Response to Comments on

National Pollutant Discharge Elimination System (NPDES) Permit

For Discharges from the

Idaho Transportation Department District 1

Municipal Separate Storm Sewer System (MS4)

NPDES Permit No. IDS028223

October 2020

U.S. Environmental Protection Agency, Region 10

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Introduction

On May 15, 2020, the U.S. Environmental Protection Agency Region 10 (EPA) proposed to reissue the National Pollutant Discharge Elimination System (NPDES) permit for discharges from the municipal separate storm sewer system (MS4) owned and/or operated by the Idaho Transportation Department District 1 (ITD1) in Kootenai County, Idaho. The permit document #IDS028223 will be referred to in this document as "the Permit." The public comment period ended on June 30, 2020.

This document provides EPA responses to comments received on the proposed Permit. Comments are broadly organized by topic in the order the issue appears in the Permit. In general, EPA summarizes each comment, and where appropriate for clarity EPA groups similar comments into one statement. In some cases, EPA includes the comment verbatim. Where indicated, EPA has made changes to the final Permit. The Administrative Record contains copies of each comment letter, as well as information considered by EPA during the permit development process.

State Certification under Clean Water Act §401

On July 9, 2020, the Idaho Department of Environmental Quality (IDEQ) provided EPA with a final Clean Water Act (CWA) Section 401 certification that includes conditions that must be included in the Permit pursuant to CWA Section 401(d), 33 U.S.C. § 1341(d). A copy of the final certification is provided in Appendix A of this document. Final certification conditions are included in the Permit. See also Table 1.

Endangered Species Act Consultation

On July 13, 2020, EPA submitted its *Biological Evaluation & Essential Fish Habitat Assessment for the City of Coeur d'Alene MS4 NPDES Permit No. IDS028215 & Idaho Transportation Department District 1 MS4 NPDES Permit No. IDS028223* to the U.S. Fish and Wildlife Service (FWS). The BE concludes that issuance of these Permits may affect but are not likely to adversely affect bull trout (Salvelinus confluentus) or its designated critical habitat in Coeur d'Alene Lake. There are no threatened or endangered species listed by National Oceanic and Atmospheric Administration – National Marine Fisheries Service (NOAA Fisheries) within the Coeur d'Alene Urbanized Area, therefore Endangered Species Act (ESA) consultation with NOAA is not required.

In a letter dated October 15, 2020, FWS concurred with EPA's determination, and recommended that the Permittees conduct, at a minimum, annual testing of the stormwater discharge into Coeur d'Alene Lake. The final Permit is consistent with this recommendation, insofar as it requires quantitative stormwater monitoring/assessment activities to be conducted at a frequency of at least four times during a calendar year, and further directs that at least one sample each calendar year must be collected in the September - October period. See Permit Parts 4.2 and 6.2.5.4 of the Final Permit. EPA has made no change to the Permit in response to the FWS recommendation.

Edits to the Final Permit

EPA has made minor editorial changes throughout the Permit text for clarity, consistency, and/or grammatical correction. Major editorial changes have been made to the following Permit Parts in response to comments and IDEQ certification, as identified in Table 1 below:

Table 1. Edits to Final Permit

Edits Based on Public Comments Received:	
Part 4.2, Table 4.2 Part 4.3	See Response #11.
Edits Based on Recent EPA Actions:	
Part 9 Definition of *Green Infrastructure*	Revised consistent with the new definition in the Water Infrastructure Improvement Act. See Response #16.
Part 9 Definition of *Waters of the United States (U.S.)*	Revised to align with EPA's final Navigable Waters Protection Rule defining "waters of the U.S.," effective June 22, 2020. See Response #17.
Edits Based on IDEQ Input:	
Parts 2.5.7, 3.2.7.1, and 4.3; Appendix A.2	Conditions of IDEQ's *Final §401 Water Quality Certification for the Idaho Transportation Department District 1 Municipal Separate Storm Sewer System; NPDES Permit #IDS028223* dated July 9, 2020. See Appendix A of this document.

Response to Comments

ITD1 submitted the following comments to EPA in a letter dated June 30, 2020.

General Topics

1. Financial resources for the state [transportation department] are very constrained. It is critical funds are used efficiently and with clear benefit to the resource. EPA's proposed draft NPDES MS4 Permit has schedule and fiscal impacts to our business operations. We appreciate the opportunity to comment.

Response: Comment noted. No change has been made to the Permit.

