instead requires Polymet to spot monitor for wetland loss in the future after damage is done. Based on results from this monitoring, the Corps might require Polymet to purchase additional mitigation credits from the Bank.

196. The Corps' approach turns the legal standard on its head by requiring actual irreparable damage to wetlands before requiring compensatory mitigation. Governing regulations provide that the Corps must require mitigation when impacts are reasonably likely to occur, and before the damage occurs.

197. The Corps' approach is contrary to law. The Corps' regulations do not allow the agency to wait until Polymet confirms secondary wetland loss in the field, before imposing

mitigation requirements, when these secondary impacts are anticipated and reasonably foreseeable now. The Corp's regulations require implementation of compensatory mitigation projects "in advance of or concurrent with" the proposed project. 33 C.F.R. § 332.3(m); *see also* 40 C.F.R. § 230.94.

198. Furthermore, mitigation requirements must be definite in the permit. The Corps' regulations do not authorize it to make an unsubstantiated promise to possibly require compensatory mitigation if future monitoring documents withering wetlands. The Corps must identify the amount and type of compensatory mitigation, and make mitigation an enforceable permit condition. 40 C.F.R. § 230.93(k)(1).

199. Each of the issues concerning the Corps' failure to require in-kind mitigation that will replace lost wetland functions, and the Corp's failure to require advance and in-kind mitigation for secondary wetland impacts, alone and certainly together, are a violation of the Corp's own permitting requirements for mitigation and are arbitrary and contrary to the record.

200. Based on the foregoing, 33 U.S.C. § 1344 (a)-(c) and its implementing regulations, as well as 5 U.S.C. § 706 (2)(A), (2)(D), the Corps authorization of permanent and temporary impacts to wetlands without adequate mitigation is arbitrary, capricious, and contrary to law.

201. Conservation Groups are entitled to an order declaring the Corps in violation of the Clean Water Act for its inadequate delineation of wetlands, and vacating the Section 404 permit.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court grant the following relief:

1. Declare that the Corps violated NEPA by failing to issue a supplemental environmental impact statement, and remand for preparation of a Supplemental EIS;

2. Declare that the Corps violated NEPA by finding adverse impacts to wetlands insignificant, declare the Final EIS inadequate, and remand for revised findings;

4. Declare that the Section 404 permit issued by defendant Army Corps for the Mine violates the Clean Water Act and its implementing regulations;

5. Vacate the Section 404 permit, and remand to the Corps for full compliance with the Clean Water Act, including by requiring thorough assessment and identification of adversely affected wetlands, and mitigation for both direct and secondary impacts to wetlands;

6. Vacate the Bank mitigation bank instrument, and remand to the Corps for full compliance with Clean Water Act, including detailed documentation of baseline conditions, re-evaluation of mitigation credit allocation, and revision of restoration activities to achieve long-term wetland recovery.

7. Issue any necessary injunctive relief against the Corps or other parties to this litigation to prevent irreparable harm pending full compliance with the law;

8. Retain jurisdiction over this matter to ensure that the Corps complies with the law;

9. Award Plaintiffs reasonable fees, costs, expenses, and disbursements, including attorneys' fees, associated with this litigation; and

10. Grant Plaintiffs such further and additional relief as the Court may deem just and proper.

Respectfully submitted this 10th day of September, 2019.

EARTHJUSTICE

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