EARTHJUSTICE

ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, D.C. INTERNATIONAL

September 28, 2015

DEQ Permitting & Compliance Division
Water Protection Bureau
Attn: Jon Kenning, Bureau Chief
P.O. Box 200901
Helena, MT 59620

*Via first class and electronic mail to DEQWPBPublicComments@mt.gov*

Re: Proposed MPDES Permit for the Montanore Mine Project, Permit No. MT0030279

Dear Mr. Kenning:

Please accept the following comments on the proposed MPDES permit for the Montanore Mine Project, Permit No. MT0030279 ("Proposed Permit"), submitted on behalf of Save Our Cabinets, Earthworks, Clark Fork Coalition, and Montana Environmental Information Center. As discussed below, the Proposed Permit contains numerous flaws and violates the Montana Water Quality Act, federal Clean Water Act, and state and federal implementing regulations. Accordingly, the commenting organizations and their thousands of members across Montana urge DEQ not to issue the permit as proposed.

## INTRODUCTION

Congress enacted the Clean Water Act "with the goal of *eliminating* the discharge of pollutants in order to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters.'" *N. Cheyenne Tribe v. Mont. Dep't of Envtl. Quality*, 2010 MT 111, ¶ 21, 356 Mont. 296, 234 P.3d 51 (emphasis in original) (quoting 33 U.S.C. § 1251(a)). The pollutant discharge permit system is the centerpiece of the statutory strategy for achieving this goal. In Montana, DEQ implements this goal through the issuance of MPDES permits pursuant to the Montana Water Quality Act and applicable requirements of the Clean Water Act.[1] Over and above ensuring compliance with federal statutory and regulatory requirements, the Montana Water Quality Act "provide[s] additional and cumulative remedies to prevent, abate, and control the pollution of state waters" and assure "the protection of the environmental life support system from degradation." MCA § 75-5-102.

The proposed Montanore Mine project would inflict substantial adverse impacts on high-quality and outstanding resource waters within and downstream of the Cabinet Mountains

[1] *See* ARM § 17.30.1301(1) (purpose of MPDES permit regulations is "to allow the board [of environmental review] and [DEQ] to administer a pollutant discharge permit system which is compatible with the national pollutant discharge elimination system as established by the U.S. Environmental Protection Agency pursuant to section 402 of the federal Clean Water Act ….").

Wilderness. The final environmental impact statement ("FEIS") jointly prepared by the U.S. Forest Service and DEQ predicts that the mine would contaminate ground- and surface waters in the project area with metals, nitrates, and sediment and would reduce or eliminate entirely the base flow of project-area streams. These water quality impacts would, in turn, harm or destroy local populations of sensitive aquatic species, including bull trout listed as a threatened species under the federal Endangered Species Act ("ESA").

For the reasons that follow, the Proposed Permit fails adequately to address these adverse effects on water quality and aquatic life, in violation of the Montana Water Quality Act, federal Clean Water Act, and applicable state and federal regulations. DEQ cannot lawfully issue the permit as proposed.

## I. The Proposed Permit Does Not Ensure Compliance With Water Quality Standards

At the outset, the Proposed Permit fails to ensure compliance with governing standards for the protection of water quality. To satisfy the Montana Water Quality Act, the effluent limitations and other terms of a MPDES permit must ensure compliance with all applicable water quality standards.[2] The federal Clean Water Act likewise mandates that discharge permits "may issue only where such permits *ensure* that every discharge of pollutants will comply with all applicable effluent limitations and standards." *Waterkeeper Alliance v. EPA*, 399 F.3d 486, 498 (2d Cir. 2005) (emphasis in original).[3] This requirement applies equally to both numeric and narrative water quality standards.[4]

The Proposed Permit violates this fundamental requirement. The water quality standards applicable to Libby, Poorman, and Ramsey Creeks mandate, among other requirements, that these waters be "maintained suitable for … growth and propagation of salmonid fishes and associated aquatic life" and state that "[n]o increases are allowed above naturally occurring concentrations of sediment or suspended sediment … which will or are likely to … render the

[2] *See* MCA § 75-5-401(2) (MPDES permit may issue or continue "only if the department finds that operation consistent with the limitations of the permit will not result in pollution of any state waters"); ARM § 17.30.637(2) ("No wastes may be discharged and no activities conducted such that the wastes or activities, either alone or in combination with other wastes or activities, will violate, or can reasonably be expected to violate, any of the standards."); *id.* § 17.30.1344(1).
[3] *See* 33 U.S.C. § 1342(b)(1)(A) (to be valid under the Clean Water Act, state-issued discharge permits must "apply, and insure compliance with" all applicable water quality standards).
[4] 40 C.F.R. § 122.44(d)(1); *Am. Paper Inst. v. EPA*, 996 F.2d 346, 350 (D.C. Cir. 1993). *See also* EPA, Final Rule, Nat'l Pollutant Discharge Elimination Sys.; Surface Water Toxics Control Program, 54 Fed. Reg. 23,868, 23,875 (June 2, 1989) ("State narrative water quality criteria must be attained and maintained in the same way as all water quality criteria. Narrative water quality criteria have the same force of law as other water quality criteria, and NPDES permits must contain effluent limitations necessary to attain and maintain all applicable water quality criteria, including narrative criteria.").

waters harmful, detrimental, or injurious to … fish ….” ARM § 17.30.623(1), (2)(f).[5] The Proposed Permit lacks necessary analyses and appropriate effluent limitations to ensure that these standards—referred to collectively here as the “fish protection standards”—are met. First, DEQ failed to complete a Reasonable Potential Analysis (“RPA”) for numerous pollutants, as required by 40 C.F.R. § 122.44(d)(1), to determine whether discharges from the Montanore Mine may result in violations of these and other water quality standards.[6] Most notably, DEQ failed to complete a RPA for Total Suspended Solids (“TSS”) despite readily available evidence that sediment discharges from the Montanore Mine will violate the fish protection standards. Second, DEQ failed even to consider the applicability of the fish protection standards in developing the Proposed Permit or attempt to establish appropriate effluent limitations to ensure the standards are met. Third, readily available evidence indicates that the proposed effluent limitations for TSS and temperature are inadequate to ensure compliance with the fish protection standards. For these reasons alone, the Proposed Permit is unlawful and may not issue. 40 C.F.R. § 122.44(d)(1).

### A. Failure to complete Reasonable Potential Analyses

To satisfy applicable requirements of the Clean Water Act, MPDES permits must include water-quality based effluent limitations (“WQBELs”) for all pollutants or pollutant parameters that “are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.” 40 C.F.R. § 122.44(d)(1)(i). In the fact sheet for the Proposed Permit, DEQ acknowledged its obligation to conduct RPAs in order to determine the need for WQBELs.[7] Nevertheless, DEQ failed to complete a RPA for numerous pollutants that would be discharged via Outfalls 001-003—namely, total dissolved solids, arsenic, TSS, nitrate, oil and grease, iron, manganese, and zinc—because of unavailable or inadequate data.[8] For discharges via Outfalls 004-008, DEQ failed to conduct any RPAs at all, based on its assertion that it “lack[s] specific data characterizing the effluent” from these outfalls.[9] These omissions render the Proposed Permit unlawful.

[5] The only exception from the water quality standard for sediment applies when DEQ has authorized a short-term turbidity standard pursuant to MCA § 75-5-318 and is not applicable here. *See* ARM § 17.30.623(2)(f).
[6] The federal regulations at 40 C.F.R. § 122.44 are incorporated by reference and made applicable to the MPDES program in ARM § 17.30.1344(2)(b). For clarity, references are made to the relevant subsection of the federal regulations.
[7] Mont. Dep’t of Envtl. Quality, Permit Fact Sheet, Mont. Pollutant Discharge Elimination Sys. (MPDES), Montanore Minerals Corp., Permit No. MT0030279, at 36 (“Permit Fact Sheet”).
[8] *Id.* at 40.
[9] *Id.*

To the extent DEQ lacks data necessary to complete RPAs, it must reject the MPDES permit as incomplete and require the applicant to provide the missing data, or DEQ must develop the data itself.[10] There is no authority for the proposition that DEQ can simply opt out of completing RPAs—and, as a consequence, the development of WQBELs for the pollutants at issue—because it lacks necessary data. A MPDES permit is incomplete and invalid where, as here, it lacks RPAs and necessary WQBELs.[11]

Further, in completing the requisite RPAs, DEQ must consider all available evidence indicating whether discharges from the Montanore Mine have the potential to cause violations of water quality standards.[12] In this regard, DEQ's failure to complete a RPA for TSS is particularly egregious because the U.S. Forest Service and U.S. Fish and Wildlife Service ("FWS"), have developed data demonstrating that sediment discharges from the Montanore Mine and resulting TSS levels do indeed have the potential to harm fish in violation of the fish protection standards, which data were incorporated in the FEIS jointly prepared by DEQ.[13] This evidence, and DEQ's obligation to consider it for purposes of developing adequate WQBELs, is discussed in more detail *infra*, Point. I.C. In addition, DEQ's assertion that it lacks the data necessary to characterize the effluent from Outfalls 004-008, and therefore could not complete

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[10] *See* 40 C.F.R. § 122.21(g)(7), (k)(5) (requiring all permit applicants to submit data characterizing effluent from proposed discharges); *id.* § 122.44(d)(1) (describing requirements for RPAs). *See also* U.S. EPA, Improving EPA Review of Appalachian Surface Coal Min. Operations Under the Clean Water Act, Nat'l Envtl. Policy Act, and the Envtl. Justice Executive Ord. 13 (July 21, 2011) ("EPA NPDES Guidance") ("In order to submit a complete NPDES permit application for an individual permit, the applicant must present data to properly characterize its discharge to enable a reasonable potential analysis to be completed by the permit writer at the time of permit issuance.") (citation omitted) (attached as Exhibit A).