2. Regarding alternatives for local control, ITD1 supports EPA's provision, [Permit Part 2.6 and] throughout the permit document, that the Permittee may request an alternative control measure for a particular permit requirement.

Response: Comment noted. Provided that the procedures outlined in Permit Part 2.6 are followed, ITD1 may request one or more alternative control measures (ACM) to implement the Stormwater Management Program (SWMP) required by the Permit. No change has been made to the Permit.

3. Regarding prioritization, ITD1 supports EPA's effort throughout the document to allow the Permittee to develop and define our own prioritization system for inspections, enforcement and maintenance, based on local knowledge and conditions. We believe that this will enable us to use our time and resources most efficiently and effectively toward [Best Management Practice [BMP] implementation and improving water quality.

Response: Comment noted. No change has been made to the Permit.

4. Regarding limited legal authority, ITD1 appreciates EPA's efforts to acknowledge the limited legal authority of ITD1, and providing for language that enables alternative compliance pathways such as developing an Escalating Response Plan that is "appropriate to its jurisdiction" (Permit Part 3.3.6), or using "available regulatory mechanisms" (Permit Part 2.5.4).

Response: Comment noted. No change has been made to the Permit.

Limitations and Conditions (Permit Part 2)

5. Regarding Permit Part 2.1 (Compliance with Water Quality Standards), ITD1 supports the first paragraph of this section, which states "*If the Permittee comply with all the terms and conditions of this Permit, it is presumed that the Permittee is not causing or contributing to an excursion above the applicable Idaho Water Quality Standards."* Regarding the second paragraph, ITD1 agrees that its responsibility is not to determine individual causation of excursions, but to participate in monitoring and implementing BMPs designed to protect the receiving water quality.

Response: Comment noted. No change has been made to the Permit.

6. Regarding Permit Part 2.6 (Alternative Control Measures), ITD1 supports EPA Region 10's proposal to use the "Two-Step Approach" to address the Phase II Remand Rule requirements. ITD1 appreciates the opportunity to submit Alternative Control Measure Requests two years after the permit effective date.

Response: Comment noted. No change has been made to the Permit. EPA notes that terminology regarding the "Two Step Approach" is specific to NPDES general permits for MS4 discharges; see 40 CFR §122.28(d). For the individual NPDES Permit for the ITD1 MS4 discharges, federal regulations at 40 CFR §§ 122.62 and 122.63 provide authority to the NPDES Permitting Authority to consider modifying individual NPDES permits based on new information submitted after the permit issuance. As written, the Permit affords ITD1 with the flexibility to submit new information in support of ACM requests, Monitoring/Assessment plans, and/or Pollutant Reduction Activities. If the NPDES Permitting Authority determines that it will grant such a request, it may do so through a permit modification. See 40 CFR §§122.62 and 122.63.

Public Education and Outreach on Stormwater Impacts (Permit Part 3.1)

7. Regarding Permit Part 3.1.3 (Stormwater Education Activities), the Permit requires the Permittee to "*distribute and/or offer at least eight (8) educational messages or activities over the permit term to the selected audience(s).*" ITD1 suggests a reduction of eight messages or activities to four (4).

Response: The commenter provides no reason or rationale to support such a revision, therefore EPA has not revised the text as suggested. No change has been made to the Permit.

8. Regarding Permit Part 3.1.5 (Assessment), the Permit requires the Permittee to "*assess, or participate in one or more efforts to assess, the understanding of the relevant messages and adoption of appropriate behaviors by their target audience(s*)." This requirement puts an extra burden on a District [transportation department] office such as ours to develop a social marketing program which includes surveys, focus groups and other tools that are used to measure audiences' understanding.

Response: EPA has not revised the text as suggested. No change has been made to the Permit. EPA states in its rationale for this provision at FS page 19 that " *…A vital, yet challenging, component of successful education programs is the assessment of whether the Permittees' efforts are achieving the goals of increasing public awareness and behavior change to improve*

water quality…..EPA recognizes and encourages the long-term nature of such assessment activities, and notes that there may be opportunities for Permittees to work together within the State, or with other organizations, on specific MS4 topics if they choose to do so."

Such assessment does not necessarily need to be part of a broader social marketing campaign. The intent of this provision is to ensure that the Permittee builds-in a means of measuring the success or failure regarding their selected education activities. Such measurement/assessment may be scaled to the activity and need not be as extensive as envisioned by the commenter. EPA encourages ITD1 to consult with IDEQ and their partners in other areas of Idaho to find common goals and activities.

