

**BEFORE THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY**

Petition for Rulemaking)
Under the Clean Water Act)
)
Water Quality Criteria for Nutrients)
and Revisions to)
Nondegradation Policy)
in the State of Montana)

I. Introduction

This petition is brought pursuant to the Administrative Procedures Act, 5 U.S.C. §§ 553(e) and 555(e). For the reasons detailed below Upper Missouri Waterkeeper (“Waterkeeper”) hereby petitions the U.S. Environmental Protection Agency (“EPA”) to determine that recently adopted statutory changes to the State of Montana’s water quality standards under Montana Senate Bill 358¹ do not meet the requirements of the Clean Water Act (“CWA”) and EPA regulations implementing the CWA, fail to protect aquatic life, fisheries, recreational, and other designated uses of Montana waters; to disapprove those changes; and to promptly prepare, publish, and finalize regulations setting forth revised or new numeric nutrient criteria that protect designated uses and meet all requirements of the CWA.

Montana Senate Bill 358 (“SB 358”) attempts to eliminate the State’s science-based numeric nutrient water quality criteria that are necessary to protect many Montana waters and their designated uses from the harmful effects of nutrient pollution. In addition, the bill adds new “nonsignificance” criteria that revise and weaken Montana’s antidegradation policy (called “nondegradation” in Montana) to include a whole new suite of exemptions allowing for degradation of local water quality. Both actions are substantive changes of Montana’s water quality standards rules requiring EPA approval before becoming effective as a matter of federal law. Moreover, both actions weaken water quality standards and protections for designated uses contrary to the requirements of the CWA and EPA regulations, necessitating determinations from EPA that Montana’s nutrient and nondegradation standards do not meet the requirements of the CWA.

¹ Montana Senate Bill 358, April 30th 2021 Final Version. Attached as Exhibit.

II. History and Background

For over two decades, EPA has recognized the importance of developing numeric nutrient water quality criteria to protect designated uses of waterbodies from nutrient pollution that is associated with increases in concentrations of nitrogen and phosphorus.² In 2014, Montana adopted protective nutrient criteria, recognizing that the existing narrative criteria had failed to protect designated uses of Montana waters from the effects of increasing nutrient pollution.³ EPA approved Montana's nutrient water quality standards in 2015 as fully-supported by sound science and necessary to protect designated uses.⁴ Montana had adopted and EPA had approved a combination of reference and stressor-response approaches to nutrient water quality standards embodied in numeric nutrient criteria for nitrogen and phosphorus, grounded in sound science.⁵ Montana's numeric nutrient criteria was precedential on a national scale as one of first States to comprehensively address the threat of nutrient pollution through strong numeric water quality criteria that protected all designated uses.

Montana Senate Bill 358 ("SB 358") attempts to eliminate the State's science-based numeric nutrient water quality criteria that are necessary to protect many Montana waters and their designated uses from the harmful effects of nutrient pollution. In addition, the bill adds new "nonsignificance" criteria that revise and weaken Montana's antidegradation policy (called "nondegradation" in Montana) to include a whole new suite of exemptions allowing for degradation of local water quality. These revisions represent a 180 degree turn in water pollution control and demonstrate a complete disregard for CWA requirements and sound science.

III. Petition

This petition under 5 U.S.C. §§ 553(e) and 555(e), requests EPA take the following actions under its Sections 303(c)(2) and 303(c)(4)(B) authority:

² EPA, Nutrient Criteria Development; Notice of Nutrient Criteria Technical Guidance Manual: Rivers and Streams, 65 Fed. Reg. 46167 (July 27, 2000). *See also* Administrative Record 228 *et seq.* in Upper Missouri Waterkeeper v. EPA, 377 F. Supp. 3d 1156, 1159-60 (D. Mont. 2019). Where appropriate this Petition also cites to the salient AR provided in EPA's Index to the Administrative Record, filed Dec. 1, 2016 in the aforementioned action.

³ Suplee, Watson, Nov. 2008. "Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana's Wadeable Streams and Rivers." (hereinafter "Technical Basis NNC 2008"); Suplee, M.W., and V. Watson, 2013. Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana's Wadeable Streams and Rivers—Update 1.; DEQ, Notice of Public Hearing on Proposed Amendment (Water Quality), MAR Notice No. 17-356 281 (Feb. 3, 2014); AR 1220-1225 (Circular12-A), 1326, 1346, and 1636.

⁴ EPA Region 8, "EPA Action on Montana's Numeric Nutrient Criteria and Variance Rules," February 26, 2015.

⁵ Technical Basis NNC 2013, AR 1222.

(1) make a determination that the state law elimination of numeric nutrient criteria and required use of a new narrative, adaptive management nutrient program under Senate Bill 358, effective immediate April 30, 2021 on signature by Governor Gianforte, fail to provide full protection for designated uses and violate the CWA;

(2) make a determination that Senate Bill 358's revisions of nonsignificance exemptions under Montana's nondegradation policy violates EPA's antidegradation policy rules and mandatory public participation rules;

(3) make a determination that Senate Bill 358's provisions violate the CWA by providing an immediate effective date upon signature by the Governor without and before providing for mandatory EPA review and action on those sections;

(4) disapprove those offending sections of Senate Bill 358 in Montana code for CWA purposes; and

(5) promulgate federal regulations applicable to Montana setting forth revised numeric nutrient water quality standards as necessary to meet requirements of the CWA.