[11] 40 C.F.R. § 122.44(d)(1); *see also* Letter from J. Giattina, Dir., Water Prot. Div., U.S. EPA Region 4, to S. Gruzesky, Dir., Div. of Water, Kentucky Dep't for Envtl. Prot., Re. Notice of Specific Objections – 19 Draft NPDES Permits Listed in Enclosure 1, Encl. 2 at 1-4 (Sept. 28, 2011) (EPA objecting to draft discharge permits because, *inter alia*, the state permitting agency failed to complete RPAs for all pollutants) (attached as Exhibit B).

[12] *See* 40 C.F.R. § 122.44(d)(1)(vi); Giattina Letter, *supra*, Encl. 2 at 1-3 (objecting to proposed discharge permits where state agency failed to consider available evidence that discharges have reasonable potential to violate water quality standards); EPA NPDES Guidance, *supra*, at 12-13 (instructing that ambient water quality and biological data developed in other permitting processes for a mine should be included in NPDES permit application to support RPA), 14 ("In conducting a reasonable potential analysis, all valid representative qualitative and quantitative information regarding the effluent and receiving water should be used …."), 16 ("A State's assessment of whether discharges from a proposed project have a reasonable potential to exceed narrative criteria should reflect the best-available science.").

[13] *See, e.g.*, U.S. Fish & Wildlife Serv., Final Biological Opinion on the Effects to Bull Trout and Bull Trout Critical Habitat From the Implementation of Proposed Actions Associated with the Plan of Operations for the Montanore Minerals Corp. Copper/Silver Mine 96-98 (March 31, 2014) ("Aquatic BiOp") (summarizing sediment impacts on bull trout and results of sediment modeling conducted by Forest Service and DEQ for Montanore Mine EIS) (attached as Exhibit M).

RPAs for any pollutant, is baseless because the permit application itself contains these data.[14] If the applicant's data are inadequate, DEQ must demand appropriate data or develop the necessary data itself.

In sum, DEQ must consider all available evidence—and either develop or direct the applicant to submit any additional evidence needed—to complete RPAs for all pollutants the Montanore Mine would discharge, including but not limited to TSS. Where a discharge has the potential to violate water quality standards, DEQ must develop appropriate WQBELs. DEQ's omission of RPAs and necessary WQBELs from the Proposed Permit is arbitrary and unlawful.

### B. Failure to consider fish protection standards and need for appropriate WQBELs

Beyond the omission of required RPAs, the fact sheet for the Proposed Permit reveals that DEQ did not even consider the applicability of the fish protection standards—let alone establish WQBELs to ensure compliance with the standards. Though the fact sheet generically references "the specific water quality standards identified in ARM 17.30.623,"[15] it contains no reference to the fish protection standards in §§ 17.30.623(1) and (2)(f) nor any analysis of effluent limitations required to meet those standards in the affected streams. EPA has affirmed that a state-issued discharge permit "that fails to include provisions implementing the narrative water quality standards, and fails to explain why such an omission is appropriate under the regulations, will not be consistent with the requirements of the CWA."[16] Accordingly, DEQ must address the fish protection standards specifically and develop effluent limitations that will ensure compliance with those standards.

### C. Failure to establish TSS limits that ensure compliance with the fish protection standards

In addition to omitting required analyses and WQBELs, DEQ has established TSS limits in the Proposed Permit that are demonstrably inadequate to ensure compliance with the fish protection standards that apply to Libby, Ramsey, and Poorman Creeks. As discussed below, the biological opinion for the Montanore Mine reveals that sediment pollution from the project as

[14] MPDES Permit 0030279 Renewal Application (Aug. 19, 2010). The application pages are not numbered; the relevant data appears at pp. 23-31 and 41-76 of the PDF file.
[15] Permit Fact Sheet 23-25.
[16] U.S. EPA, Office of Wastewater Mgmt., Water Permits Div., Review of Clean Water Act § 402 Permitting for Surface Coal Mines by Appalachian States: Findings & Recommendations 16 (July 13, 2010) (footnote omitted) ("EPA Appalachia Memo") (attached as Exhibit C).

authorized in the Proposed Permit will cause substantial harm to bull trout,[17] in violation of the fish protection standards. Accordingly, the permit cannot issue.

The Proposed Permit includes the following TSS limits[18]:

| Outfall | Average Monthly Limitation, TSS (mg/L) | Maximum Daily Limitation, TSS (mg/L) | Annual Maximum (tons/year) | Basis for Limit |
|---|---|---|---|---|
| 001 | 20 | 30 | N/A | Effluent Limitation Guideline |
| 002 | 20 | 30 | N/A | Effluent Limitation Guideline |
| 003 | 20 | 30 | N/A | Effluent Limitation Guideline |
| 001-008 (sum of all daily discharges from facility) | N/A | N/A | 24 | TMDL |

DEQ's conclusion that these limits will ensure compliance with applicable water quality standards—which include the fish protection standards—is contradicted by FWS's analysis in the biological opinion for the Montanore Mine. That analysis reveals that anticipated sediment discharges from the outfalls covered by the Proposed Permit will cause substantial harm to bull trout, in violation of the fish protection standards. Critically, the analysis of sediment impacts in the biological opinion is based on evidence concerning the status of the affected streams and the sensitivities of bull trout specifically; in contrast, DEQ's proposed TSS limits derive from EPA's Effluent Limitation Guidelines and do not incorporate any site- or species-specific information to ensure they are sufficiently stringent to protect fish. DEQ must address the site- and species-specific evidence in the biological opinion and explain how, in the face of this evidence, the effluent limitations in the Proposed Permit will *ensure* that the applicable water quality standards, including the fish protection standards, are met.

Suspended and deposited sediment in excess of natural levels is notoriously harmful to salmonids and their habitat.[19] For bull trout specifically, "[t]he introduction of sediment in

[17] As discussed in the FEIS for the Montanore Mine, the affected streams also harbor sensitive populations of sculpin and redband rainbow trout, which are likely to suffer similar harm from sediment pollution authorized in the Proposed Permit. *See* FEIS 351 (discussing species' distribution in project area), 396-97 (describing adverse impacts on fish habitat generally due to short-term increases in sediment levels during mine's evaluation and construction phases), 418-19 (explaining that these effects would occur under Alternative 3, the agencies' preferred alternative).

[18] *See* Permit Fact Sheet 45-46.

excess of natural amounts can have multiple adverse effects."[20] As summarized in the Aquatic BiOp for the Montanore Mine:

> The effect of suspended and deposited sediment beyond natural background conditions can be fatal [to bull trout] at high levels. Embryo survival and subsequent fry emergence success have been highly correlated to percentage of fine material within the streambed. Low levels of suspended sediment may result in sublethal and behavioral effects such as increased activity, stress, and emigration rates; loss or reduction of foraging capability; reduced growth and resistance to disease; physical abrasion; clogging of gills; and interference with orientation in homing and migration. The effects of increased suspended sediments can cause changes in the abundance and/or type of food organisms, alterations in fish habitat, and long-term impacts to fish populations. Although no absolute threshold has been determined at which fine-sediment addition to a stream is harmless, even at low concentrations, fine-sediment deposition can decrease growth and survival of juvenile salmonids. Sediment deposition in streams can result in habitat modification (fine substrates) which has been associated with brook trout invasion (Shepard 2004).[21]

Even in the absence of the Montanore Mine and the discharges authorized in the Proposed Permit, *existing* sediment levels in Libby, Poorman, and Ramsey Creeks are harmful to bull trout. According to the federal agencies' most recent analysis, due to existing sediment levels Libby Creek already is functioning at unacceptable risk for bull trout, while Poorman and Ramsey Creeks are functioning at risk/at unacceptable risk.[22] Consistent with these findings, DEQ has classified the two inventoried segments of Libby Creek downstream of outfalls 001-

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[19] *See generally* Robertson, M.J., Scruton, D.A., Gregory, R.S., and Clarke, K.D. 2006. Effect of suspended sediment on freshwater fish and fish habitat. Can. Tech. Rep. Fish. Aquat. Sci. 2644: v + 37 pp (attached as Exhibit D).

[20] Aquatic BiOp 96.

[21] *Id.*

[22] Kootenai Nat'l Forest, Biological Assessment for Threatened, Endangered, and Proposed Aquatic Species and Designated Aquatic Critical Habitat on the Montanore Minerals Corp. Montanore Project, Tbls. 5.3.1.1-1, 5.3.1.1.5-1, 5.3.1.1.6-1 (Feb. 25, 2013) (attached as Exhibit N).

