



# Fact Sheet

**Pursuant to the Provisions of the Clean Water Act (CWA),  
The U.S. Environmental Protection Agency (EPA) Proposes to:**

- **Issue a National Pollutant Discharge Elimination System (NPDES) General Permit for Regulated Municipal Separate Storm Sewer Systems (MS4s) to Discharge Pollutants in the State of Idaho; and**
- **Designate Certain Entities as Regulated MS4s Needing NPDES Permit Coverage under the General Permit**

Public Comment Start Date:

Public Comment Expiration Date:

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EPA proposes to issue a NPDES General Permit for storm water discharges into waters of the United States in Idaho from regulated municipal separate storm sewer systems (MS4s).

To ensure protection of water quality and human health, the permit establishes conditions, prohibitions, and management practices for discharges of storm water from regulated MS4s. The General Permit requires the regulated MS4 operator to implement a comprehensive storm water management program (SWMP) to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP).

EPA further proposes to designate the MS4s owned and/or operated by the City of Moscow, Idaho, and the University of Idaho in Moscow, as regulated MS4s needing NPDES permit coverage under the above referenced General Permit.

Permit requirements, and the proposed designation of MS4s as needing NPDES permit coverage, are based on Section 402(p) of the Clean Water Act (CWA), 33 U.S.C. § 1342(p), and EPA regulations for permitting municipal storm water discharges (40 CFR §§ 122.26, 122.30-35, and 123.35; 55 Federal Register 47990 [Nov. 16, 1990] and 64 FR 68722 [Dec. 8, 1999], respectively).

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures;
- descriptions of the regulated MS4 discharges to be covered under the Idaho MS4 General Permit (MS4GP);
- explanation of the conditions, prohibitions and management practices for discharges of storm water from the MS4s;

- technical references supporting these conditions in the MS4GP; and
- explanation of the decisions to designate the City of Moscow and the University of Idaho as regulated MS4s.

### **State Certification**

*EPA requested that the Idaho Department of Environmental Quality (IDEQ) certify the draft MS4GP under provisions of Section 401 of the CWA, 33 USC § 1341. The State of Idaho provided a draft certification for the MS4GP (see Appendix 6 of this document). Questions and/or comments on the IDEQ's draft § 401 certification should be addressed to Nicole Deinarowicz, at (208) 373-0576, [Nicole.deinarowicz@deq.idaho.gov](mailto:Nicole.deinarowicz@deq.idaho.gov), or submitted by mail to the following address:*

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### **Public Comment**

Persons wishing to comment on the draft MS4GP, and/or EPA's decision to designate discharges from the storm sewer systems from certain entities as regulated MS4 discharges, must do so in writing by the ***expiration date of the public notice***.

All comments must be in writing, and must include the commenter's name, address, and telephone number, as well as the permit name (MS4GP), and/or the MS4 decision topic. Comments must include a concise statement of the basis for the issue, and any relevant facts the commenter believes EPA should consider in making its final decisions regarding the conditions and limitations in the final MS4GP, and/or regarding the entities being considered for designation as regulated MS4s.

Persons wishing to request that a public hearing be held may do so, in writing, no later than ***(insert date ~midpoint of the public comment period)***. A public hearing is a formal meeting whereby EPA officials hear the public's views and concerns about an EPA action or proposal. All requests for a public hearing must state the nature of the issues to be raised, reference the NPDES permit name and permit number, and include the requester's name, address, and telephone number.

EPA must receive all public comments, and/or requests for a hearing, no later than the expiration date of the public comment period. All comments should be addressed to the attention of the EPA Regional Director, in the Office of Water and Watersheds, at the following address:

**U.S. EPA, Region 10  
Director, Office of Water and Watersheds  
Attn: Idaho MS4 General Permit  
1200 6th Avenue, Suite 900, OWW-191  
Seattle, WA 98101**

Prior to the expiration date of the public comment period, public comments may be submitted via E-mail to: [vakoc.misha@epa.gov](mailto:vakoc.misha@epa.gov)

After the comment period, EPA will review and address all submitted comments. EPA's Regional Director for the Office of Water and Watersheds will then make final decisions regarding permit issuance and the other decision actions described in this notice. If EPA receives no comments, the tentative conditions in the draft MS4GP, and other decisions, will become final.