A. Jurisdiction and Authority of the Environmental Protection Agency

The CWA requires that states adopt water quality standards. Such standards must consist of the designated uses, the water quality criteria for waters based on such uses, and antidegradation requirements.⁶ The standards must protect the public health or welfare, enhance the quality of water and wherever attainable, provide water quality for the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water, taking into account their use and value of public water supplies, and agricultural, industrial, and other purposes including navigation.⁷

Water quality criteria must be adopted that protect the designated uses.⁸ Water quality criteria are expressed as constituent concentrations, levels, and/or statements, representing a quality of water that supports a designated use(s).⁹ Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the

⁶ 33 U.S.C. § 1313(c)(2)(A); *see also* 40 C.F.R. §§ 131.2, 131.3(i), 131.6.

⁷ 33 U.S.C. § 1313(c)(2)(A); *see also* 40 C.F.R. § 131.5(a)-(b).

⁸ 40 C.F.R. 131.11(a)(1).

⁹ 40 C.F.R. § 131.3(b).

designated use(s).¹⁰ For waters with multiple use designations, the criteria shall support the most sensitive use.¹¹

In any instance when EPA determines that a new or revised standard is necessary to meet the requirements of the CWA, the Administrator shall promptly prepare and publish proposed regulations setting forth a revised or new water quality standard.¹² This petition demonstrates that the facts in combination with the CWA's plain language, EPA's regulations and guidance, support the Administrator making a determination that Montana's elimination of its numeric nutrient criteria and replacement 'to-be-determined' narrative adaptive management approach to nutrient pollution control, and revisions of its nondegradation policy's nonsignificance exemptions, are individually and collectively not fully protective of designated uses or based on sound scientific rationale and, moreover, that Montana's revisions to water quality standards and alleged immediate effective date occurred unlawfully without mandatory EPA approval.

B. Nitrogen and Phosphorus Pollution Threaten the Designated Uses of Waters in Montana

1. Nutrient Pollution is Widespread and Harming Uses of Montana's Waterbodies

It is well-documented that the addition of nitrogen and phosphorus to surface waters leads to phenomenon referred to as eutrophication. Eutrophication is increased plant and algae growth and decay in a waterbody, and all the consequential changes to the waterbody and the water quality that occur as a result. Indeed, some problems are caused by high concentrations of the nutrients themselves; for example, direct toxicity of high levels of nitrate in drinking water to humans and to aquatic organisms. Most problems caused by nitrogen and phosphorus, however, result from the stimulating effect these pollutants have on plant and microbial growth, altering the balance of natural communities, robbing the water column of oxygen, and promoting the growth of harmful microorganisms.¹³

These problems prevent waters from attaining the basic CWA "fishable/swimmable" goals, threaten the health of human and wildlife users of these waters, and impose significant costs on drinking water supplies. Nitrogen and phosphorus pollution harm Montana's waters

¹⁰ 40 C.F.R. 131.11(a)(1).

¹¹ *Id.*

¹² 33 U.S.C. § 1313(c)(4)(B), 40 C.F.R. §§ 131.5(a)(1)-(3), 131.5(b).

¹³ *See* Technical Basis NNC 2008, 2013.

through: damage to recreational use of waters; damage to aquatic plant and wildlife communities; damage to drinking water supplies; and damage to aesthetic quality of waters.¹⁴

An exhaustive body of literature shows that increased nitrogen and phosphorus loading to freshwater systems stimulates algal growth across aquatic ecosystems.¹⁵ Researchers have consistently reported significant positive relationships between nutrient concentrations and both suspended and benthic algal biomass in streams. Chronic nitrogen and phosphorus pollution from anthropogenic nutrient additions, sometimes called cultural eutrophication, shifts aquatic ecosystems out of balance and dramatically alters food webs with many detrimental effects. Nitrogen and phosphorus over-enrichment detrimentally affects aquatic life, and leads to aquatic life impairment. These indirect effects are attributed mostly to changes in the dissolved oxygen regimen and alteration of food and habitat resources. Studies of the effects of nutrient additions to streams and resulting change in algal abundance and composition have shown major changes in the abundance and types of consumers including macroinvertebrates and fishes present in these nutrient-enriched streams.¹⁶

So too does nutrient pollution impair the aesthetic quality of freshwater by significantly reducing water clarity, causing floating mats of live and decomposing algae, and producing hypoxic and anoxic conditions resulting in unpleasant odors and event fish kills. The stimulation of freshwater algae and cyanobacteria by nutrient pollution described herein results in excessive quantities of planktonic and sestonic algae in lakes, rivers, and streams. Water clarity is decreased significantly by the algae as they overgrow the system and form blooms. These blooms and poor aesthetic conditions affect the fishing designated use of many waterways.