Illicit Discharge Detection and Elimination (Permit Part 3.2)

9. Regarding Permit Part 3.2.5.1 (Outfall Identification and Screening Protocols), this section requires that the Permittee "*must use reconnaissance activities, information recorded through the complaint reporting program, and (if available) existing watershed assessment or Total Maximum Daily Load (TMDL) analyses, to prioritize and target outfalls for screening throughout their Permit Area defined in Part 1.1.The Permittee must develop a written plan that outlines how chemical and microbiological field screening analysis will be conducted on the dry weather flows identified during the reconnaissance and screening efforts, including field screening methodologies and associated trigger thresholds used by the Permittee for determining follow-up action(s)*. "

ITD1 requests removing the requirement of mandatory chemical and microbiological screening analysis, and instead use visual screening analysis for outfall monitoring of any dry weather flows if visual pollutants are present (odor, color, turbidity, floatables, paint, suds, etc) and if visual indicators warrant additional screening methodologies (chemical or microbiological), they can be pursued.

Response: EPA has not revised the text as suggested. No change has been made to the Permit. Visual observation of dry weather flows will not sufficiently characterize possible pollutant concentrations in the identified flows. While visual observation of dry weather flows is an important initial step in the identification process, the potential presence of nutrients and metals in stormwater cannot be identified through visual observation. As such, the Permit requires the Permittee to actively seek to identify potential pollutants in and sources of dry weather flows. The Permit requires the Permittee to adequately plan for having at least minimal capacity to field screen or otherwise characterize whether the dry weather flows contain solid or dissolved constituents of concern within the Coeur d'Alene Lake watershed.

10. Regarding Permit Part 3.2.5.3 (Monitoring of Illicit Discharges), this section states: *Where dry weather flows from the MS4 are identified by the Permittees, the Permittees must identify the source of such flows, and take appropriate action to eliminate such flows to the extent allowable pursuant to authority granted the Permittee under Idaho law. At a minimum, the Permittee must conduct sampling of dry weather flows via grab samples of the discharge for in-field analysis and identification, and may elect to use the following as indicator constituents: pH; total chlorine; detergents as surfactants; total phenols; E. coli; total phosphorus; turbidity; temperature; and suspended solids concentrations. Results of any field sampling must be compared to established trigger threshold levels and/or existing state water quality standards to direct appropriate follow-up actions by the Permittee in accordance with existing protocols and the ordinance/regulatory mechanism established by the Permittee*.

ITD1 requests removal of mandatory sampling of dry weather flows via grab samples, and instead use visual screening analysis for illicit discharge monitoring if visual pollutants are present (odor, color, turbidity, floatables, paint, suds, etc.) and if visual indicators warrant additional screening methodologies (chemical or microbiological), they can be pursued.

Response: See Response #9. EPA has not revised the text as suggested. No change has been made to the Permit.

Requirements for Discharges into Impaired Waters (Permit Part 4)

11. Regarding Permit Parts 4.2 and 4.3 (Monitoring and Assessment Activities and Pollutant Reduction Activities, respectively), Table 4.2 in this section identifies the proposed MS4 permit locations, including an ITD1 MS4 discharge to Coeur d'Alene Lake. ITD1 no longer has responsibility for Coeur d'Alene Lake Drive and therefore does not discharge stormwater from an MS4 to Coeur d'Alene Lake. ITD1 recently transferred jurisdiction of Coeur d'Alene Lake Drive within the Coeur d'Alene Urbanized Area to the City of Coeur d'Alene (City), and therefore no longer controls any operational right of way along that roadway. ITD1 has established a representative MS4 monitoring location near the I-90 Sherman Avenue Interchange which we have monitored for water quality since the issuance of the original permit. The water flowing past this location is a combination of stormwater runoff from I-90 between approximately MP 12 to 14.9 and contribution points within the City of Coeur d'Alene, including the French Gulch watershed. These combined flows enter Fernan Creek approximately 1,300 feet below the ITD1 MS4 monitoring location. ITD1 asks that the monitoring location representing an MS4 discharge to Coeur d'Alene Lake be removed from the Permit. In addition, ITD1 requests the removal of the requirement for implementing pollutant loading [reduction] from the MS4 to Coeur d'Alene Lake in Permit Part 4.3.