004 as impaired due to their inability fully to support aquatic life.[23] For stream assessment unit MT76D002_062, which extends from the Highway 2 bridge to the mouth of Libby Creek, DEQ has identified existing sediment pollution as the source of impairment.[24] For stream assessment unit MT76D002_061, which begins one mile above Libby Creek's confluence with Howard Creek and extends to the Highway 2 bridge, DEQ has identified as one of several sources of impairment "physical substrate habitat alterations,"[25] which DEQ classifies as "a non-pollutant [impairment] listing commonly linked to sediment impairment."[26] Notably, this impairment exists despite pre-project TSS levels that are substantially lower than the concentrations authorized in the Proposed Permit.[27] Given the current degraded state of these streams as a result

[23] With regard to the stream segment that includes the immediate receiving waters for Outfalls 001-004, the fact sheet for the Proposed Permit misleadingly states that "[t]he reach of Libby Creek that is the receiving water is not listed as impaired on Montana's 2014 Clean Water Act 303(d) list" and "[n]o impairments have been identified in the direct receiving waters of Libby Creek requiring the development of [a] TMDL." Fact Sheet 26. DEQ has not determined that this segment is unimpaired; indeed, DEQ has not even inventoried this segment or assigned it an assessment number, so it is unknown whether the waters currently are impaired. This omission cannot be used as an excuse for allowing water-quality impacts that otherwise would be prohibited if DEQ's analyses were complete. At a minimum, under the federal Clean Water Act DEQ must estimate TMDLs for this stream segment that would ensure protection of native fish. *See Pronsolino v. Nastri*, 291 F.3d 1123, 1128 (9th Cir. 2002) ("Each state must also identify all waters *not* placed on its § 303(d)(1) list (the '§ 303(d)(3) list') and 'estimate' TMDLs for pollutants in those waters.") (quoting 33 U.S.C. § 1313(d)(3)). And together with the evidence in the Aquatic BiOp and Biological Assessment, the impaired status of the two downstream segments strongly indicates that polluting the immediate receiving waters in Libby Creek with additional sediment will cause violations of the fish protection standards.

[24] Permit Fact Sheet 27.

[25] *Id.*

[26] Mont. Dep't of Envtl. Quality, Kootenai-Fisher Project Area Metals, Nutrients, Sediment, and Temperature TMDLs and Water Quality Improvement Plan 5-25 (May 2014). Because DEQ itself notes that physical substrate habitat alteration is "commonly linked to sediment impairment," there is no apparent basis for classifying this as "a non-pollutant" impairment listing. *Id.* Further, while DEQ has identified sediment-related impairment of this stream segment, the agency has not actually measured sediment levels in this segment since at least 2006, so it cannot be assumed that existing sediment levels are acceptable for aquatic life. *See* Mont. Dep't of Envtl. Quality, Water Quality Standards Attainment Record for Assessment Unit MT76D002_061, at 17-18 (Oct. 6, 2014) (attached as Exhibit E). Again, DEQ's failure to develop baseline data cannot justify inferior protections for this stream segment, particularly in the face of evidence from the federal agencies that existing sediment levels throughout Libby Creek are harmful to aquatic life.

[27] *See* AMEC Geomatrix, Updated Supporting Water Res. Info. for MPDES Permit Application, Montanore Mine Project 23 (Jan. 2011) ("Geomatrix (2011)") (reporting pre-project TSS concentrations of 0.5-8 mg/L). There appears to be no data in the MPDES permit application or supporting materials characterizing current sediment levels in Ramsey or Poorman Creeks, so it is unclear how DEQ assessed the effect of authorized sediment pollution in these streams on aquatic life or other beneficial uses.

of existing high sediment levels, *any* measurable increase in sediment pollution threatens a violation of the fish protection standards, ARM § 17.30.623(1), (2)(f). Unless DEQ can affirmatively demonstrate that a violation of water quality standards will not occur, it cannot issue the Proposed Permit.

Indeed, the Aquatic BiOp for the Montanore Mine reveals that, even with implementation of BMPs relied upon in the Proposed Permit, sediment discharges from the project will violate the fish protection standards by causing severe harm to bull trout. Bull trout populations in Libby, Poorman, and Ramsey Creeks all will be adversely affected by authorized sediment discharges during the first 2-4 years of the Montanore project.[28] The most severe impacts will occur in the Libby Creek watershed, but in all affected streams,

> [t]he expected response to predicted short-term increases in sediment input from the proposed mining activities … would be decreased numbers of bull trout …. This negative population response would largely be attributable to reduced survival of incubating eggs and young (small) fish as increased sediment in the affected streams decreases egg survival and fills interstitial spaces in the substrate reducing volume and quality of juvenile bull trout rearing habitats.[29]

Further, bull trout may enjoy no benefit from long-term sediment reductions achieved through BMPs because (1) local bull trout populations may be extirpated before the benefits of BMPs are realized, and (2) non-native fish that compete with or prey upon bull trout may benefit from the degradation of habitat conditions for bull trout during the initial period of sediment increases and expand their distribution.[30] In other words, the BiOp reveals that BMPs relied upon in the Proposed Permit to mitigate sediment impacts will be too little, too late to avoid severe harm to—if not outright destruction of—local bull trout populations in Libby, Poorman, and Ramsey Creeks.

Put starkly, the Aquatic BiOp reveals that authorized sediment pollution from the Montanore Mine will render the waters in Libby, Ramsey, and Poorman Creeks harmful—and potentially uninhabitable—for bull trout. DEQ must address FWS's evidence and conclusions on this issue, which directly contradict DEQ's conclusion that the limits on sediment pollution in the Proposed Permit will ensure that Libby, Ramsey, and Poorman Creeks will be "maintained suitable for … growth and propagation of salmonid fishes and associated aquatic life" and that "[n]o increases [will occur] above naturally occurring concentrations of sediment or suspended sediment … which will or are likely to … render the waters harmful, detrimental, or injurious to

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[28] *Id.* at 96-97. Bear, Cable, Midas, West Fisher, and Rock Creeks also will be adversely affected by sediment pollution from the project, *see id.*, but DEQ did not address these impacts in the proposed permit.

[29] *Id.* at 105-06.

[30] *Id.* at 100, 106. According to FWS, the presence of brook trout will undermine the benefits of BMPs for bull trout in Ramsey Creek and Libby Creek downstream of the barrier falls. This detrimental impact of brook trout on bull trout is "less likely to occur in Poorman Creek … than for other streams in the action area because non-native fish species are partially blocked by seasonal dewatering and do not currently co-occur with bull trout." *Id.* at 100.

… fish ….” ARM § 17.30.623(1), (2)(f). Further, DEQ must affirmatively demonstrate in the statement of basis for the final permit that the TSS limitations imposed will ensure compliance with the fish protection standards.

In this regard, it bears emphasis that basing TSS limitations on EPA's Effluent Limitation Guidelines and/or the TMDL for the downstream segment of Libby Creek does not create a "safe harbor" for DEQ. Beyond limitations consistent with the Effluent Limitation Guidelines and TMDL, the permit must include "any requirements … necessary to … [a]chieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality." 40 C.F.R. § 122.44(d)(1).[31] Further, EPA repeatedly has instructed that states "must use all valid and representative data" available to determine whether a proposed discharge may violate applicable water quality standards,[32] and specifically has stated that data generated through other permitting processes for the project seeking a discharge permit "are expected to be used to inform [the] State's decisions" about necessary effluent limitations.[33] "At a minimum, should the record indicate that a reasonable potential [for violations of narrative water quality standards] exists, the permitting authority must demonstrate in the administrative record, based on site-specific information, how the permit implements the narrative water standards in a manner that is consistent with the CWA."[34] DEQ may not issue a MPDES permit for the Montanore Mine unless and until it addresses the available evidence that authorized sediment discharges will violate the fish protection standards.

### D. Failure to establish temperature limitations that are necessary to ensure compliance with the fish protection standards

In addition, the Proposed Permit lacks effluent limitations for temperature that are necessary to ensure compliance with the fish protection standards. Indeed, the Proposed Permit contains no temperature limits, requiring only monitoring of temperature in Libby Creek.[35] This omission apparently is based on DEQ's unsupported conclusion that discharges from Outfalls

[31] Moreover, the Aquatic BiOp demonstrates that the predicted impacts of the Montanore Mine project are not consistent with the assumptions of the TMDL. Specifically, the TMDL assigns the project a sediment wasteload allocation of zero for construction-related activities, based on the assumption that BMP implementation will eliminate sediment discharges from these activities. Kootenai-Fisher Project Area TMDLs, *supra*, at 5-50 – 5-51. But FWS rejected the idea that BMPs will have this effect and, to the contrary, concluded that the most severe sedimentation impacts will occur during the project's initial phases. *See* Aquatic BiOp 96-98; *see also* FEIS 395 (stating that "[s]ediment increases to streams from the mine facilities would most likely occur during the Construction Phase of the mine, when trees, vegetation, or soils were removed from many locations for mine facilities, roads, and the transmission line"); *id.* at 418 (same under agencies' preferred alternative).

[32] *See, e.g.*, EPA Appalachia Memo, *supra*, at 20.

[33] *Id.* at 18-19.

[34] *Id.* at 19.