In adopting its statewide numeric nutrient criteria Montana DEQ specifically recognized that forms of nitrogen and phosphorus rank as the 4th, 8th, 10th, and 12th most common types of pollution in Montana's flowing waters.¹⁷ In fact, excess nitrogen and phosphorus levels account for at least 17% of all stream miles impaired by all forms of water pollution in Montana.¹⁸ DEQ recognized that "the effects of excess nitrogen and phosphorus in streams and rivers go well beyond the undesirable aquatic life referred to in the [previous] narrative standard. Excess nitrogen and phosphorus affect other water quality parameters [e.g. DO, pH, and] [t]he state-of-

¹⁴ See generally, DEQ Integrated Reports 2006-2020, 303d Lists.

¹⁵ See Technical Basis NNC 2008, "Section 2.0 The Science of Stream Eutrophication" & Technical Basis NNC 2013, "Section 2.5 "Literature Consulted"".

¹⁶ *Id.*

¹⁷ DEQ, 'Nutrient Standards Rules and Statements of Reasonable Necessity,' 2014. (Hereinafter "Rule Statement.")

¹⁸ *Id.*

the-science is such that linkages can clearly be made between nitrogen and phosphorus concentrations and these other, already-adopted standards. Thus, the numeric nutrient criteria will also assure protection and attainment of the state's dissolved oxygen and pH standards which are, in and of themselves, critical to the protection of fish and aquatic life."¹⁹ In turn, Montana developed and adopted nitrogen and phosphorus criteria set at levels so that they protect streams from the undesirable aspects of eutrophication.²⁰

2. Numeric Nutrient Criteria Represent Scientific Best Practices and Regulatory Consensus for Maintaining and Restoring Water Quality in Montana

Eutrophication has long been recognized as a serious water quality problem by EPA, illustrated by the fact that the agency undertook a national eutrophication survey of streams just shortly after its creation in the early 1970s. By the late 1990s EPA announced that all states and tribes must develop nutrient criteria for their respective waters, and by 2000 EPA had published a series of regionally-based numeric nutrient criteria recommendations.²¹ Acknowledging the serious issues that nutrient pollutants can cause, EPA developed nutrient guidance in 2000 and directed states to create science-based numeric criteria by 2003 to protect designated uses of waters from the harmful effects of nutrient pollution as required by the Clean Water Act.²² EPA found the nation's reliance on varying narrative standards to control nutrient pollution in waterbodies to be inadequate and lacking quantitative values and lacking specificity.²³ Conversely, EPA has found numeric criteria to be more effective in protecting and supporting designated uses and more effective for regulating pollutant discharges.²⁴

Montana first adopted numeric nutrient criteria on large stretches of the Clark Fork River and defined reach-specific nutrient concentrations and benthic algae biomass benchmarks.²⁵ Montana chose to use numeric criteria for the Clark Fork early on, instead of relying on its then-existing narrative nutrient criteria, because of the quantitative values associated with numeric criteria. Soon after, in crafting numeric nutrient criteria for statewide application, DEQ's expert nutrient scientist Dr. Suplee recognized how numeric nutrient criteria embody the precautionary

¹⁹ *Id.* at 1.

²⁰ *See* Circular 12-A, AR 1220-1225.

²¹ EPA. Ambient Water Quality Criteria Recommendations: Information Supporting the Development of State and Tribal Nutrient Criteria, 2000. Washington, D.C., U.S. Environmental Protection Agency.

²² EPA. Nutrient Criteria Development; Notice of Nutrient Criteria Technical Guidance Manual: Rivers and Streams, 65 Fed. Reg. 46167 (July 27, 2000). (hereinafter "EPA Nutrient Guidance 2000").

²³ EPA Nutrient Guidance 2000 at 1, 3-4.

²⁴ *Id.* at 4, 9-10.

²⁵ Montana ARM 17.60.631.

approach and work synergistically with traditional DO and pH numeric criteria to better protect designated uses from eutrophication in Montana streams and rivers than narrative criteria:

“[S]omething about the DO, pH, and narrative [nutrient] criteria was not and is not working when it comes to stream eutrophication, since eutrophication problems continue to be common in Montana... [I]f one knew the nutrient concentrations that could prevent exceedances of the DO and pH criteria in a waterbody, one has a good chance of actually attaining the DO and pH criteria because the root cause of the problem would be addressed. That is exactly what numeric nutrient criteria are intended to do.”²⁶

In advocating for the use of numeric nutrient criteria Dr. Suplee explicitly recognized the problematic nature of Montana’s prior narrative nutrient criteria, which have “more difficult implementation challenges...there are no definitions in rule of what “undesireable” aquatic life is, or, if that could be determined, what the levels of this aquatic life should be held to.”²⁷ Montana’s narrative nutrient criteria are poorly defined such that the application of such criterion is subject to individual interpretation and, consequently, debate and varying levels of efficacy in actually protecting designated uses. Put simply, Montana’s previous narrative criteria approach did not adequately address the state’s rampant nutrient pollution where excess nitrogen and phosphorus levels accounted for 17 percent of all stream miles impaired in the state by pollution.²⁸