Pursuant to Section 509(b)(1) of the CWA, 33 USC 1369(b)(1), any interested person may appeal the General Permit in the Ninth Circuit Court of Appeals within 120 days following notice of EPA's final decision for the permit.

Pursuant to 40 CFR 124.19, any interested person may appeal the EPA decision to designate the City of Moscow and University of Idaho as regulated MS4s to the Environmental Appeals Board within 30 days following notice of EPA's final decision on these actions.

**Documents are Available for Review**

The draft MS4GP, and other information related to these decisions are available on the EPA Region 10 website at:

<http://yosemite.epa.gov/r10/water.nsf/stormwater/ms4-id-wa>

The draft MS4GP permit and related documents can be reviewed by contacting the EPA Region 10 Operations Office in Boise between 8:30 a.m. and 4:00 p.m. (Mountain Time), Monday through Friday:

United States Environmental Protection Agency Region 10  
Idaho Operations Office  
950 W. Bannock Street, Suite 900  
Boise, ID 83702  
(208) 378-5746

The draft MS4GP and related supporting materials are also available for inspection and copying at the EPA Region 10 office in Seattle:

U.S. Environmental Protection Agency, Region 10  
Office of Water and Watersheds  
1200 Sixth Avenue, OWW-191  
Seattle, Washington 98101  
(206) 553-0523 or 1-800-424-4372 and request x-0523

For technical questions regarding the permit or fact sheet, contact Misha Vakoc at the phone number or e-mail listed above. Services can be made available to persons with disabilities by contacting Audrey Washington at (206) 553-0523.

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## Acronyms

BE	Biological Evaluation
BOD	Biochemical oxygen demand
BMP	Best Management Practices
°C	Degrees Celsius
CFR	Code of Federal Regulations
cfu	Colony Forming Unit
CGP	Construction General Permit
COD	Chemical Oxygen Demand
CREAT	Climate Resilience Evaluation and Analysis Tool
CWA	Clean Water Act
CZARA	Coastal Zone Act Reauthorization Amendments
DMR	Discharge Monitoring Report
EA	Environmental Assessment
EFH	Essential Fish Habitat
EFNA	Edson Fichter Nature Area
EIS	Environmental Impact Statement
ELG	Effluent Limitation Guideline
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FR	Federal Register
Ft <sup>2</sup>	Square feet
HUC	Hydrologic Unit Code
ID	Idaho
IDDE	Illicit Discharge Detection and Elimination
IDEQ	Idaho Department of Environmental Quality

In	Inches
ITD	Idaho Transportation Department
LA	Load Allocation
LBR	Lower Boise River
lbs/day	Pounds per Day
mg/L	Milligrams per liter
ml	Milliliters
µg/L	Micrograms per liter
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
MS4GP	Municipal Separate Storm Sewer System General Permit
NEPA	National Environmental Protection Act
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NOT	Notice of Termination
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
OMB	Office of Management and Budget
OWW	Office of Water and Watersheds
O&M	Operations and maintenance
Pg/L	Picograms per Liter
PCBs	Polychlorinated Biphenyls
POTW	Publicly owned treatment works
PSNS	Pretreatment Standards for New Sources
QAPP	Quality assurance project plan
SCM	Storm Water Control Measures
SF	South Fork
SHPO	State Historic Preservation Office
SPCC	Spill Prevention and Control and Countermeasure
SS	Suspended Solids
SWMP	Storm water Management Program

SWPPP	Stormwater Pollution Prevention Plan
TP	Total Phosphorus
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TSS	Total suspended solids
UA	Urbanized Area
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
WA	Washington State
WLA	Waste load allocation
WQS	Water Quality Standards

## **I. Introduction**

This fact sheet explains the rationale for the proposed National Pollutant Discharge Elimination System (NPDES) permit conditions in the Idaho municipal separate storm sewer system (MS4) General Permit (MS4GP).