[35] *See* Permit Fact Sheet 27.

001-003 will have no thermal effect on Libby Creek.[36] However, this conclusion too is contradicted by the federal agencies' analyses.

DEQ stated in support of the Proposed Permit that discharges of treated mine and adit water from Outfall 003 are "not expected to have a thermal effect on Libby Creek."[37] But in the Aquatic BiOp, FWS reached the opposite conclusion, stating in relevant part:

> The temperature of the discharge of mine and adit water during the evaluation, construction and operations phases is expected to be between 56º and 65ºF (KNF BA 2013) which exceeds the temperature thresholds of bull trout spawning, egg incubation, and rearing, and for generally preferred water temperatures of bull trout (see [Aquatic BiOp] section III.B., Habitat Characteristics). Discharges would be to either groundwater or surface water from the Water Treatment Plant at the Libby Adit Site (KNF BA 2013). These relatively warm water inflows would occur at the "existing outfall" [(Outfall 003)] near LB-300 … where a significant volume of water augmentation is predicted … to occur at baseflow conditions at a known bull trout spawning location. *This water temperature impact in addition to predicted reductions in baseflows poses a serious threat to the viability of the Libby Creek bull trout population residing upstream of Libby Creek falls.*[38]

DEQ's characterization of baseline temperature conditions in Libby Creek likewise conflicts with the federal agencies' analysis. In the permit fact sheet, DEQ states that Libby Creek water temperatures are "within the range of temperatures necessary for bull trout survival … but potentially below temperatures for optimal bull trout growth."[39] But FWS and the Forest Service have determined that Libby Creek already is "functioning at risk/at unacceptable risk" for bull trout due to elevated stream temperatures[40]; in the stream's lower and middle segments, temperatures "are warmer than 59ºF, a maximum limit for salmonids, for numerous days during the summer months and may create thermal barriers for bull trout and other species."[41]

Once again, DEQ must address the evidence in the Aquatic BiOp and FEIS that undermines its conclusion that the authorized discharges via Outfall 003 will have no thermal effect on Libby Creek, and it must determine whether, and what, temperature limitations are needed in the MPDES permit to ensure compliance with the fish protection standards. In this regard, the commenting organizations note DEQ's apparent misconception that bull trout are not present in Libby Creek in the immediate vicinity of the authorized discharge points.[42] While the

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[36] *See id.* at 35.
[37] *Id.*
[38] Aquatic BiOp 95 (emphasis added).
[39] Permit Fact Sheet 27 (citations omitted).
[40] Aquatic BiOp 50.
[41] FEIS 380.
[42] *See* Permit Fact Sheet 35 (asserting that "[t]here is a fish passage barrier downstream from [the] facility's authorized discharge locations (and their associated mixing zones) that prevents the migration and/or passage of salmonids from the lower reaches of Libby Creek up to the discharge location," while making no mention of resident bull trout population above the falls).

falls on Libby Creek create a barrier to upstream fish passage, the stream segment upstream of the falls is designated bull trout critical habitat and is currently occupied by bull trout—indeed, FWS explained that this area "has numerous [bull trout] spawning areas" and hosts a local bull trout population that is among "the most resilient … that occupy the entire Libby Creek watershed."[43] It is this bull trout population that will be "most exposed to the mine's effects," with FWS predicting a decline in abundance due specifically to "[t]he anticipated higher stream temperature in the spawning reach" resulting from discharges authorized in the Proposed Permit.[44] To the extent DEQ's determination of no thermal effect from the authorized discharges rests on a belief that the receiving waters in Libby Creek harbor no bull trout, that determination is incorrect.

## II. The Proposed Permit Unlawfully Authorizes Degradation of State Waters

DEQ's Proposed Permit for the Montanore Mine also fails to comply with essential nondegradation requirements. The Montana Water Quality Act requires that "[e]xisting uses of state waters and the level of water quality necessary to protect those uses must be maintained and protected." MCA § 75-5-303(1). Pursuant to this nondegradation policy, damaging the existing quality of high-quality waters is prohibited absent a valid authorization to degrade, while degrading outstanding resource waters is prohibited in all circumstances.[45] To ensure compliance with the nondegradation policy in issuing MPDES permits, DEQ must determine whether proposed discharges would cause significant changes in water quality and, if so, whether those changes are allowable pursuant to a valid authorization to degrade.

Though DEQ purports to acknowledge these requirements by reciting them in the fact sheet for the Proposed Permit, it ultimately proposes to violate the nondegradation policy by allowing unauthorized degradation of high-quality and outstanding resource waters as a result of the Montanore Mine. Indeed, DEQ has not conducted nondegradation review for any of the discharges authorized in the Proposed Permit. DEQ wrongly determined that nondegradation review is not required for discharges via Outfalls 001-003 on the theory that these discharges constitute "existing" sources or are covered by an authorization to degrade issued in 1992 to a since-abandoned mine project at the Montanore site.[46] Regarding Outfalls 004-008, DEQ concluded without supporting data or analysis that the discharges authorized in the Proposed Permit will result in nonsigificant changes in water quality.[47] Finally, DEQ disregarded entirely degradation of outstanding resource waters that will occur as a result of the Montanore Mine.[48] These violations of the nondegradation policy render the Proposed Permit unlawful.

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[43] Aquatic BiOp 124. *See also* Map, Proposed Outfall Locations (depicting location of outfalls in relation to designated bull trout critical habitat) (attached as Exhibit F); Kootenai Nat'l Forest, Biological Assessment, *supra*, Fig. 5.3.1.1-1 (indicating Libby Creek is occupied by bull trout upstream of the barrier falls and at the location of Outfall 003).
[44] Aquatic BiOp 124.
[45] MCA § 75-5-303(2), (7).
[46] *See* Permit Fact Sheet 29.
[47] *See id.* at 30.
[48] Degradation of outstanding resource waters is addressed *infra*, Point VII.A.

### A. Outfalls 001-003 are new sources subject to the nondegradation policy

Contrary to DEQ's fact-sheet assertion, the proposed discharges via Outfalls 001-003 are not shielded from nondegradation review as "existing" sources. The Montana Water Quality Act's nondegradation policy applies "to any activity of man resulting in a new or increased source which may cause degradation." ARM § 17.30.705(1). In the fact sheet for the Proposed Permit, DEQ wrongly asserts that Outfalls 001, 002, and 003 are "existing" sources and therefore "are not subject to review under the nondegradation policy …."[49] Because the record reveals that the source of discharges via Outfalls 001-003 has changed, and that no discharges ever have occurred from two of these outfalls, they are new sources subject to nondegradation review.

In characterizing the discharges authorized via Outfalls 001-003 as "existing," DEQ disregards that the Proposed Permit authorizes a "change [in] source water" from that covered by the prior MPDES permit for the Montanore Mine.[50] Specifically, the Proposed Permit authorizes discharges via Outfalls 001-003 of polluted water from multiple adits, the Poorman tailings storage facility, and runoff from mine-related facilities, whereas the prior MPDES permit authorized discharges only from a single adit in the Libby Creek drainage.[51] Thus, the Proposed Permit plainly authorizes discharges from new sources. That these new sources will discharge via existing *outfalls* is irrelevant because the nondegradation policy applies to any "new or increased *source*," ARM § 17.30.705(1) (emphasis added); its applicability does not turn on the existence of a new outfall. An alternative interpretation would make little sense and undermine the purpose of the nondegradation policy because radical changes in source water—and associated changes in the impacts to receiving waters—could escape nondegradation review as long as they occur via an existing outfall. Because the Proposed Permit authorizes a "change in source" for discharges from Outfalls 001-003,[52] DEQ must conduct nondegradation review for these discharges.

Even if the nondegradation policy's application turned on the existence of a new outfall— which it does not—nondegradation review still would be required for at least Outfalls 002 and 003. As stated in the materials supporting the permit application, "Outfall 003 has not been constructed yet."[53] As a result, Outfall 003 does not exist, there never has been a discharge from it, and it cannot be characterized as an "existing" source in any sense of the word. It also appears that no discharge has occurred from Outfall 002 for at least seventeen years, if ever.[54]

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[49] Permit Fact Sheet 29.

[50] AMEC Geomatrix, Updated Supporing Water Res. Info. for MPDES Permit Application, Montanore Mine Project 15 (Aug. 2010) ("Geomatrix (2010)").

[51] *See id.* at 6 (report supporting MPDES permit application, stating that "it is requested that the existing MPDES permit be amended to allow source water from the Poorman TSF and from runoff at the mine-related facilities, rather than limiting the source water only to the adits"), 15; Permit Fact Sheet 6 (listing sources of wastewater contributing to each outfall).

[52] Geomatrix (2010) at 15 (capitalization omitted).

[53] Geomatrix (2011) at 11.

[54] *Compare* Geomatrix (2010) at 10 (stating that discharges of Libby Adit water occurred via Outfall 002 in 1997-98) *with* Permit Fact Sheet 84 (stating that "no discharges have occurred at Outfalls 002 or 003").