Response: EPA was unaware of the change in operational control over the Coeur d'Alene Lake Drive segment during development of the draft permit. After the close of the comment period, ITD1 submitted to EPA the *Road Closure and Maintenance Agreement* (Agreement) between ITD and the City for the approximately 1.2 miles segment of Coeur d'Alene Lake Drive in existing City limits. The Agreement was signed by both parties on January 2, 2018; however, EPA was unaware of the Agreement until it was submitted to EPA on August 19, 2020. Because the Agreement formally transfers operational control of this roadway to the City, EPA has revised Table 4.2 of the final Permit as requested to delete the monitoring location identified as *ITD1 MS4 Discharges to Coeur d'Alene Lake.*

EPA declines to delete the requirement in Permit Part 4.3 regarding pollutant reduction activities as suggested by the commenter. Instead, EPA has revised Part 4.3 consistent with the relevant condition in IDEQ's CWA Section 401 Certification dated July 9, 2020, and as indicated below. See Appendix A. Fernan Creek is a tributary to Coeur d'Alene Lake, and any monitoring and/or pollutant reduction activities conducted by ITD1 designed to assess and reduce pollutants in MS4 discharges to Fernan Creek will also serve to assess and reduce pollutant loading to Coeur d'Alene Lake. Therefore, EPA has revised Part 4.3 as follows in response to both the condition in IDEQ's Final §401 Certification and this comment:

4.3 Pollutant Reduction ~~Activities~~ **Activity**

~~The Permittee must define and implement at least one (1) activity designed to reduce pollutant loadings from the MS4 into Fernan Creek for the impairment pollutants identified in Table 4.3 below.~~

The Permittee must define and implement at least one (1) **pollutant reduction** activity designed to reduce ~~pollutant~~ **lead, zinc, cadmium, and total phosphorus** loadings from the MS4 into Coeur d'Alene Lake ~~for the impairment pollutants identified in Table 4.3 below.~~

Compliance Responsibilities-Standard NPDES Permit Conditions (Permit Part 7)

12. The text in Permit Part 7 includes language copied from wastewater permits that is not suitable or relevant to stormwater. The Permittee urges EPA simplify Part 7 so that only the language directly applicable to stormwater permits be included in the final permit. FS Section 2.8 states that there are provisions in Part 7 that do not apply to MS4s. If the provisions do not apply to the discharge permit, they should be removed. There is precedence for not including these provisions in MS4 permits. These sections are not included in Montana Phase 2 General permit, precisely because they do not apply to stormwater permits. EPA's (2008) TMDLs to Stormwater Permits Handbook clearly states the differences between stormwater and wastewater and the need for unique and distinct permit language.

Response: NPDES regulations at 40 CFR §§ 122.41 through 122.43 require the provisions reflected in Permit Parts 7 and 8 to be included in each NPDES permit. Specifically, 40 CFR §122.41 states:

The following conditions apply to all NPDES permits. … All conditions applicable to NPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations …must be given in the permit.

Further, EPA is required to include such provisions in all MS4 permits. See 40 CFR §122.33 (c)(2):

(c) As appropriate, the permit will include: … (2) … Other applicable NPDES permit requirements, standards and conditions established in the individual or general permit, developed consistent with the provisions of §§ 122.41 through 122.49.

In prior Phase II MS4 permits previously issued in Idaho, EPA erred by not including all mandatory provisions as required by 40 CFR §§122.41 through 122.43. As explained in the FS, "*…if a particular provision in Permit Parts 7 or 8 does not apply to the Permittees MS4 discharges or facilities, the Permittees do not need to comply with that provision*." See FS at page 33.

13. Regarding Permit Parts 7.6 (Toxic Pollutants), 7.7 (Planned Changes), and 7.11 (Upset Conditions) – Based on the rationale above, ITD1 suggests the permit language can be simplified to address stormwater responsibilities, by removing parts 7.6, 7.7, and 7.11 from the Permit.

Response: See Response #12. EPA has not revised the text as suggested; no change has been made to the Permit. EPA clarifies that Part 7.6 (Toxic Pollutants) does not apply to MS4s as originally envisioned by the regulation, because EPA has not promulgated any effluent guidelines applicable to MS4 discharges under CWA Section 307(a). However, EPA notes that as a condition of its certification under CWA Section 401, IDEQ requires the Permittee to immediately report to IDEQ and EPA all spills of hazardous material, deleterious material, and petroleum products which may impact ground and surface waters of the state. See Permit Part 3.2.7.1.