### **A. Background**

Storm water is the surface runoff that results from rain and snow melt. Urban development alters the landscape's natural infiltration, and human activity generates pollutants that can accumulate on paved or impervious surfaces. Uncontrolled pollutants and flow associated with storm water discharges from urban areas can negatively affect water quality. Contaminants enter storm water from a variety of sources in the urban landscape. In general, these pollutants degrade water quality in receiving waters associated with urbanizing watersheds. Urban storm water is often a contributing factor where there is a water quality standard (WQS) impairment in a particular water body. Storm water or urban runoff typically contains a mixture of pollutants, including the following major constituents:

- Sediment;
- Nutrients (nitrogen and phosphorus);
- Chlorides;
- Trace metals;
- Petroleum hydrocarbons;
- Microbial pollution; and,
- Organic chemicals (pesticides, herbicides, and industrial).<sup>1</sup>

The federal Clean Water Act (CWA) and the NPDES storm water regulations establish permit requirements for discharges from certain publicly-owned MS4s to control pollutants in the MS4 discharge to the maximum extent practicable (MEP). Definitions of relevant terms such as “municipal separate storm sewer,” “large MS4,” “medium MS4,” and “small MS4” are found at 40 CFR § 122.26(b). In general, a MS4 includes any publicly owned conveyance or system of conveyances used for collecting and conveying storm water that discharges to waters of the United States. MS4s include roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and/or storm drains.

In 1990, EPA promulgated regulations to implement CWA Section 402(p), 33 U.S.C. § 1342(p). These regulations, known as the “Phase I” regulations, required that large and medium MS4s obtain NPDES permits for their storm water discharges. See 40 CFR 122.26. The 1990 regulation identified the Phase I MS4s nationally, and for Idaho included the MS4s located within the boundaries of Garden City and Boise, Idaho.

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<sup>1</sup> See: Shaver, Horner, et al. 2007.

In 1999, EPA designated additional small MS4s as needing NPDES permits under the “Phase II” storm water regulations. Small MS4s are any that are partially or wholly located within an Urbanized Area (UA) as defined by the latest decennial Census.<sup>2</sup> Phase II small MS4s in Idaho are located within the following Census-defined UAs: Coeur d’Alene; Lewiston; Nampa; Boise; Pocatello; and Idaho Falls.<sup>3</sup>

All MS4 permits must require the implementation and enforcement of storm water management programs (SWMPs) designed to reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.<sup>4</sup>

Currently, most existing regulated MS4 discharges in Idaho are covered by individual NPDES permits. Once issued, EPA intends to authorize all regulated MS4 discharges under the MS4GP. EPA also proposes to provide permit coverage to any MS4 discharge in Idaho designated by EPA as needing permit coverage under the MS4GP, pursuant to the procedure described in Part IV.B of this fact sheet.

For the purposes of the MS4GP, EPA collectively refers to all medium- and small MS4s in Idaho as “regulated MS4s.”

#### **B. Use of a General Permit vs. Individual NPDES Permits**

Federal regulations at 40 CFR 122.28 and 122.33(b) allow EPA to issue a general permit to regulate numerous facilities (such as MS4s) under one NPDES permit when those facilities:

- Are located within the same geographic area;
- Involve the same or substantially similar types of operations;
- Discharge the same types of wastes;
- Require the same effluent limits or operating conditions;
- Require the same or similar monitoring requirements; and
- In EPA’s opinion, the discharges are more appropriately controlled under a general permit rather than under separate individual permits.

Using general permits conserves resources and reduces the paperwork burden associated with obtaining discharge authorization for the regulated community. All regulated MS4s subject to the MS4GP are required to implement the same narrative effluent limits (expressed as storm water management control measures, or SCM) and monitoring requirements. Moreover, these regulated

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<sup>2</sup> See: 33 U.S.C. § 1342(p)(3); 40 CFR §122.26; EPA 1990; and EPA 1999.

<sup>3</sup> See: 40 CFR §§122.26(b)(7), 122.26(b)(16) and 122.32(a). Reference maps of the UAs associated with Coeur d’Alene, Lewiston (ID)-Clarkston (WA), Nampa, Boise, Pocatello, and Idaho Falls UAs are available at [http://www2.census.gov/geo/maps/dc10map/UAUC\\_RefMap/ua/](http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/)

See also: Appendix 2 of this document.

<sup>4</sup> See: CWA 402(p)(3); 40 CFR §§122.26(d) and 122.34; and EPA 2016.

MS4s are substantially similar public drainage facilities located within the state of Idaho. Therefore, EPA has determined that a general permit is the appropriate mechanism to address the identified regulated MS4s in Idaho subject to the NPDES requirements and the CWA.