Therefore, it too cannot fairly be called an "existing" source. There is no authority for the proposition that an outfall may be abandoned for well over a decade and then revived as an "existing" source in a new MPDES permit to evade nondegradation review. In any event, as explained above, DEQ must complete nondegradation review for discharges via Outfalls 001-003 because the Proposed Permit authorizes discharges via these outfalls from new sources.[55]

### B. DEQ may not rely on the 1992 Authorization to Degrade issued to Noranda

Though DEQ wrongly states in the fact sheet for the Proposed Permit that discharges via Outfalls 001-003 will be from "existing" sources, exempting those discharges from the nondegradation policy, the agency then goes on to assert that nondegradation review is not required for discharges of numerous pollutants via these outfalls[56] because the applicable effluent limitations in the Proposed Permit comply with an authorization to degrade issued in 1992 to Noranda, Inc., for a different mine project at the Montanore site.[57] DEQ likewise asserts that this 1992 Authorization to Degrade applies to discharges via Outfalls 004-008.[58] As explained below, in no case may DEQ rely on the 1992 Authorization to Degrade in lieu of conducting nondegradation review or to justify degradation of high-quality waters.

The 1992 Authorization to Degrade cannot supply a basis for avoiding nondegradation review or for establishing effluent limitations in the Proposed Permit because it has expired by its own terms. The 1992 Authorization states that it applies "during the operational life of this

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[55] To justify its failure to conduct nondegradation review for discharges via Outfalls 001-003, DEQ also asserted that the WQBELs in the Proposed Permit "ensur[e] the level of water quality necessary to attain and maintain existing and anticipated beneficial uses." Permit Fact Sheet 29-30. But as explained above, DEQ has not properly developed WQBELs for numerous pollutants because it failed to complete RPAs and failed to consider the applicability and requirements of the fish protection standards. Regarding TSS specifically, DEQ disregarded abundant and persuasive evidence indicating that its technology-based TSS limits are not adequate to maintain existing fisheries uses. Accordingly, this alternative rationale for jettisoning nondegradation review for the discharges authorized via Outfalls 001-003 is invalid.

[56] The pollutants at issue are total dissolved solids, total inorganic nitrogen, chromium, copper, iron, manganese, zinc, ammonia, and nitrates. *See* Permit Fact Sheet 29-30 (stating that WQBELs for discharges via Outfalls 001-003 "are derived from and comply with either the state's water quality standards or the [1992] Board-issued authorization to degrade"), 45-46 (citing 1992 Authorization to Degrade as source of final numeric effluent limitations for these pollutants).

[57] In the Matter of the Petition for Modification of Quality of Ambient Waters Submitted by Noranda Minerals Corp. for the Montanore Project, Dkt. No. BHES-93-001-WQB (Mont. Bd. of Health & Envtl. Sciences, Nov. 20, 1992) ("1992 Authorization to Degrade").

[58] The practical impact of this contention is unclear because the Proposed Permit does not impose any effluent limitations on discharges via Outfalls 004-008 that derive from the 1992 Authorization to Degrade. In any event, for the reasons that follow, DEQ's position that the 1992 Authorization to Degrade applies in any manner to the pending MPDES permit request for the Montanore Mine is wrong.

mine," *i.e.*, the mine project proposed by Noranda in 1989.[59] The operational life of the Noranda project ended in 2002 when the company abandoned the project and formally relinquished its authorization to develop the mine.[60] Based on that affirmative abandonment, neither Noranda nor its successors possessed legal authorization to construct the proposed mine at the Montanore site. Accordingly, the Forest Service considers the pending mine proposal advanced by Montanore Minerals Corporation ("MMC") to be "a new proposed Plan of Operations … because [Noranda] relinquished the federal authorization to construct and operate the Montanore Project in 2002."[61] DEQ has articulated no rational basis for a contrary conclusion. Though DEQ decided in 2002 to leave Noranda's MPDES permit in effect pending completion of the company's reclamation obligations, that decision did not extend the operational life of the project nor suspend indefinitely the expiration of the 1992 Authorization to Degrade.[62] Because the operational life of the Noranda project is over, the 1992 Authorization is no longer applicable by its own terms.

[59] 1992 Authorization to Degrade 6. The 1992 Authorization adds that it may continue to apply after the operational life of the relevant mine project "for so long thereafter as necessary." *Id.* However, DEQ has not asserted that the 1992 Authorization to Degrade has remained in effect because it is "necessary" to do so, and such a finding would require support and justification consistent with the purposes of the Water Quality Act and its nondegradation policy. Accordingly, this discussion focuses on DEQ's apparent position that the 1992 Authorization to Degrade remains in effect because the operational life of the affected mine continues.

[60] *See* Letter from M. Patterson, Reg'l Reclamation Mgr., Noranda, to John McKay, Forest Geologist, Kootenai Nat'l Forest, Re. Notice of Project Abandonment (Sept. 12, 2002) (advising agencies "that Noranda Minerals Corp. has decided to abandon the Montanore copper-silver project" and was accordingly "relinquishing the authorization to construct and operate the Montanore Project as set forth in the Plan of Operations which was never implemented") (attached as Exhibit G).

[61] FEIS S-4.

[62] *See* Letter from P. Plantenberg, Operating Permit Section Supervisor, Envtl. Mgmt. Bureau, Mont. Dep't of Envtl. Quality, to M. Patterson, Noranda, Inc., Re. Agencies Review of the Final Reclamation Plan for the Libby Adit, Montanore Project, operating Permit 00150 (April 18, 2003) (explaining that it may be necessary to leave MPDES permit in place pending reclamation because of potential for pollutant discharges) (attached as Exhibit H).

Further, even if the life of the Noranda project had not concluded with the company's affirmative abandonment in 2002, the 1992 Authorization to Degrade still would be inapplicable because the project proposed by MMC is substantially different from Noranda's, with distinct water quality impacts. As discussed above, the MMC project would involve water pollution from multiple adits, the Poorman tailings storage facility, and runoff from various mine-related facilities, whereas the Noranda project involved pollution from only a single adit in the Libby Creek drainage. Additionally, the MMC project would involve discharges from five new outfalls that were never contemplated as part of the Noranda Project, let alone utilized. The discharges from these new outfalls, Outfalls 004-008, would constitute major sources of pollution to project-area streams, as disclosed in MMC's permit application.[63] Accordingly, MMC's application itself concedes that the components of its proposed project are merely "*similar* to those specified previously when the nondegradation review was completed" for the Noranda project in 1992.[64] Indeed, MMC has made substantial changes to the project proposal even since 2007: For example, MMC no longer proposes the use of LAD areas and proposes a newly designed tailings storage facility in the Poorman Creek drainage instead of the facility previously proposed in the Little Cherry Creek drainage. Accordingly, MMC's permit application acknowledges that much of the analysis completed in 2007—not to mention that completed in 1992 to support Noranda's authorization to degrade—"is no longer applicable to the proposed Montanore Project" because of "a change in the preferred alternative and the proposed water management system …."[65] These significant alterations in the project proposal underscore that the life of the Noranda mine concluded more than ten years ago, rendering the 1992 Authorization an irrelevant artifact for purposes of the MPDES permit at issue.[66]

A contrary interpretation would be inconsistent with the Water Quality Act. As DEQ appears to acknowledge, it has a legal obligation to justify the effluent limitations in the Proposed Permit based on evidence in the record. And in order to justify permit terms that allow degradation of high-quality waters, DEQ must find by a preponderance of the evidence that:

> (a) degradation is necessary because there are no economically, environmentally, and technologically feasible modifications to the proposed project that would result in no degradation;
>
> (b) the proposed project will result in important economic or social development and that the benefit of the development exceeds the costs to society of allowing degradation of high-quality waters;

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[63] *See* MPDES Permit 0030279 Renewal Application, *supra*, at pp. 23-31 and 41-76 of the PDF file.

[64] Geomatrix (2011) at 29 (emphasis added).

[65] *Id.* at 10.

[66] In the intervening decades since the 1992 Authorization to Degrade was issued, there also have been significant changes in the laws applicable to the Montanore Mine. Bull trout have been listed as a threatened species under the ESA and critical habitat has been identified; new water quality standards have been established for nutrients. Indeed, the nondegradation policy itself has undergone substantial amendment. These factors bear on DEQ's nondegradation obligations and, plainly, the 1992 Authorization did not address them. For this reason, too, complete nondegradation review is required before DEQ may issue the Proposed Permit.

(c) existing and anticipated uses of state waters will be fully protected; and

(d) the least degrading water quality protection practices determined by the department to be economically, environmentally, and technologically feasible will be fully implemented by the applicant prior to and during the proposed activity.[67]

Because of the substantial differences between the abandoned Noranda project and the proposed MMC project, the 1992 Authorization to Degrade cannot, as a matter of fact or law, support the findings demanded by the statute. To the contrary, evidence discussed above from the Aquatic BiOp strongly indicates that existing uses of the affected high-quality waters will *not* be fully protected under the terms of the Proposed Permit. Accordingly, the 1992 Authorization to Degrade cannot relieve DEQ of its clear obligations under the Water Quality Act to protect existing uses and to make the findings described above before issuing a permit that allows degradation of state waters.

Finally, the commenting organizations note that DEQ's arbitrary exclusion of a polluting activity from nondegradation review violates the fundamental rights guaranteed by Article II, section 3, and Article IX, section 1, of the Montana Constitution.[68] For this reason, too, DEQ cannot simply point to the 1992 Authorization—which expired by its own terms and applied to a substantially different project from that covered by the Proposed Permit—to evade the requirements of the nondegradation policy.