C. Montana’s Nutrient Water Quality Standards

1. Montana’s Numeric Nutrient Criteria & EPA Approval

To address the ongoing issue of pervasive nutrient pollution and to comply with EPA instruction to establish numeric nutrient criteria, Montana’s Department of Environmental Quality (“DEQ”) developed water quality standards for nutrients in Circular 12-A.²⁹ Montana did so because narrative nutrient criteria were not adequately addressing water quality impairments.³⁰ Circular 12-A set science-based numeric criteria for phosphorus and nitrogen to protect all designated use such as health, fishing, and recreation in Montana’s wadeable streams.

The limits on in-stream pollutant concentrations in Circular 12-A are tied to the ecoregional characteristics of Montana as well as the season in which they are to be applied.

²⁶ Technical Basis NNC 2008 at pp. 26.

²⁷ *Id.*

²⁸ Notice of Public Hearing on Proposed Amendment (Water Quality). MAR Notice No. 17-356 281 (Feb. 3, 2014).

²⁹ Circular 12-A, Numeric Nutrient Criteria in Montana. July 2014 Final Edition.

³⁰ Technical Basis NNC 2013 at 11-12.

“The nitrogen and phosphorus concentrations provided here have been set at levels that will protect beneficial [AKA, designated] uses and prevent exceedances of other surface water quality standards which are commonly linked to nitrogen and phosphorus concentrations (e.g., pH and dissolved oxygen...) The nitrogen and phosphorus concentrations provided here also reflect the intent of the narrative standard at ARM 17.30.637(1)(e) and will preclude the need for case-by-case interpretations...”³¹ In other words, Montana’s numeric nutrient criteria represent best available science tied directly to the most efficacious means for protecting designated uses of most Montana waterways.

Table 12A-1. Base Numeric Nutrient Standards for Wadeable Streams in Different Montana Ecoregions. If standards have been developed for level IV ecoregions (subcomponents of the level III ecoregions) they are shown in italics below the applicable level III ecoregion. Individual reaches are in the continuation of this table.

Ecoregion ^{1,2} (level III or IV) and Number	Ecoregion Level	Period When Criteria Apply ³	Numeric Nutrient Standard ⁴	
			Total Phosphorus (µg/L)	Total Nitrogen (µg/L)
Northern Rockies (15)	III	July 1 to September 30	25	275
Canadian Rockies (41)	III	July 1 to September 30	25	325
Idaho Batholith (16)	III	July 1 to September 30	25	275
Middle Rockies (17)	III	July 1 to September 30	30	300
<i>Absaroka-Gallatin Volcanic Mountains (17i)</i>	IV	July 1 to September 30	105	250
Northwestern Glaciated Plains (42)	III	June 16 to September 30	110	1300
<i>Sweetgrass Upland (42l), Milk River Pothole Upland (42n), Rocky Mountain Front Foothill Potholes (42q), and Foothill Grassland (42r)</i>	IV	July 1 to September 30	80	560
Northwestern Great Plains (43) and Wyoming Basin (18)	III	July 1 to September 30	150	1300
<i>River Breaks (43c)</i>	IV	See Endnote 5	See Endnote 5	See Endnote 5
<i>Non-calcareous Foothill Grassland (43s), Shields-Smith Valleys (43t), Limy Foothill Grassland (43u), Pryor-Bighorn Foothills (43v), and Unglaciated Montana High Plains (43o)*</i>	IV	July 1 to September 30	33	440

Circular DEQ 12-A, p.3, Final July 2014 Edition.

In sum, Montana’s numeric nutrient water quality criteria are based on a large body of scientific work, including EPA’s nutrient guidance, years of sampling and research by DEQ, and scientific studies that show numeric criteria are necessary to protect the designated uses in

³¹ Circular 12-A, Introduction.

Montana's streams.³² Narrative criteria lack specificity whereas numeric nutrient criteria provide "distinct interpretations of acceptable and unacceptable conditions, form the foundation for responsible measurement of environmental quality, and reduce ambiguity for management and enforcement decisions."³³ The state's analysis and EPA's 2000 guidance established a firm scientific basis supporting Montana's decision to derive numeric nutrient criteria at the ecoregion level III scale.³⁴ Indeed, EPA found Montana's numeric nutrient criteria to be "scientifically defensible, well supported by the record, and consistent with Clean Water Act requirements" when approving numeric nutrient criteria for CWA purposes in 2015.³⁵ EPA has not disapproved Montana's numeric nutrient criteria since adoption in 2015 and therefore they are still applicable in Montana as a matter of federal law.

2. Montana's April 2021 Legislative Passage and Governor Gianforte's Signature of Senate Bill 358

The Montana Legislature passed Senate Bill 358 during the 2021 Session.³⁶ Petitioners sent EPA Region 8 a letter dated April 23, 2021 detailing practical and legal issues with Senate Bill 358 and requesting EPA urge Montana Governor Gianforte to veto the bill and if passed, to exercise its CWA Section 303(c) authority and disapprove its sections amending state water quality standards.³⁷ Montana Governor Gianforte signed SB 358 into state law on Friday April 30th, 2021.