### **C. Permit History**

As previously noted, EPA issued individual NPDES permits to address storm water discharges from Phase I and Phase II MS4s in Idaho:<sup>5</sup>

- EPA issued the individual NPDES permit for discharges from the Phase I MS4s located within the corporate boundaries of Boise and Garden City for its first term in November 2000; EPA reissued this permit in December 2012, effective in January 2013 and expires in January 2018.
- Since 2006, EPA issued individual NPDES permits to all of the Phase II MS4s located within the Coeur d'Alene, Nampa, Boise, Pocatello, and Idaho Falls UAs; as of October 2014, all of these Phase II MS4 permits have expired.<sup>6</sup> Each of the permitted Phase II MS4 operators submitted permit renewal application(s) prior to their respective permit's expiration date, and their permit coverage was therefore administratively extended, pursuant to 40 CFR 122.6.

EPA intends to authorize all eligible regulated MS4s that have submitted complete and appropriate NPDES permit renewal applications or Notices of Intent to discharge under the MS4GP.

The MS4GP combines the narrative SWMP requirements of the prior Phase I and Phase II MS4 permits, collectively, into a single permit document. Compared to the current, existing MS4 individual permits in Idaho, the MS4GP includes additional prescriptive detail for each control measure that EPA determines to be appropriate, practicable, and necessary storm water management actions to reduce the discharge of pollutants from regulated MS4s across the state of Idaho.

EPA considered a variety of information to develop the draft MS4GP, including:

- The conditions required in the prior Phase I and Phase II MS4 individual permits in Idaho;
- Newly approved total maximum daily loads (TMDLs) and additional impaired waters listings for Idaho receiving waters;
- Annual Reports submitted by individual permittees during the previous MS4 permit terms; and

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<sup>5</sup> All previously proposed and final NPDES permits for Phase I and Phase II MS4s in Idaho are available online at <http://yosemite.epa.gov/r10/water.nsf/NPDES+Permits/Current+ID1319>

<sup>6</sup> In 2008, EPA also proposed, but did not finalize, permits for small MS4 discharges within the Lewiston Urbanized Area, namely for the City of Lewiston and ITD District #2.

- Updated Urbanized Area boundaries based on the Year 2010 Census; and other technical developments in the field of storm water management.

EPA proposes to provide coverage under the MS4GP to Existing MS4 Permittees, and New Regulated MS4s.

- “Existing MS4 Permittees” are those entities that have previously had individual NPDES permit coverage.
- “New regulated MS4s” include regulated entities that previously submitted MS4 permit applications to EPA, but have not yet received final permit coverage (such as MS4s within the Lewiston UA); MS4s newly designated automatically as a result of expanded boundaries from the Year 2010 Urbanized Areas; and MS4s that EPA is now proposing to designate as needing permit coverage. In addition, in the future, any MS4s that meet the definition of a regulated small MS4 can obtain coverage under the MS4GP, upon EPA’s receipt of a complete and accurate Notice of Intent for permit coverage pursuant to procedures described later in this document.

#### **D. Types of Regulated MS4s in Idaho**

In Idaho, several different types of public entities own and/or operate regulated MS4s. These include, but are not limited to: cities and counties; local highway districts, and the Idaho Transportation Department (ITD); colleges and universities; drainage districts which convey urban storm water runoff; and/or any other public entity whose MS4 discharges contribute substantially to the pollutant loadings of a physically interconnected regulated MS4 which EPA designates as needing a NPDES permit.<sup>7</sup> See Appendix 1 of this document, and/or the MS4GP Appendix A, for the list of MS4s EPA intends to cover under the MS4GP.

Entities listed below in Table 1 previously communicated to EPA that they do not own or operate a MS4 within the State of Idaho, and therefore do not meet the definition of a large-, medium- or small MS4 as defined by the NPDES regulations. Relevant information provided by entities listed below is available for public review and comment as part of the Administrative Record for this permit action.

**Table 1: Municipal Entities That Do Not Own or Operate a MS4 in Idaho**

<b>Urbanized Area</b>	<b>Municipal Entity</b>
Coeur d’Alene UA	City of Heutter; City of Hayden; City of Fernan Lake Village; City of Dalton Gardens; City of Hayden Lake; Kootenai County
Boise UA	City of Meridian, City of Eagle
Idaho Falls UA	City of Iona, Bonneville County, Idaho National Laboratory

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<sup>7</sup> See 40 CFR §§122.32 and 123.35(b)(4).