### C. DEQ arbitrarily concluded that discharges via Outfalls 004-008 will cause nonsignificant changes in water quality

For Outfalls 004-008, which DEQ concedes are new sources subject to the nondegradation policy, DEQ eschewed nondegradation review based on its conclusion that the discharges from these outfalls will result in nonsignificant changes in water quality.[69] A change in water quality may be characterized as nonsignificant, and therefore generally exempt from nondegradation review, if it satisfies *all* of the criteria in ARM § 17.30.715(1). In the fact sheet for the Proposed Permit, DEQ states that authorized stormwater discharges from Outfalls 004-008 will have a nonsignificant effect on water quality because the Proposed Permit "stipulates that (in addition to any applicable numeric standards required) BMPs must be implemented prior

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[67] MCA § 75-5-303(3).

[68] *Mont. Envtl. Info. Ctr. v. Mont. Dep't of Envtl. Quality*, 1999 MT 248, ¶ 80, 296 Mont. 207, 988 P.2d 1236.

[69] Permit Fact Sheet 30-31. As noted *supra*, DEQ also indicated that the 1992 Authorization to Degrade applies to Outfalls 004-008. *See id.* at 29. DEQ has not explained how an authorization to degrade issued in 1992 possibly could apply to discharges that are *new* as of 2015. Ultimately, it appears that DEQ's erroneous contention that the 1992 Authorization applies to discharges from Outfalls 004-008 had no practical effect on the terms of the Proposed Permit, as DEQ did not establish any effluent limitations for Outfalls 004-008 based on the 1992 Authorization to Degrade. *See id.* at 46-47 (listing final numeric and narrative effluent limitations for Outfalls 004-008). In any event, the 1992 Authorization cannot relieve DEQ's obligation to conduct nondegradation review for discharges via Outfalls 004-008.

to the commencement of any regulated activities at these outfalls."[70] Because this conclusion is unsupported and, indeed, contradicted by readily available evidence, DEQ must conduct complete nondegradation review for authorized discharges from Outfalls 004-008.

DEQ has not supported its nonsignifiance determination for authorized discharges from Outfalls 004-008 with any data or analysis demonstrating that these discharges satisfy each of the criteria in ARM § 17.30.715(1). On the contrary, DEQ asserted in the fact sheet for the Proposed Permit that it "lack[s] specific data characterizing the effluent" from Outfalls 004-008.[71] Without such data—as well as detailed information about the existing quality of the receiving waters—it is not possible for DEQ to demonstrate that the authorized discharges from these outfalls will satisfy the nonsignifiance criteria, and its finding of nonsignificance in the Proposed Permit is arbitrary.

In fact, readily available evidence indicates that the authorized sediment discharges from Outfalls 004-008 will not satisfy at least one of the nonsignificance criteria because those discharges "will … have a measurable effect on … existing or anticipated use [of the receiving waters] or cause measurable changes in aquatic life or ecological integrity." ARM § 17.30.715(1)(h). As discussed above, the Aquatic BiOp for the Montanore Mine reveals that authorized sediment discharges will harm or destroy bull trout populations in Libby, Poorman, and Ramsey Creeks notwithstanding the implementation of BMPs relied on by DEQ.[72] And MMC's MPDES permit application indicates that the lion's share of sediment pollution from the project will occur via Outfalls 004-008.[73] This evidence contradicts DEQ's assertion that the authorized discharges from these outfalls will satisfy the nonsignificance criterion in ARM § 17.30.715(1)(h) and the agency's conclusion that authorized sediment discharges from these outfalls will result in "a nonsignificant change in existing water quality due to [the] low potential to affect … the environment."[74]

### D. The Proposed Permit unlawfully authorizes warm-water discharges via Outfall 003 that will degrade Libby Creek

In a further violation of nondegradation requirements, DEQ failed to address proposed warm-water discharges from Outfall 003 into Libby Creek. In its discussion of nondegradation requirements applicable to Outfall 003, DEQ states that it has established WQBELs that "are derived from and comply with either the state's water quality standards or the Board-issued authorization to degrade, ensuring the level of water quality necessary to attain and maintain existing and anticipated beneficial uses."[75] With regard to temperature, this conclusion is

[70] *Id.* at 30-31. The Proposed Permit contains numeric effluent limitations for Outfalls 004-008 only for the parameters oil and grease and pH; together with Outfalls 001-003, Outfalls 004-008 are subject to a TSS limit of 24 tons/year. *Id.* at 46.
[71] *Id.* at 40.
[72] *See* Aquatic BiOp 96-97, 100-02, 105-06.
[73] *See* MPDES Permit 0030279 Renewal Application, *supra*, at pp. 23, 41, 50, 59, and 68 of PDF file (presenting TSS discharge estimates for proposed outfalls).
[74] Permit Fact Sheet 30.
[75] *Id.*at 29-30.

demonstrably incorrect. As discussed above, authorized discharges of treated mine wastewater via Outfall 003 will cause thermal pollution of Libby Creek that will harm or destroy the local population of bull trout upstream of the Libby Creek falls. The Proposed Permit contains no temperature limitation for discharges via Outfall 003,[76] and there is no temperature limitation in the 1992 Authorization to Degrade.[77] Accordingly, before the Proposed Permit may issue, DEQ must affirmatively demonstrate that discharges of warm water via Outfall 003 will satisfy the nonsignifiance criteria in ARM § 17.30.715(1)—including by addressing the above-referenced evidence in the Aquatic BiOp—or must require MMC to obtain a valid authorization to degrade that addresses this thermal pollution.

## III. The Proposed Permit Unlawfully Authorizes Discharges to Impaired Waters

In addition to unlawfully failing to establish appropriate effluent limitations and violating nondegradation requirements, the Proposed Permit impermissibly authorizes discharges of pollutants to waters that already are impaired. As discussed above, DEQ has classified two segments of Libby Creek downstream from Outfalls 001-004 as impaired pursuant to § 303 of the Clean Water Act. This designation restricts DEQ's ability to authorize new discharges that will affect water quality in these stream segments. Specifically, DEQ cannot lawfully authorize new discharges to stream assessment unit MT76D002_061 because (1) DEQ has not developed a TMDL for this segment, and (2) the discharges authorized in the Proposed Permit will cause a decline in water quality for parameters by which the water body is impaired. DEQ cannot authorize new discharges to stream assessment unit MT76D002_062 because it has not developed compliance plans for existing point sources discharging to this stream segment. DEQ must address these deficiencies before it may issue the Proposed Permit.

### A. The Proposed Permit unlawfully authorizes discharges to an impaired stream segment for which no TMDL has been established

DEQ has determined that stream assessment unit MT76D002_061, which is the inventoried segment immediately downstream of Outfalls 001-004, does not fully support aquatic life due to alterations in stream-side or littoral vegetative covers and physical substrate habitat alterations—a sediment-related source of impairment.[78] As DEQ acknowledged in the fact sheet for the Proposed Permit, for stream assessment unit MT76D002_061, a TMDL is "required but not complete."[79] Until DEQ completes a TMDL for this impaired segment of Libby Creek, it may not issue MPDES permits authorizing discharges that will affect water quality there.[80] Indeed, the federal district court for Montana has in the past enforced a prohibition against the issuance of MPDES permits affecting impaired waterways for which—

[76] *See id.* at 46.
[77] *See id.* at 10 (listing effluent limitations in 1992 Authorization to Degrade).
[78] *See id.* at 27.
[79] *Id.* (capitalization omitted).
[80] *See* 40 C.F.R. § 122.4(d) (no permit may issue when imposition of conditions cannot ensure compliance with state water quality standards), (i) (no permit may issue to new source or new discharge that will cause or contribute to violation of water quality standards).

like stream assessment unit MT76D002_061—a TMDL is required but not complete.[81] A panel of the U.S. Court of Appeals for the Ninth Circuit affirmed that action by the district court, concluding that the ban was necessary to satisfy the requirements of 40 C.F.R. § 122.4.[82] Under this authority, the discharges to Libby Creek authorized in the Proposed Permit are unlawful.

### B. The Proposed Permit unlawfully authorizes discharges to an impaired stream segment for which there is no compliance plan for existing sources

As described above and in the fact sheet for the Proposed Permit, stream assessment unit MT76D002_062, which also is downstream of Outfalls 001-004, is impaired due to existing sediment pollution and is subject to a sediment TMDL. As of September 23, 2013, DEQ had identified 11 permitted point sources with the potential to contribute sediment to the impaired segment of Libby Creek.[83] However, the TMDL document does not contain compliance plans for these sources that will bring the impaired stream segment into compliance with applicable water quality standards, and the commenting organizations are not aware of any such plans established elsewhere by DEQ. In the absence of plans that provide for compliance with the applicable water quality standards, DEQ may not authorize additional sediment pollution that will affect the impaired segment of Libby Creek.[84]

## IV. DEQ Failed to Consider the Impacts of the Authorized Mixing Zones on Bull Trout

DEQ also failed to consider the environmental harms threatened by the proposed authorization of mixing zones in the midst of habitat for the most resilient bull trout population remaining in Libby Creek. Pursuant to ARM § 17.30.506, DEQ conducted a water quality assessment in conjunction with its authorization of mixing zones in the Proposed Permit.[85] However, in conducting that assessment, it appears that DEQ operated under the misapprehension that the receiving waters for Outfalls 001-003 in Libby Creek do not support bull trout. Specifically, in evaluating whether the affected waters constitute a "Biologically Important Area," DEQ stated that "[t]here is a fish barrier downstream from [the] facility's authorized discharge locations (and their associated mixing zones) that prevents the migration and/or passage of salmonids from the lower reaches of Libby Creek up to the discharge

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[81] *See Friends of the Wild Swan v. EPA*, 74 Fed. App'x 718, 723-24 (9th Cir. July 25, 2003) (affirming district court's order prohibiting Montana from issuing new MPDES permits affecting impaired waters until TMDLs completed).