Regarding Part 7.7 (Planned Changes), in 2009 EPA previously clarified for other Idaho MS4 permits in the Treasure Valley that this provision does not require approval from EPA or IDEQ for planned changes to the MS4. Annexations of existing MS4s by one operator from another operator are not considered "physical changes or additions to the permitted facility" as

envisioned by this regulation. If the operator has any questions as to whether something needs to be reported as a planned change, the operator should contact EPA for clarification. See: EPA R*esponse to Comment on the Ada County Highway District MS4 Permit No. IDS-028185*, August 2009, page 30 at https://www.epa.gov/sites/production/files/2017-10/documents/r10-npdes-ada-county-ms4-ids028185-rtc-2009.pdf.

14. Regarding Permit Part 7.9 (Twenty-Four Hour Notice of Noncompliance Reporting), ITD1 proposes removing the last two bullets in section 7.9 in order for this section to be applicable to stormwater noncompliance reporting.

Response: See Response #12. No change has been made to the Permit.

15. Regarding Permit Part 7.10 (Bypass of Treatment Facilities), ITD1 proposes alternative language for Part 7.10 that could be interpreted in light of a stormwater treatment system could be replaced with text that applies to an MS4 and clarifies the actions required by the Permittee. The following text, adapted from the Eastern Washington Phase 2 general MS4 permit, is directly applicable to stormwater and would be more suitable for this permit. ITD1 recommends EPA use the following as a replacement for the language in the proposed Permit, as 7.10.3):

> *The Permittees are prohibited from intentionally bypassing stormwater from all or any portion of a stormwater treatment BMP as long as the design capacity of the BMP is not exceeded unless the following conditions are met.*
>
> *Bypass is:*
>
> *(1) unavoidable to prevent the loss of, personal injury, or severe property damage or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act (CWA); and there are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated stormwater, or maintenance during normal dry periods."*

Response: As EPA has responded to similar comments on recently issued Idaho MS4 permits,[1] EPA appreciates the interpretation and agrees that this provision can be interpreted in light of the overall maintenance and operation of the MS4. However, EPA cannot revise the text of a standard permit condition as suggested. See Response #12. No change has been made to the Permit. The first sentence of Part 7.10.1 addresses most if not all situations likely to be encountered by a Permittee during the appropriate operation and maintenance of a MS4: *"The Permittees may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation."*

In this case, the Permit's "effluent limitations" are the narrative terms and conditions requiring the Permittee's implementation of the stormwater management control measures through the SWMP. See preamble to EPA's NPDES Municipal Separate Storm Sewer System General Permit Remand Rule, December 9, 2016, at 89 FR 89337. EPA anticipates it unlikely there will be situations where stormwater must be forced to bypass a treatment BMP that are unrelated to essential maintenance or severe weather-related emergency.

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[1] See, for example: EPA's *Response to Comments on National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from the City of Idaho Falls and Idaho Transportation Department District #6 Municipal Separate Storm Sewer Systems (MS4s) NPDES Permit No. IDS028070* (February 2020).

Definitions (Permit Part 9)

16. ***Subject: Definitions (Part 9) Green Infrastructure:*** The Water Infrastructure Improvement Act (WIIA) was signed into law on January 14, 2019. WIIA amends Sections 309. 402, and 502 of the CWA, and includes a definition of green infrastructure. See: CWA Section 502(27), 33 U.S.C. 1362(27), at: *https://www.epa.gov/sites/production/files/2019-10/documents/waterinfrastructureimprovementact.pdf*. EPA has revised the definition of green infrastructure in the Permit to read as follows:

    Green infrastructure is defined in Section 502 of the CWA and means the range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspirate stormwater and reduce flows to sewer systems or to surface waters.

17. ***Subject: Definitions (Part 9) Waters of the United States:*** EPA and the Department of the Army published the final Navigable Waters Protection Rule (NPWR) defining "waters of the United States" in the Federal Register on April 21, 2020; the NWPR became effective on June 22, 2020. EPA has revised the definition of waters of the United States in the Permit to read as follows:

    Waters of the United States or *waters of the U.S.* means those waters defined in 40 CFR §120.2.