## **E. Geographic Area of Coverage**

EPA proposes to expand the minimum geographic area for all regulated MS4 cities by defining the geographic area of coverage under the MS4GP as the *entire incorporated area of the city*. For the Phase I MS4s in Idaho, the geographic area under the MS4GP will remain essentially the same as defined in the existing Phase I MS4 permit. The Phase I MS4 Permit in Boise/Garden City defines the minimum MS4 Permit Area on a jurisdiction-wide basis and based upon the 1990 Census, consistent with 40 CFR §122.26(a)(3), as: “...all areas within the corporate boundary...”.

However, in the Phase II MS4 permits for other areas of Idaho, EPA defined the Permit Area for regulated entities consistent with the Phase II regulations at 40 CFR §122.32(a)(1), as only the “*portion of the MS4 that is located within a UA as determined by the latest Decennial Census.*”

The regulations at 40 CFR §§122.26(a)(1)(v) and 122.26(a)(9) allow EPA to expand the minimum geographic permit area for the Phase II MS4 cities.

EPA is expanding the minimum geographic area to include areas of a regulated Phase II MS4 city that may lie outside of the UA boundary to create a consistent geographic permit area definition for all cities across Idaho, and to ensure the broadest application of enforceable storm water practices across the urban landscape. EPA’s review of city ordinances for the regulated MS4s shows that most MS4 cities do impose their SWMP-related ordinances on a citywide basis. To reduce the discharge of pollutants generated within highly populated urban landscapes into impaired waters, EPA believes it is necessary to ensure that all Cities use their appropriate ordinances and services within the entire incorporated city area.

## **II. Receiving Waters**

### **A. Water Quality Standards and Receiving Waters**

EPA proposes to authorize storm water discharges from the regulated MS4s owned or operated by entities listed in Appendix A into the waters of the United States listed therein. Table 2 summarizes all receiving waters and their applicable water quality standards.

### **B. Overview**

Section 301(b)(1)(C) of the CWA requires the development of limitations in permits necessary to meet water quality standards. A State’s water quality standards are composed of use classifications, numeric and/or narrative water quality criteria and an anti-degradation policy.

The use classification system designates the beneficial uses that each water body is expected to achieve, such as drinking water supply, contact recreation, and aquatic life. The numeric and narrative water quality criteria are the criteria deemed necessary by the State to support the beneficial use classification of each water body. The anti-degradation policy represents a three-tiered approach to maintain and protect various levels of water quality and uses.

### **C. Designated Beneficial Uses**

Table 2 summarizes the applicable Idaho Water Quality Standards and beneficial uses for water

bodies receiving MS4 discharges to be authorized under the MS4GP.. In addition to the beneficial uses listed, all waters of the State of Idaho are protected for industrial and agricultural water supply, wildlife habitats, and aesthetics.<sup>8</sup>

Federal regulations at 40 CFR §122.4(d) require that NPDES permits include conditions necessary to ensure compliance with the water quality requirements of all affected States. Regulated MS4s in the Coeur d’Alene and Lewiston, ID, UAs, and within the boundaries of the City of Moscow, ID, discharge to receiving waters upstream from the Idaho/Washington state border; therefore, applicable Washington water quality standards are also included in the Table 2 designated use summary.

<b>Table 2: Designated Beneficial Uses for Waters Receiving Regulated MS4 Discharges</b>			
<b>Urbanized Area/City</b>	<b>Receiving Water</b>	<b>Citation from IDAPA or WAC</b>	<b>Designated Beneficial Uses</b>
<b>PANHANDLE BASIN</b>			
Coeur d’Alene	Fernan Lake	58.01.02.110.10	Cold water aquatic life, salmonid spawning, primary contact recreation, domestic water supply
Coeur d’Alene	Coeur d’Alene Lake	58.01.02.110.10	Cold water aquatic life, salmonid spawning, primary contact recreation, domestic water supply and special resource water
Coeur d’Alene	Spokane River	58.01.02.110.12	Cold water aquatic life, salmonid spawning, primary contact recreation and domestic water supply.
Coeur d’Alene	Spokane River	WAC 173-201A-130	<i>Spokane River (Washington portion, between River Mile 58.0 and RM 96.0):</i> “Class A” waterbody, site-specific temperature criterion of 20°C. (See); designated uses: domestic, industrial and agricultural water supply; stock watering; migration, rearing, spawning and harvesting of salmonids and other fish; wildlife habitat; recreation including primary contact recreation, sport fishing, boating, and aesthetic enjoyment; and commerce and navigation.  <i>Lake Spokane (reservoir formed by the Long Lake Dam on the Spokane River):</i> Class A and Lake Class water body; designated uses: domestic, industrial and agricultural water supply; stock watering; migration, rearing, spawning and harvesting of salmonids and other fish; wildlife habitat; recreation including primary contact recreation, sport fishing, boating, and aesthetic enjoyment; and commerce and navigation
Coeur d’Alene	Hayden Lake	58.01.02.110.12	Cold water aquatic life, salmonid spawning, primary contact recreation and domestic water supply.
<b>UPPER SNAKE BASIN</b>			
Idaho Falls	Snake River	58.01.02.150.03	Cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply
Pocatello	Portneuf River	58.01.02.150.10	Cold water aquatic life, salmonid spawning, and , secondary contact recreation.