SB 358 is a blatant attempt to eliminate a well-documented, proven, and science-based approach to protecting designated uses of most Montana waterways with numeric nutrient criteria. Waterkeeper is unaware of a single instance across the Nation in which EPA has allowed a State to regress and remove a duly-promulgated and approved protective numeric criteria approach in favor of a less-protective, narrative criteria approach. As EPA knows, its own regulations for development of water quality standards requires states to adopt numeric criteria unless such criteria cannot be established.³⁸

³² See Technical Basis NNC 2008, 2013; see also EPA Nutrient Guidance.

³³ EPA Nutrient Guidance at 10.

³⁴ EPA Approval Letter 2015.

³⁵ *Id.* at 2.

³⁶ Senate Bill 358.

³⁷ See Letter, Upper Missouri Waterkeeper to EPA Region 8, "State of Montana Senate Bill 358; Request For Action From the Environmental Protection Agency," April 23, 2021.

³⁸ 40 C.F.R. 131.11(b).

Moreover, EPA has already found that Montana’s numeric water quality standards are necessary to address nutrient pollution in the state, protect designated uses, and are based on sound science. As EPA stated in its original Action Letter Approving Montana’s Numeric Nutrient Criteria in 2015, “[t]he adopted water quality criteria...that are the subject of today’s action are scientifically defensible, well supported by the record and consistent with CWA requirements.”³⁹ Further, EPA determined that Montana’s numeric nutrient criteria “will protect aquatic life and recreational designated uses and are based on a strong scientific rationale that is consistent with the EPA guidance on deriving NNC using scientifically defensible methods,” and therefore approved such numeric criteria in 2015.⁴⁰ Based upon this history and the robust scientific record supporting Montana’s numeric criteria, EPA cannot now find that the Legislature’s elimination of the necessary and protective numeric criteria protecting designated uses of Montana waters is defensible, particularly given the lack of any rationale supporting such revision. Senate Bill 358’s changes to Montana’s water quality standards cannot be approved, and must be disapproved, as a result.

a. Elimination of Numeric Nutrient Criteria Under SB 358

In SB 358, Section 1, ‘Transition for nutrient standards,’ the bill eliminates Montana’s duly-adopted and EPA-approved numeric nutrient criteria and implementing rules and requires the Montana Department of Environmental Quality (hereinafter “DEQ”) to adopt new nutrient pollution control rules framed as a so-called “adaptive management program,” which is little more than a variant, and a poor one, on the narrative standards approach.

b. SB 358 Violates the CWA

SB 358 is wholly divorced from requirements of the CWA or EPA regulations. Congress directed states to establish water quality standards that “consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses.”⁴¹ EPA regulations specify that “[s]uch criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use.”⁴² Because water quality criteria must be set at a level that protects the designated use, economic factors “are

³⁹ See EPA 2015 Action Letter at 2.

⁴⁰ *Id.* at 12.

⁴¹ 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. § 131.2.

⁴² 40 C.F.R. § 131.11(a)(1).

irrelevant” and states should not take them into account.⁴³

Water quality standards under § 1313 are standards for protecting waterway health and designated uses. And, as EPA well-knows, science-based and protective water quality standards are foundational to sound implementation of the CWA affecting, in particular, the second primary method of restoring and protecting our waterways: pollutant discharge elimination permits and the development of Total Maximum Daily Load (“TMDL”) cleanup plans. Congress prohibited all pollutant discharges to waterways absent a permit, and water quality standards are a primary driver of those permit requirements.⁴⁴ A TMDL must be designed to ensure that a waterbody is returned to meeting water quality standards,⁴⁵ thus the importance of a science-based goal post for water quality protection.

Repudiating this framework, SB 358 repeals the Montana water quality standard that actually protects designated uses, proposes an ambiguous future regulatory program that does not meet requirements in the Act and will allow permits to be issued that continue to cause and contribute to water quality impairments, and requires a series of novel implementation methods that will have the effect of frustrating the federal requirements discussed above.

i. Adaptive management is not a water quality standard meeting the requirements of 33 U.S.C. § 1313(c).

Adaptive management plans cannot substitute for duly-promulgated water quality standards. Too frequently (in fact most often) “adaptive management” is simply an open-ended and purposefully ambiguous quasi-regulatory scheme that benefits only the regulated community, externalizes the costs of major polluting sectors on the human environment, and does not comply with mandates of federal water pollution control law. It may have some usefulness in long-term planning guidance, but it has no place in setting water quality standards that must protect designated uses—*i.e.*, limits for known pollutant parameters, designed at meeting needs for the waterbodies in question. Standards must include criteria defining a set level of ambient conditions that are protective of human contact, of fish, of aquatic invertebrates, and of wildlife.⁴⁶ SB 358 eliminates protective, duly-promulgated and EPA-approved numeric nutrient criteria effective immediately, replacing those standards with nothing other than an

⁴³ *Miss. Comm’n on Natural Res. v. Costle*, 625 F.2d 1269, 1277 (5th Cir. 1980).