Appendix A: Idaho Department of Environmental Quality's Final Certification under Clean Water Act §401

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

2110 Ironwood Parkway • Coeur d'Alene, ID 83814 • (208) 769-1422
www.deq.idaho.gov

Brad Little, Governor
John Tippets, Director

July 9, 2020

Misha Vakoc, Municipal Stormwater Permit Coordinator
Permitting, Drinking Water and Infrastructure Branch - Water Division
U.S. EPA Region 10
1200 6th Avenue, Suite 155
Mail Code WD-19-H16
Seattle, WA 98101-3188

Subject: FINAL §401 Water Quality Certification for the Idaho Transportation Department District 1 Municipal Separate Storm Sewer System (MS4); NPDES Permit # IDS028223

Dear Ms. Vakoc:

On May 13, 2020, the Coeur d'Alene Regional Office of the Idaho Department of Environmental Quality (DEQ) received the proposed final draft of the above-referenced permit for the Idaho Transportation Department District 1 Municipal Separate Storm Sewer System (MS4). Section 401 of the Clean Water Act requires that states issue certifications for activities which are authorized by a federal permit and which may result in the discharge to surface waters. In Idaho, the DEQ is responsible for reviewing these activities and evaluating whether the activity will comply with Idaho's Water Quality Standards, including any applicable water quality management plans (e.g., total maximum daily loads). A federal discharge permit cannot be issued until DEQ has provided certification or waived certification either expressly, or by taking no action. This letter is to inform you that DEQ is issuing the attached §401 Water Quality Certification subject to the terms and conditions contained therein.

Please direct any questions to Chantilly Higbee at 208.666.4605 or Chantilly.Higbee@deq.idaho.gov.

Sincerely,

Dan McCracken, Regional Administrator
Coeur d'Alene Regional Office

Idaho Department of Environmental Quality
Final §401 Water Quality Certification

July 9, 2020

NPDES Permit Number(s): Idaho Transportation Department - District #1 Municipal Separate Storm Sewer System (MS4); NPDES Permit # IDS028223

Receiving Water Body: Fernan Creek, French Gulch, and Coeur d'Alene Lake

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review National Pollutant Discharge Elimination System (NPDES) permits and issue water quality certification decisions.

Based upon its review of the above-referenced permit and associated fact sheet, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the discharge will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The Idaho Transportation Department - District #1 discharges the following pollutants of concern: sediment, nutrients (phosphorus and nitrogen), heat, chlorides, metals, petroleum hydrocarbons, microbial pollution (*Escherichia coli*), and organic chemicals (pesticides and industrial chemicals). Terms and conditions of the permit and this certification require permittees to reduce pollutant loading to the maximum extent practicable.

Receiving Water Body Level of Protection

The Idaho Transportation Department - District #1 discharges to the Fernan Creek, the French Gulch, and Coeur d'Alene Lake within the Coeur d'Alene Lake Subbasin assessment units (AU), ID17010303PN001L_0L (Coeur d'Alene Lake), ID17010303PN001_02a (French Gulch), and ID17010303PN032_03 (Fernan Creek – Fernan Lake to mouth). These AUs have the following designated beneficial uses: cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

According to DEQ's 2016 Integrated Report, the Coeur d'Alene Lake AU is not fully supporting its aquatic life use due to exceedances of cadmium, lead, and zinc; the contact recreation use is unassessed. However, *E. coli* data collected in 2008 and 2014 indicate that the recreation use is fully supported. Therefore, DEQ will provide Tier I protection (IDAPA 58.01.02.051.01) for the aquatic life use and Tier II protection (IDAPA 58.01.02.051.02), in addition to Tier I, for the contact recreation beneficial use. The French Gulch AU is currently unassessed. DEQ will provide Tier II protection, in addition to Tier I, for the aquatic life and contact recreation uses of the French Gulch. Fernan Creek is not supporting its aquatic life use due to temperature impairment. The contact recreation beneficial use in Fernan Creek is fully supported. Therefore, DEQ will provide Tier I protection for the aquatic life use and Tier II protection, in addition to Tier I, for the contact recreation use of Fernan Creek.

Protection and Maintenance of Existing Uses (Tier I Protection)

A Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing and designated uses and the level of water quality necessary to protect existing and designated uses shall be maintained and protected. In order to protect and maintain existing and designated beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The numeric and narrative criteria in the WQS are set at levels that ensure

protection of existing and designated beneficial uses. The terms and conditions contained in the Idaho Transportation Department - District #1 permit and this certification require the permittee to reduce the discharge of pollutants to the maximum extent practicable and ensure compliance with the narrative and numeric criteria in the WQS.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. A central purpose of TMDLs is to establish wasteload allocations for point source discharges, which are set at levels designed to help restore the water body to a condition that supports existing and designated beneficial uses. Discharge permits must contain limitations that are consistent with wasteload allocations in the approved TMDL.