<sup>8</sup> See IDAPA 58.01.02.100.03.b and c, 100.04 and 100.05

<b>Table 2: Designated Beneficial Uses for Waters Receiving Regulated MS4 Discharges</b>			
<b>Urbanized Area/City</b>	<b>Receiving Water</b>	<b>Citation from IDAPA or WAC</b>	<b>Designated Beneficial Uses</b>
Pocatello	Pocatello Creek	58.01.02.150.10	Undesignated; presumed to be cold water aquatic life and primary contact recreation
<b>SOUTHWEST BASIN</b>			
Boise/ Nampa	Boise River and its tributaries ( <i>Five Mile, Ten Mile, Fifteen Mile Creeks, etc.</i> )	58.01.02.140.12	<i>Boise River, from the Diversion Dam to River Mile 50:</i> Cold water aquatic life, salmonid spawning, domestic water supply, and primary contact recreation and special resource water, <i>Boise River, from River Mile 50 to Indian Creek:</i> Cold water aquatic life, salmonid spawning and primary contact recreation <i>Boise River, Indian Creek to mouth:</i> Cold water aquatic life, salmonid spawning, and primary contact recreation
Nampa	Indian Creek	58.01.02.140.12	Cold water aquatic life, and secondary contact recreation
Nampa	Mason Creek	58.01.02.140.12	Secondary contact recreation
Nampa	Willow Creek	58.01.02.140.12	Undesignated; presumed to be cold water aquatic life and primary contact recreation
<b>CLEARWATER BASIN</b>			
Moscow	Paradise Creek	58.01.02.120.01	Coldwater aquatic life salmonid spawning and secondary contact recreation
		WAC 173-201A-600	Salmonid spawning, rearing, & migration; primary contact recreation; domestic, industrial, & agricultural water supply; stock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values
Moscow	South Fork Palouse River	58.01.02.120.01	Coldwater aquatic life salmonid spawning secondary contact recreation
		WAC 173-201A-600	Salmonid spawning, rearing, & migration; primary contact recreation; domestic, industrial, & agricultural water supply; stock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values
Lewiston	Lower Granite Dam Pool	58.01.02.120.08	Cold water aquatic life, primary contact recreation, domestic water supply
Lewiston	Lindsay Creek	58.01.02.120.08	Cold water aquatic life and secondary contact recreation
Lewiston	Tammany Creek	58.01.02.130.02	Cold water aquatic life and secondary contact recreation
Lewiston	Snake River (Asotin River to Lower Granite Dam Pool)	58.01.02.130.02	Cold water aquatic life, primary contact recreation, domestic water supply

#### **D. Anti-degradation**

IDEQ completed an anti-degradation review, which is included in the draft 401 certification for the MS4GP; See Appendix 6 of this document for the State’s draft 401 water quality certification.

EPA reviewed this anti-degradation review, and finds that it is consistent with the State's 401 certification requirements and the State's anti-degradation implementation procedures. Comments on the State's draft 401 certification, including the anti-degradation review, must be submitted to IDEQ as set forth above (see *State Certification*).