[82] *See id.* (discussing and affirming district court's order prohibiting issuance of MPDES permits affecting impaired streams for which DEQ had not completed TMDLs). The Ninth Circuit panel focused on 40 C.F.R. § 122.4(i), which concerns permits for "a new source or a new discharger." As explained above, the authorized discharges via Outfalls 001-003 are new sources, and there is no dispute that the discharge via Outfall 004 is a new source. Even assuming for the sake of argument that the authorized discharges via Outfalls 001-003 are existing sources, which they are not, 40 C.F.R. § 122.4(d) still would prohibit these discharges.

[83] Kootenai-Fisher Project Area TMDLs, *supra*, at 5-49.

[84] 40 C.F.R. § 122.4(i)(2); *Friends of Pinto Creek v. EPA*, 504 F.3d 1007, 1012-15 (9th Cir. 2007).

[85] *See* Permit Fact Sheet 34-35.

location."[86] As described above, DEQ is incorrect insofar as this statement suggests that bull trout are absent above the barrier falls on Libby Creek and in the vicinity of Outfalls 001-003. The Aquatic BiOp states that the segment of Libby Creek that is the receiving waters for Outfalls 001-003 "has numerous [bull trout] spawning areas" and hosts a local bull trout population that is among "the most resilient … that occupy the entire Libby Creek watershed."[87] Before it may authorize mixing zones as described in the Proposed Permit, DEQ must correct this flaw in its water quality assessment and must fully analyze the impact of any proposed mixing zones on the vulnerable and ecologically important population of bull trout in the upstream segment of Libby Creek.[88]

## V. The Proposed Permit Relies on an Invalid Water Balance

In addition, the effluent limitations in the Proposed Permit rest on an improper water balance analysis. To be valid and complete, a MPDES permit application must include a water balance indicating "approximate average flows at intake and discharge points and between units, including treatment units," as well as data estimating the average flow of wastewater from each process, operation, or production area covered by the permit that contributes to the effluent for any authorized outfall. 40 C.F.R. § 122.21(g)(2)-(3), (k)(3)(i)-(ii). The water balance supporting MMC's MPDES permit application does not satisfy this requirement because it incorporates seepage estimates for a tailings storage facility that is no longer part of the project design. DEQ's reliance on this water balance in the Proposed Permit is arbitrary and unlawful.

The project water balance relied upon in the Proposed Permit incorporates estimates of seepage from the tailings storage facility in the 2009 Draft EIS for the Montanore Mine.[89] The estimated seepage rate of 25 gal/min is based on a proposed tailings storage facility in the Little Cherry Creek drainage.[90] That tailings storage facility is not part of the agencies' preferred alternative, *i.e.*, the current plan for the Montanore Mine. Instead, a different tailings storage facility is proposed in the Poorman Creek drainage. The Poorman facility location and design differ in important respects from the Little Cherry Creek facility. First, the two facilities would involve different seepage controls. As described in the FEIS, "[d]ue to the wide footprint of the dam face the Poorman Impoundment Site would require a more extensive seepage collection system. In addition, there would be less room downstream of the dam footprint to install a pumpback well system or other seepage interception systems between the dam toe and private

[86] *Id.* at 35.
[87] Aquatic BiOp 124. *See also* Map, Proposed Outfall Locations (depicting location of outfalls in relation to designated bull trout critical habitat); Kootenai Nat'l Forest, Biological Assessment, *supra*, Fig. 5.3.1.1-1 (indicating Libby Creek is occupied by bull trout upstream of the barrier falls and at the location of Outfall 003).
[88] *See* ARM § 17.30.506(1) (prohibiting granting of mixing zone "if it would threaten or impair existing beneficial uses"), (2)(a) (stating that "the presence of fish spawning areas … within the proposed mixing zone … will support a finding that the mixing zone may be inappropriate during the spawning … periods").
[89] Geomatrix (2011) at 14.
[90] *See* Kootenai Nat'l Forest & Mont. Dep't of Envtl. Quality, Draft Envtl. Impact Statement for the Montanore Project 106, Appx. G (Water Quality Mass Balance Calculations) (2009).

property not owned by MMC."[91] Second, the geology of the Poorman facility site differs from the Little Cherry Creek site, with implications for the seepage rate from the tailings storage facility. Depth to bedrock is not well defined at the Poorman site, and it is unknown whether the low permeability fine-grained material there is laterally connected to the glaciolacustrine type deposits found in the Little Cherry Creek drainage.[92] No aquifer tests were performed on the fine-grained deposits at the Poorman site. In short, MMC—and DEQ in developing the Proposed Permit—simply assumed without foundation that the seepage rate from the Poorman tailings storage facility will be the same as that from the previously proposed Little Cherry Creek facility. That unsubstantiated assumption does not satisfy the regulatory requirement for a valid estimate of the outflows from the mine elements MMC actually proposes to construct, which is an essential data point for the development of appropriate effluent limitations.[93] DEQ must obtain and analyze a valid water balance for the mine facilities in the agencies' preferred alternative before it may issue the Proposed Permit.

## VI. The Proposed Permit Contains Unlawful Compliance Schedules

The Proposed Permit excuses compliance with many of the final effluent limitations for Outfalls 001-003 for a three-year period, during which less stringent interim effluent limitations will apply.[94] To justify this three-year delay in compliance with the final effluent limitations, DEQ states only that "[a] compliance schedule is required since this permit enacts effluent limits for some previous limited parameters that are more stringent than the 2006-issued permit limits as well as new effluent limits for other parameters."[95] As discussed above, DEQ has failed to support its contention that even the final effluent limitations in the Proposed Permit will ensure compliance with water quality standards, as the federal Clean Water Act and Montana Water Quality Act require. DEQ's proposal to delay compliance even with those inadequate limitations pursuant to a compliance schedule is prohibited by the Clean Water Act and Montana's implementing regulations.[96] Accordingly, DEQ must eliminate the compliance schedules and interim effluent limitations for Outfalls 001-003 in the Proposed Permit and require immediate compliance with effluent limitations that will ensure all applicable water quality standards are met.

In order to carry out the central purpose of the Clean Water Act to restore and maintain the integrity of our nation's waters, Congress included in the statute explicit deadlines for permitting agencies to require compliance with water quality standards. Specifically, the statute provides that after July 1, 1977, all discharge permits must require immediate compliance with effluent limitations based on water quality standards adopted before that date; compliance schedules may be allowed for effluent limitations designed to comply with standards adopted after that date only if the relevant water quality standard or state implementing regulations

[91] FEIS 756.
[92] *Id.* at 550-51.
[93] 40 C.F.R. § 122.21(g)(2)-(3), (k)(3)(i)-(ii).
[94] Permit Fact Sheet 48-49.
[95] *Id.* at 48.
[96] *See* 33 U.S.C. § 1311(b); ARM § 17.30.1350(1)(a).

expressly authorize them.[97] Montana's implementing regulations provide that "[a]ny schedules of compliance … must require compliance as soon as possible, but not later than the applicable statutory deadline under the [Water Quality] Act or under the federal Clean Water Act, as codified at 33 USC 1311(b)(2)(A), (C), (D), (E), and (F)." ARM § 17.30.1350(1)(a) (emphasis added). Clean Water Act section 1311(b)(2), in turn, requires that compliance must be achieved "in no case later than March 31, 1989." Accordingly, in 2015, DEQ is prohibited from authorizing delayed compliance with effluent limitations necessary to meet water quality standards.[98] DEQ must eliminate the compliance schedule and interim effluent limitations in the Proposed Permit and mandate immediate compliance with effluent limitations that will ensure the applicable water quality standards are met.

## VII. DEQ Must Address the Additional Water Quality Impacts of the Montanore Mine

For the reasons stated above, the Proposed Permit fails adequately to address the water quality impacts of the discharges it authorizes. Further, in the Proposed Permit DEQ has omitted entirely any analysis or remedial measures addressing the other serious water quality impacts of the proposed Montanore Mine. Before DEQ may issue its final approval of the Montanore Mine project's plan of operations, it must address these additional impacts—either in the MPDES permit under consideration or separate agency decision(s) properly supported by record evidence and open to public comment.