The cold water aquatic life use in Coeur d'Alene Lake is not fully supported due to excess lead, zinc, and cadmium (2016 Integrated Report). A TMDL has not yet been developed for Coeur d'Alene Lake; however, a lake management plan has been developed and is being implemented to limit basin-wide nutrient inputs that impair lake water quality conditions, which in turn influence the solubility of mining-related metals contamination contained in lake sediments.

The cold water aquatic life use in Fernan Creek is not fully supported due to excess heat according to the 2016 Integrated Report. The *Coeur d'Alene Tributaries Temperature Total Maximum Daily Loads: Addendum to the Coeur d'Alene Lake Subbasin Assessment and TMDLs* (DEQ 2012) identified that the cause of impairment is excess temperature loading, due to a lack of shade. The TMDL sets target loads for shade cover with the goal of returning the watershed to natural background vegetation conditions. The TMDL indicates that unique hydrologic conditions exist at the lower portion of Fernan Creek relevant to this MS4, which make it unlikely that the MS4, which is shared with the City of Coeur d'Alene MS4, has any meaningful heat contribution to Fernan Creek during the months when temperatures are most likely to exceed Idaho's WQS. For example, a backwater condition exists at the confluence of Coeur d'Alene Lake and Fernan Creek below the outfall, which influences temperature independent of upstream shade and solar loading. This reach is also directly below the Fernan Lake outlet, making temperature heavily influenced by the upstream lake. In addition, a dam, which controls the elevation of Fernan Lake, exists directly above the reach. Consequently, this reach is significantly dewatered during the late summer months, which makes meeting shade targets on this reach of Fernan Creek unrealistic. These flow alteration and backwater conditions preclude the ability to fully mitigate temperature impairment caused by this condition. Additionally, surface water and stormwater discharge data collected by DEQ and the City of Coeur d'Alene (at the shared outfall), respectively, indicate that stormwater discharges from the MS4s contribute temperatures that are on average, consistently cooler than the ambient temperature of Fernan Creek between the months of April through August, which are the months of concern for temperature exceedances of Idaho WQS. Prior to the development of a TMDL for Coeur d'Alene Lake, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04). Although the antidegradation policy and implementation provisions do not require consistency with the Coeur d' Alene Lake Management Plan, DEQ notes that that the comprehensive stormwater management, monitoring, and pollution reduction activities required by the permit are consistent with the recommended actions in the Plan. The permit contains clear, specific and measureable provisions for the continued implementation of specific controls, management practices, control techniques, and system design and engineering methods to achieve the requirements of the permit. The

provisions in the new MS4 permit are at least as stringent as those established in the previous individual MS4 permit for the Idaho Transportation Department - District #1 permit.

Specific terms and conditions of the permit that ensure these impaired waters meet a Tier I level of protection include:

- a prohibition on snow disposal directly into surface waters;
- specific prohibitions for non-stormwater discharges;
- a requirement to develop/revise a stormwater management plan that includes five control measures:
  a) public education and outreach,
  b) illicit discharge detection and elimination,
  c) construction site stormwater runoff control,
  d) post-construction stormwater management for new development and redevelopment,
  e) pollution prevention/good housekeeping for MS4 operations;
- quantitative monitoring/assessment of pollutants removed by BMPs in conjunction with their required maintenance in all impaired AUs;
- requirements for the Idaho Transportation Department - District #1 to implement pollutant reduction activities; and
- the stipulation that if either EPA or DEQ determine that an MS4 causes or contributes to an excursion above the water quality standards, the permittee must take a series of actions to remedy the situation.

In summary, the terms and conditions contained in the Idaho Transportation Department-District #1 MS4 permit provide reasonable assurance that the permittee will reduce discharge of pollutants to the maximum extent practicable. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in Fernan Creek, the French Gulch, and Coeur d'Alene Lake in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

High-Quality Waters (Tier II Protection)

Fernan Creek, the French Gulch, and Coeur d'Alene Lake are considered high quality for primary contact recreation. The French Gulch is also considered high quality for aquatic life. As such, the water quality relevant to primary contact recreation use of Fernan Creek, the French Gulch, and Coeur d'Alene Lake and the aquatic life use of the French Gulch must be maintained and protected, unless a lowering of water quality is deemed necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the permit issuance will affect water quality for each pollutant that is relevant to primary contact recreation uses of Fernan Creek, the French Gulch, and Coeur d'Alene Lake (IDAPA 58.01.02.052.05). Pollutants

relevant to recreational uses include the following: microbial pollution, nutrients, metals, chlorides, petroleum hydrocarbons, and organic chemicals.