#### **E. Water Quality Limited Waters and Total Maximum Daily Loads**

Any water body that does not and/or is not expected to meet the applicable water quality standards is described as "impaired" or as a "water quality-limited segment." Section 303(d) of the CWA, 33 U.S.C. § 1313(d), requires States to identify impaired water bodies within the State and develop TMDL management plans for those impaired water bodies. TMDLs define both waste load allocations (WLAs) and load allocations (LAs) that specify how much of a particular pollutant can be discharged from both regulated and unregulated sources, respectively, such that the water body will again meet State water quality standards.

IDEQ's 2012 *Integrated Section 303(d)/Section 305(b) Report* (2012 Integrated Report) contains the list of impaired water bodies within Idaho as required by CWA Section 303(d).<sup>9</sup>

Table 3 (below) identifies all receiving waters for the regulated MS4 discharges to be covered by the MS4GP, indicates those waters that IDEQ considers impaired, and the status of any applicable TMDL(s) for those water bodies.

NPDES permit conditions must be consistent with the assumptions and requirements of available WLAs.<sup>10</sup> EPA guidance documents discuss how NPDES permit conditions for regulated storm water discharges should be defined, consistent with the assumptions and requirements of available water quality information and TMDLs. In general, EPA's guidance recommends that the NPDES permitting authority use best management practices (BMPs) to implement applicable WLAs and load reduction targets in a NPDES permit. When using BMPs as narrative permit limitations to implement a WLA or load reduction target, the permit must provide a monitoring mechanism to assure compliance. The NPDES permitting authority may require the use of expanded or better-tailored BMPs in successive permit terms when monitoring demonstrates they are necessary to implement the WLA and protect water quality.<sup>11</sup>

EPA is proposing specific additional measures in the MS4GP Part 4 that affected MS4 operators must implement to comply with the requirements of the applicable TMDL(s). These detailed requirements include monitoring and assessment activities, based on EPA's evaluation of the impairments and associated TMDL assessment and/or implementation documents for receiving waters listed in Table 3. EPA also considered current SWMP implementation efforts by existing

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<sup>9</sup> The IDEQ's 2010 Integrated Report is available online at: <https://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx>

<sup>10</sup> See: 40 C.F.R. § 122.44(d)(1)(vii)(B).

<sup>11</sup> See: EPA 1996; EPA 2002; EPA 2014a; and EPA 2014b.

MS4 Permittees, and consultation with IDEQ, when developing these required provisions. Section V of this document contains general discussion of these additional requirements. Detailed discussion of these additional requirements, by receiving waterbody, is provided in Appendix 3 and Appendix 4 of this document. All of the applicable Idaho TMDL documents listed in Table 3 can be found through IDEQ's website at <http://deq.idaho.gov/water-quality/surface-water/tmdls/table-of-sbas-tmdls/>

In the event that EPA approves other TMDLs for MS4 receiving waters prior to the issuance date of this permit, and WLAs are assigned to one or more of the MS4s covered by the MS4GP, EPA may incorporate those WLAs into the final permit. In the event that EPA approves other TMDLs for MS4 receiving waters prior to the expiration date of this permit, and WLAs for one or more of the MS4s covered by the MS4GP are included, EPA may elect to reopen and modify the permit. MS4GP Part 7.1 addresses such a permit modification, consistent with the NPDES regulations at 40 CFR §§122.62, 122.64 and 124.5.

**Table 3: Impairment and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges**

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
<b>PANHANDLE BASIN</b>				
Coeur d'Alene	Coeur d'Alene Lake	ID17010303PN001L_0L <i>Coeur d'Alene Lake</i>	Cadmium; Lead; Zinc	No TMDL completed.
Coeur d'Alene	Fernan Lake	ID17010303PN033_0L <i>Fernan Lake</i>	Total Phosphorus	<i>Coeur d'Alene Lake and River Subbasin Assessment and Total Maximum Daily Loads: 2013 Fernan Lake Addendum, October 2013. Approved November 2013.</i>
Coeur d'Alene	Spokane River	ID17010305PN004_04 <i>Spokane R.-Coeur d'Alene Lake to Post Falls Dam</i>  ID17010305PN003_04 <i>Spokane R.- Post Falls Dam to ID/WA border</i>	Cadmium; Lead; Total Phosphorus; Zinc	No TMDL completed.
	Spokane River	<i>Spokane R.- downstream of the ID/WA border</i>	Polychlorinated Biphenyls (PCBs)	No TMDL completed.
Coeur d'Alene	Hayden Lake	ID17010305PN005L_0L <i>Hayden Lake</i>	Total Phosphorus	<i>Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie (17010305), November 2000. Approved January 2001.</i>
<b>UPPER SNAKE BASIN</b>				
Idaho Falls	Snake River	ID17040201SK001_04 <i>Snake River Dry Bed Creek to River Mile 791</i>  ID17040201SK001_05 <i>South Fork Willow Creek</i>  ID17040201SK003_05 <i>North Fork Willow Creek</i>  ID17040201SK001_05 <i>Crow Creek</i>	Not Assessed.	Not applicable.
Pocatello	Portneuf River	ID17040208SK001_05 <i>Portneuf R.-Marsh Creek to American Falls Reservoir</i>	Total Nitrogen Oil and Grease Total Phosphorus <i>E. coli</i> Sedimentation/Siltation	<i>Portneuf River TMDL, April 2001. Portneuf River TMDL Revision and Addendum February 2010. Approved July 2010.</i>
	Pocatello Creek	ID17040208SK025_02 <i>South Fork Pocatello Creek - source to mouth</i>	Sedimentation/ Siltation	