⁴⁴ 33 U.S.C. §§ 1311(b)(1)(c) and 1342 (a)(1). *See also*, 40 C.F.R. § 122.44(d).

⁴⁵ 33 U.S.C. § 1313(d).

⁴⁶ 33 U.S.C. § 1313(c); 40 C.F.R §§ 131.5(a)(2); 131.11(a).

indefinite and unprotective narrative approach and a future rulemaking process. A future state rulemaking process with undefined and speculative result(s) also does not satisfy the CWA's requirements that water quality standards – today - must protect existing and designated uses.

ii. The bizarre implementation provisions of SB 358 are unscientific and will allow increased pollution and harm to Montana's waterways in violation of the Act.

SB 358 would require a 'balancing act' in setting narrative nutrient water quality standards for Montana. However, a balancing act in setting nutrient pollution controls is wholly inappropriate and unlawful. The CWA is clear: a state must set water quality standards at a level necessary to protect designated uses and then point source pollution must be controlled at levels necessary to satisfy applicable standards and to ensure discharges do not cause or contribute to violations of water quality standards. In stark contrast, SB 358 directs DEQ to prioritize phosphorus reductions over nitrogen reductions contrary to an extensive body of nutrient science for Montana's waters⁴⁷, functionally incentivizing *more* harm to waterways by allowing a primary causal agent of eutrophication, nitrogen, to be de-emphasized in standard setting decisions. Ample evidence proves that most Montana waterways are nitrogen-limited and nitrogen discharges from point sources are significant causes of pollution.⁴⁸

Lastly, SB 358's requirement to use determinations of novel response variables throws out the State's existing, proactive approach to nutrient pollution control that synthesizes a wide body of science to create effective numeric nutrient criteria that protect designated uses in favor of a crisis management regime where attempts to address site-specific pollution problems occur only after the problem is out of hand. This is contrary to the protective directives of the Clean Water Act and makes little scientific or economic sense as it is far more efficient – and cheaper – to prevent nutrient pollution problems than to try and fix them after the occur.

iii. Montana cannot "repeal" protective numeric standards approved by EPA for weaker narrative standards.

SB 358 has an effective date as of passage and signing by the Governor⁴⁹ and requires DEQ to implement a narrative approach to nutrient pollution control until "to-be-determined"

⁴⁷ See Technical Basis NNC 2013 at 2-6: DEQ expert nutrient scientist Dr. Suplee recommends complimentary nitrogen and phosphorus criteria because "[w]ater quality standards based on control of only a single nutrient (i.e., P) could result in unwanted ecological consequences in Montana's rivers and streams."

⁴⁸ *Id.* See also DEQ Circular 12A.

⁴⁹ SB 358, Section 11, "Effective Date."

adaptive management program rules are adopted in spring 2022.⁵⁰ These sections violate the CWA. The bill tries to prevent DEQ, as of the date on which Governor Gianforte signed SB 358, from implementing numeric nutrient criteria that EPA has approved, which are effective as a matter of federal law, and which fulfill the CWA's intent and purposes of providing a scientific, proven basis for protecting designated uses of most Montana waterways.

While Petitioner notes that DEQ must, under federal law, implement the EPA-approved nutrient criteria in Circular 12A, Waterkeeper is also aware from experience that DEQ has proven unwilling to go against State Legislative directives despite federal law requirements, and therefore it is very likely that lawful point source control of nutrient pollution through federally-applicable numeric nutrient criteria has halted upon SB 358's April 30th 2021 passage to state law. To this point, DEQ is presently undertaking a new state-level Nutrient Work Group stakeholder process specifically designed to implement the new adaptive-management approach to nutrient pollution control required under Senate Bill 358, and is expressing in communication to stakeholders the State of Montana's view that Senate Bill 358 has eliminated numeric nutrient criteria for Clean Water Act purposes.⁵¹

SB 358 violates the Clean Water Act and directs the overt violation of the State of Montana's duty to faithfully implement requirements of the CWA which, among other items, mandates that changes to water quality standards – like those contemplated by SB 358 – are only effective upon EPA approval and upon a sound scientific and evidentiary basis, all of which are lacking here.⁵² Given the numeric nutrient rule package experience with DEQ and this unfortunate state of affairs, time is of the essence and EPA must act very quickly to protect Montana waters from unlawful pollution by acting on this petition within 90 days as contemplated under Section 303(c), and certainly before the state adaptive management rulemaking process required under SB 358 gains traction and wastes valuable time and limited resources on an unlawful wild goose chase.

⁵⁰ *Id.* Section 2 “Transition for nutrient standards-department.”

⁵¹ See Email Solicitation from DEQ to Stakeholders Regarding SB 358 – Narrative Nutrient Standards, May 12, 2021.