For a reissued permit or license, the effect on water quality is determined by looking at the difference in water quality that would result from the activity or discharge as authorized in the current permit and the water quality that would result from the activity or discharge as proposed in the reissued permit or license (IDAPA 58.01.02.052.06.a). NPDES permits for regulated small MS4s must include terms and conditions to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements under the Clean Water Act. "Maximum extent practicable" is the statutory standard that describes the level of pollutant reduction that MS4 operators must achieve. To achieve these goals, the current and proposed MS4 permits implement minimum control measures and rely on iterative practices to identify and reduce discharge of pollutants. Permittees' implementation of these practices must be documented in annual reports to EPA and DEQ review (Permit Part 6.4.2), and is subject to on-site inspections (Permit Part 8.7). EPA also determined that additional pollutant reduction activities were required for the Idaho Transportation Department - District #1.

The permit reissues the Idaho Transportation Department - District #1 MS4 permit. Due to the nature of MS4 permits, implementing their requirements results in a continual discovery of pollutant sources, use and refinement of BMPs, feedback from BMP implementation and maintenance, additional knowledge through training opportunities, and investigating and resolving complaints. This level of scrutiny and effort combined with requirements to address pollution sources typically leads to improved water quality the longer the permit is in effect. It also generally results in minimal to no adverse change in water quality significant to recreational and aquatic life uses.

This permit contains monitoring and assessment expectations for the Idaho Transportation Department - District #1 MS4 (Permit Part 4.2). A multitude of case studies illustrate that the use of best management practices (which include stormwater management program elements, permit prohibitions, and other permit conditions) have a measurable positive effect on water quality or a biological metric.[1] In addition, the Idaho Transportation Department-District #1 is required to conduct at least two pollutant reduction activities (Permit Part 4.3) targeting pollutants causing impairments in Fernan Creek and Coeur d'Alene Lake. EPA oversight through review of annual reports and periodic inspections should ensure correct BMP design, construction, and maintenance. At a minimum, water quality conditions should be maintained from current conditions. Therefore, DEQ has reasonable assurance that insignificant or no degradation will result from the discharge of pollutants from the Idaho Transportation Department - District #1 MS4 permit.

DEQ concludes that this permit complies with the Tier II provisions of Idaho's WQS (IDAPA 58.01.02.051.02 and 58.01.02.052.06).

[1] Urban Stormwater Management in the United States, National Research Council, 2008.

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

Best Management Practices

Best management practices (BMPs) must be designed, implemented, and maintained by the permittee to fully protect and maintain the beneficial uses of waters of the United States and to improve water quality at least to the maximum extent practicable.

When selecting BMPs, the permittee must consider and, if practicable, utilize practices identified in the Idaho Department of Environmental Quality *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties* (http://www.deq.idaho.gov/water-quality/wastewater/stormwater/).

Pollutant Reduction Activities in Coeur d'Alene Lake

In carrying out the requirements of Part 4.3 of the permit, Idaho Transportation Department-District #1 must define and implement at least one (1) pollutant reduction activity designed to reduce lead, zinc, cadmium, and total phosphorus loadings from the MS4 into Coeur d'Alene Lake.

Reporting of Discharges Containing Hazardous Materials or Deleterious Material

All spills of hazardous material, deleterious material or petroleum products which may impact waters (ground and surface) of the state shall be immediately reported. Call 911 if immediate assistance is required to control, contain or clean up the spill. If no assistance is needed in cleaning up the spill, contact the Coeur d'Alene Regional Office at 208-769-1422 during normal working hours or Idaho State Communications Center after normal working hours. If the spilled volume is above federal reportable quantities, contact the National Response Center.

For immediate assistance: Call 911

National Response Center: (800) 424-8802

Idaho State Communications Center: (800) 632-8000

Other Conditions

This certification is conditioned upon the requirement that any material modification of the permit or the permitted activities—including without limitation, any modifications of the permit to reflect new or modified TMDLs, wasteload allocations, site-specific criteria, variances, or other new information—shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401.

Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the "Rules of Administrative Procedure before the Board of Environmental Quality" (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to Chantilly Higbee, Coeur d'Alene Regional Office at 208-769-1422 or via email at Chantilly.Higbee@deq.idaho.gov.

Dan McCracken
Regional Administrator
Coeur d'Alene Regional Office