### A. Baseflow reductions

As documented in the Aquatic BiOp and FEIS for the Montanore Mine, the mine project would reduce flows on a long-term or permanent basis in Libby Creek, Poorman Creek, Ramsey Creek, East Fork Rock Creek, mainstem Rock Creek, and East Fork Bull River. These flow reductions would irreversibly damage local bull trout populations and habitat of special conservation significance and would completely dewater stream reaches within the Cabinet Mountains Wilderness. Because these flow reductions would adversely affect water quality in the project area—and indeed, would violate applicable water quality standards and the

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[97] 33 U.S.C. § 1311(b)(1)(C); *In the Matter of Star-Kist Caribe*, 3 E.A.D. 172, 1990 WL 324290, at *2 (E.A.B. April 16, 1990) (holding that Clean Water Act prohibits schedules of compliance "that would sanction pollutant discharges that do not meet applicable water quality standards" developed after July 1, 1977, unless state water quality standard itself or implementing regulations "can be fairly construed as authorizing a schedule of compliance") (attached as Exhibit I); Memorandum from J. A. Hanlon, Dir., EPA Office of Wastewater Mgmt., to A. Strauss, Dir., Water Div., EPA Region 9, Re. Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits (May 10, 2007) (directing EPA regional office to apply this interpretation of § 1311) (attached as Exhibit L).

[98] Additionally, as discussed above, the federal Clean Water Act and Montana Water Quality Act prohibit the issuance of discharge permits that will not ensure compliance with applicable water quality standards; there is no exception for the period covered by a compliance schedule. *See* 42 U.S.C. § 1342(b)(1)(A); 40 C.F.R. § 122.44(d); MCA § 75-5-401(2). These provisions independently and additionally require that DEQ eliminate the compliance schedules and interim effluent limitations in the Proposed Permit.

nondegradation policy—DEQ must address them before approving the plan of operations for the Montanore Mine.

In the Aquatic BiOp, FWS determined that flow reductions caused by the Montanore Mine would result in "significant and permanent degradation [of] important local bull trout populations" and designated critical habitat in the Libby Creek, Rock Creek, and East Fork Bull River drainages.[99] FWS determined that the mine would reduce base flows on the order of 10 to 20% in multiple reaches that contain occupied bull trout habitat.[100] Because seasonally dry conditions in northwest Montana coincide with the most sensitive periods in the bull trout life cycle—spawning and egg incubation—the adverse effects of these flow reductions on bull trout would be particularly severe.

Further, substantial flow reductions would occur in streams of special importance for sustaining vulnerable bull trout populations in the Lower Clark Fork and Kootenai River watersheds—notably, Libby Creek, East Fork Bull River, and East Fork Rock Creek.[101] In Libby Creek near the Cabinet Mountains Wilderness boundary, the mine would cause base flow reductions exceeding 20% over a 16 to 20 year period, constituting a significant adverse impact on the local bull trout population.[102] Libby Creek contains numerous spawning areas and supports an important bull trout population upstream of the barrier falls; because this population presently is protected from invasive species, in the absence of new threats it has unique potential to persist and thrive compared to other vulnerable populations in the Kootenai River watershed. In East Fork Rock Creek and East Fork Bull River downstream of the wilderness boundary, the mine would cause permanent base flow reductions of approximately 9% and 13%, respectively.[103] East Fork Bull River is considered "the single-most important bull trout spawning and rearing stream in the Lower Clark Fork bull trout core area."[104] It supports more bull trout spawning than any other stream in the core area of which it is a part, with the greatest concentration of spawning and egg incubation occurring in its East Fork.[105] Indeed, FWS has determined that maintaining the spawning and rearing success of the East Fork Bull River and East Fork Rock Creek bull trout populations "is essential to maintaining the existing survival status and potential for recovery" of bull trout throughout the Lower Clark Fork River watershed.[106]

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[99] Aquatic BiOp 103.
[100] *Id.* at 90-91.
[101] *See id.*at 95, 100-01, 103, 120-21.
[102] *Id.* at 90, 124.
[103] *Id.* at 90-91, Tbl. 5.
[104] U.S. Dep't of Interior Comments on Supp. Envtl. Impact Statement for the Montanore Project 2 (Nov. 15, 2011) (attached as Exhibit J).
[105] U.S. Fish & Wildlife Serv., Biological Opinion on the Effects to Grizzly Bears, Bull Trout, and Bull Trout Critical Habitat from the Implementation of Proposed Actions Associated with Plan of Operation for the Revett RC Res. Inc. Rock Creek Copper/Silver Mine, at B-54 (Oct. 11, 2006) (excerpt attached as Exhibit K).
[106] Aquatic BiOp 122.

In short, the Montanore Mine would substantially reduce flows in multiple streams to a degree that would significantly damage bull trout critical habitat and reduce bull trout abundance in areas of special significance for conserving and recovering the species in the region. The FEIS reveals that these flow reductions also would adversely impact populations of redband and westslope cutthroat trout.[107] The evidence presented in the FEIS and Aquatic BiOp and summarized here indicates that expected flow reductions would violate the fish protection standards that apply to the affected streams and exceed nonsignificance criteria in multiple reaches. Accordingly, DEQ must analyze and address these impacts before it approves the plan of operations for the Montanore Mine.

In addition, the FEIS for the Montanore Mine reveals that the project would cause dramatic depletions of baseflows in streams within the Cabinet Mountains Wilderness, up to and including complete dewatering.[108] Specifically, within the wilderness, the mine would reduce baseflows in East Fork Rock Creek by 100%, in East Fork Bull River by 97%, and in Libby Creek by 11%.[109] Critically, these flow depletions would occur *with* implementation of approved mitigation measures; in the absence of mitigation measures, or if such measures prove less than 100% effective, the flow reductions would be even more severe.[110] Again, DEQ must address these substantial baseflow reductions—both those that would occur within the Cabinet Mountains Wilderness and those described above in reaches beyond the wilderness boundary—before it provides final approval for the Montanore Mine.

In particular, DEQ must analyze the project's flow impacts pursuant to the nondegradation policy, MCA § 75-5-303. Projected baseflow reductions in numerous reaches of high-quality streams will exceed nonsignificance criteria and cannot lawfully proceed without a valid authorization to degrade.[111] Flow reductions that will degrade wilderness streams are strictly prohibited and DEQ cannot approve activities that will trigger those reductions.[112]

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[107] FEIS 465-66.
[108] *Id.* at 572, Tbl. 100.
[109] *Id.*
[110] *See id.*
[111] *See* ARM § 17.30.715(1)(a) (classifying as nonsignificant activities that, among other requirements, reduce a stream's $7Q_{10}$ flow by ten percent or less); *id.* § 17.30.715(1)(h) (classifying as nonsignificant changes in water quality for parameters to which only narrative standards apply that, among other requirements, "will not have a measurable effect on any existing or anticipated use or cause measurable changes in aquatic life or ecological integrity").
[112] *See* MCA § 75-5-303(7) ("The board may not issue an authorization to degrade state waters that are classified as outstanding resource waters."); ARM § 17.30.705(2)(c) ("For outstanding resource waters, *no degradation is allowed* and no permanent change in the quality of outstanding resource waters resulting from a new or increased point source discharge is allowed.") (emphasis added); *see also* ARM § 17.30.617(1) (designating surface waters within wilderness areas as outstanding resource waters).

Before the Montanore Mine project can go forward, DEQ must address the clear threat of degradation due to baseflow reductions caused by the mine.[113]

### B. Sediment pollution in Big Cherry, Bear, Cable, and West Fisher Creeks

The Aquatic BiOp also documents that the Montanore Mine project would involve sediment discharges to Big Cherry Creek, Bear Creek, Cable Creek, Midas Creek, Fisher River, and West Fisher Creek.[114] Due to existing elevated sediment levels, these streams presently are functioning "at risk" or "at unacceptable risk" for bull trout, and FWS predicts that short-term sediment increases in these streams from the Montanore Mine would inflict "severe impacts" on bull trout populations there.[115] As in Libby Creek, discussed above, long-term sediment reductions achieved through implementation of BMPs may not benefit the local bull trout populations in these streams "due to severe impacts of short-term sediment increases on a small bull trout population, or benefits accruing to non-native brook trout" that compete with bull trout.[116]

The Proposed Permit does not address sediment discharges to Big Cherry Creek, Bear Creek, Cable Creek, Midas Creek, Fisher River, or West Fisher Creek or the impact of those discharges on aquatic life. The FEIS indicates that stormwater runoff "from all facilities" in the agencies' preferred mine alternative "would be collected in ditches and directed to one or more sediment ponds."[117] It is not clear why the Proposed Permit addresses stormwater discharges to Libby, Poorman, and Ramsey Creeks only. DEQ must address this omission and the predicted discharges of sediment to the streams identified here in the final MPDES permit or a separate agency decision before it grants final approval to the Montanore Mine.

[113] Because the 1992 Authorization to Degrade issued to the Noranda mine project did not address flow reductions, there can be no argument that the 1992 Authorization satisfies DEQ's nondegradation review obligations regarding the Montanore Mine.
[114] Aquatic BiOp 101.
[115] *Id.*
[116] *Id.*
[117] FEIS S-43.

## CONCLUSION

For the reasons stated above, DEQ may not lawfully issue the Proposed Permit. Should you have any questions about these comments, please contact the undersigned at the number below.

Sincerely,

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