⁵² 33 U.S.C. § 1313(c)(2).

c. SB 358’s Creation of New Nonsignificance Exemptions Under the State of Montana’s Nondegradation Policy

In addition to eliminating Montana’s numeric nutrient criteria, SB 358 adds new “nonsignificance” exemptions for pollutant discharges under its nondegradation policy.

Specifically, SB 358 adds the following:

75-5-317. Nonsignificant activities. (1) The categories or classes of activities identified in subsection (2) cause changes in water quality that are nonsignificant because of their low potential for harm to human health or the environment and their conformance with the guidance found in 75-5-301(5)©.

(2) The following categories or classes of activities are not subject to the provisions of 75-5-303:

...

(u) discharges of total phosphorus or total nitrogen that do not:

- (i) create conditions that are toxic or harmful to human, animal, plant, and aquatic life;
- (ii) create conditions that produce undesirable aquatic life; or
- (iii) cause measurable changes in aquatic life; and

v) any other activity that is nonsignificant because of its low potential for harm to human health or to the environment and its conformance with the guidance found in 75-5-301(5)(c).

SB 358, Section 7, pp. 16-17. SB 358’s revised nonsignificance criteria operate to allow more, not less, pollution in Montana’s waterways.

First, SB 358’s new nondegradation exemptions invert the burden of proof in permit decisionmaking, creating a legal presumption that nutrient discharges are *per se* nonsignificant absent a showing triggering one of the thresholds under MCA 75-5-317(2)(u)(i-iii) or the “catch-all” exemption embodied in 75-5-317(2)(v). This allocation of discretion and procedural approach is legally backwards; rather, the starting point for nondegradation review must be that all discharges – and given the record of nutrient pollution in Montana –especially nutrient pollutant discharges, are subject to Tier 2 nondegradation review unless a site-specific showing is made to justify an exemption.⁵³ Here, no such showing(s) has been made in making revisions to Montana’s nondegradation policy.

Second, SB 358’s nutrient specific categorical exemptions are not faithful to the CWA’s

⁵³ 40 C.F.R. § 131.12(a)(2). States may exercise their implied *de minimis* authority and exempt a discharge from Tier II analysis only if the discharge’s impact on water quality is insignificant, constrained by the purposes of the CWA, and genuinely *de minimis* as proven by findings. *See also* Water Quality Standards Regulatory Revisions, 80 Fed. Reg. 51,020, 51,034 (Aug. 21, 2015).

goals of maintaining and restoring water quality. SB 358 defines nutrient discharges as *insignificant as a matter of law*, operating without regard to the specifics of a proposed discharge and contrary to the very point of nondegradation: preserving water quality by preventing death by a thousand cuts. EPA has emphasized in its Aug 2015 WQS Rule Revisions that a state agency must look at the particular circumstances of a discharge when applying a *de minimis* exemption to ensure that the discharge is *insignificant-in-fact*: “[u]nless a state...can provide appropriate technical justification, it should not create categorical exemptions from Tier 2 review for specific types of activities based on a general finding that such activities do not result in significant degradation.”⁵⁴ SB 358’s new categorical exemptions functionally subvert the State’s nondegradation policy because they empower Montana to allow significant, often cumulative, degradation without Tier II review. Doing so exceeds the state’s implied authority to create *de minimis* exemptions, lacks a factual basis, and is unlawful.

The same fatal flaws are found in SB 358’s new MCA 75-5-317(2)(v), which operates as a ‘catch-all’ category purportedly exempting any “other activity that is nonsignificant because of its low potential for harm...” This catch-all is incredibly overbroad, potentially authorizing thousands of different activities that could alone, or together synergistically with other discharges to a waterway, harm existing uses and degrade water quality. EPA’s rules do not allow such broad exemptions to Tier II reviews under nondegradation policy as doing so is not only contrary to well-established regulation, but so too would allow the ‘exception to swallow the rule’ through unscientific, categorical exemptions of otherwise polluting activities from meaningful review and permitting. Mandatory public participation requirements are also ignored insofar as this section allows DEQ to exempt potentially significant discharges from any number of activities or types of pollutants, including even bioaccumulative pollutants, without any findings, notice to the public, or even a public hearing.

Critically, SB 358’s revisions to Montana’s nondegradation policy through vast expansions of nonsignificance exemptions fail to satisfy public participation requirements of the CWA and EPA rules. SB 358’s legislative-based approach to revising Montana’s nondegradation policy ignores Section 303(c)’s public participation requirements by mandating an effective date upon signature by the Governor, not approval by EPA or through a requisite

⁵⁴ Water Quality Standards Regulatory Revisions, 80 Fed. Reg. 51,020, 51,035 (Aug. 21, 2015) (codified at 40 C.F.R. pt. 131).

public process.⁵⁵ There are also no written findings accompanying SB 358 supporting these revisions to Montana's nondegradation policy; without written findings neither EPA nor the public have any way of knowing what the legislature considered in creating these exemptions, whether the changes comply with directives to protect existing or designated uses, and in any case could not meaningfully participate in decisionmaking.

EPA regulation requires states to adopt an antidegradation policy and implementation procedures consistent with 40 CFR § 131.12(a)(1-4). Here, no findings were created, EPA was not given an opportunity to review and take action on the nondegradation policy changes before effective date, and the public was precluded from substantively participating in the development and any subsequent revisions to Montana's nondegradation policy. In both substance and process SB 358's revisions to Montana's nondegradation policy violate the CWA's intent, purpose, and EPA rules.

As described in the EPA WQS Handbook (1994), EPA may disapprove and federally promulgate all or part of an implementation process for antidegradation if, in the judgment of the Administrator, the State's process (or certain provisions thereof) can be implemented in such a way as to circumvent the intent and purpose of the antidegradation policy.⁵⁶ EPA must exercise its authority to do so here by disapproving SB 358's unlawful revisions to Montana's nondegradation policy.

IV. Relief Requested by This Petition

For the reasons detailed above, Petitioners hereby petition EPA to, under Section 303(c)(2) and 303(c)(4)(B) to:

(1) make a determination that the State of Montana's statutory elimination of numeric nutrient criteria and creation of a new narrative, adaptive management nutrient criteria under Senate Bill 358, effective immediate April 30, 2021 on signature by Governor Gianforte, fail to provide full protection for designated uses and violate the CWA;

(2) make a determination that Senate Bill 358's revisions of nonsignificance exemptions under Montana's nondegradation policy violates EPA's antidegradation policy rules and mandatory public participation rules;

⁵⁵ Section 303(c); 40 C.F.R. 131.12(a)-(b).

⁵⁶ *See also* 33 U.S.C. § 1313(c)(4)(B).

(3) make a determination that Senate Bill 358's provisions violate the CWA by providing an immediate effective date upon signature by the Governor without and before providing for mandatory EPA review and action on those sections;

(4) disapprove those offending sections of Senate Bill 358 in Montana code for CWA purposes; and

(5) promulgate federal regulations applicable to Montana setting forth revised numeric nutrient water quality standards as necessary to meet requirements of the CWA.

Conclusion

The results intended by and process for adopting SB 358 under Montana law are contrary to the explicit direction of the Clean Water Act and EPA rules. SB 358 was signed into state law on April 30, 2021 with an unambiguous immediate effective date, resulting in an urgent and stark conflict between federal law and EPA regulations, and state law revisions to water quality standards that do not protect designated uses of Montana's waters, are not based on science, and were not lawfully approved. SB 358's passage into Montana law flies in the face of the scientifically rich record that supports the State's numeric nutrient criteria in Circular 12-A, criteria that EPA has approved for CWA purposes. Montana's Legislature passed and Governor Gianforte signed SB 358 without providing a reasoned rationale for the decision to depart from previous findings, without providing evidentiary support for other substantive revisions to Montana's water quality standards, and failed to provide for mandatory public participation opportunities or EPA review and approval.

For these reasons Waterkeeper petitions EPA to, within 90 days of receipt of this petition, make the determinations requested in Section IV *supra*, to disapprove SB 358's changes to Montana's water quality standards, and to promulgate federal regulations applicable to Montana setting forth revised numeric nutrient water quality standards as necessary to satisfy requirements of the CWA.

Respectfully submitted-



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Dated this day, the 24th of May, 2021.
Attachments: List of Citations

**List of Citations to Petition for Rulemaking Under the Clean Water Act Regarding
Water Quality Standards for Nutrients in the State of Montana**

DEQ. Circular 12-A, Numeric Nutrient Criteria in Montana. July 2014 Final Edition.

DEQ. Email Solicitation to Stakeholders Regarding SB 358 Rulemaking – Narrative Nutrient Standards, May 12, 2021. (Attached hereto).

DEQ. Notice of Public Hearing on Proposed Amendment (Water Quality). MAR Notice No. 17-356 281 (Feb. 3, 2014).

DEQ. ‘Nutrient Standards Rules and Statements of Reasonable Necessity,’ 2014.

EPA. “Ambient Water Quality Criteria Recommendations: Information Supporting the Development of State and Tribal Nutrient Criteria”, 2000. Washington, D.C., U.S. Environmental Protection Agency.

EPA. “Nutrient Criteria Development; Notice of Nutrient Criteria Technical Guidance Manual: Rivers and Streams”, 65 Fed. Reg. 46167 (July 27, 2000).

EPA Region 8, “EPA Action on Montana’s Numeric Nutrient Criteria and Variance Rules,” February 26, 2015.

Letter, Upper Missouri Waterkeeper to EPA Region 8, “State of Montana Senate Bill 358; Request For Action From the Environmental Protection Agency,” April 23, 2021. (Attached hereto).

Senate Bill 358, Montana 2021 Legislature, April 30th 2021, Final Version. (Attached hereto).

Suplee, M.W ., and V. Watson , 2013. Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana’s Wadeable Streams and Rivers—Update 1. Montana DEQ.

Suplee, Watson, 2008. “Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana’s Wadeable Streams and Rivers.” Montana DEQ.