**Table 3: Impairment and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges**

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
<b>SOUTHWEST BASIN</b>				
Boise/ Nampa	Boise River and tributaries	ID17050114SW005_06 <i>Boise R.-Veterans Memorial Pkwy to Star Bridge</i>  ID17050114SW005_06a- <i>Boise R –Star to Middleton</i>  ID17050114SW005_06b <i>Boise R.-Middleton to Indian Creek</i>  ID17050114SW001_06 <i>Boise R. - Indian Creek to mouth</i>	Fecal Coliform  Sedimentation/Siltation	<i>Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads, September 1999, Approved January, 2000.</i>  <i>Lower Boise River Sediment and Bacteria TMDLs Addendum, April 2008. Approved June, 2008.</i>  <i>Lower Boise River TMDL 2015 Sediment and Bacteria Addendum. June 2015. Approved September 2015.</i>
Boise/ Nampa	Boise River and tributaries	ID17050114SW011a_06 <i>Boise R.-Diversion Dam to Veterans Memorial Pkwy</i> ID17050114SW005_06 <i>Boise R. Veterans Memorial Parkway to Star Bridge</i> ID17050114SW005_06a <i>Boise R.-Star to Middleton</i> ID17050114SW005_06b <i>Boise R.-Middleton to Indian Creek</i> ID17050114SW001_06 – <i>Boise R.-Indian Creek to the mouth</i>	Temperature	No TMDL completed.
Boise/ Nampa	Boise River and tributaries	ID17050114SW001_06 – <i>Boise R.-Indian Creek to the mouth</i> ID17050114SW005_06b <i>Boise R-Middleton to Indian Creek</i>	Total Phosphorus	<i>Lower Boise River TMDL 2015 Total Phosphorus Addendum. August 2015. Approved December 2015.</i>
Nampa	Indian Creek	ID17050114SW002_04 <i>Indian Creek - 4th order below Sugar Ave. in Nampa</i>	Temperature; Cause Unknown (Nutrients Suspected); <i>E. coli</i> ; Sedimentation/ Siltation	<i>Lower Boise River TMDL 2015 Sediment and Bacteria Addendum. June 2015. Approved September 2015.</i>  No TMDL(s) completed for temperature or other causes.
Nampa	Indian Creek	ID17050114SW003a_04 <i>Indian Creek - New York Canal to Sugar Avenue</i>	Temperature; Cause Unknown; (Nutrients suspected)	No TMDL(s) completed for temperature or other causes
Nampa	Mill Slough	ID17050114SW005_02 <i>Mill Slough and Phyllis Slough</i>	Temperature	No TMDL(s) completed.
Nampa	Mason Creek	ID17050114SW006_02 <i>Mason Creek - entire watershed</i>	Sedimentation/ Siltation; Temperature; Chlorpyrifos; Malathion; <i>E. coli</i> ; Cause unknown (Nutrients suspected)	<i>Lower Boise River TMDL 2015 Sediment and Bacteria Addendum. June 2015. Approved September 2015.</i>  No TMDL(s) completed for temperature, pesticides, or other causes.

**Table 3: Impairment and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges**

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Nampa	Fifteen Mile Creek	ID17050114SW007_04- <i>Fifteenmile Creek - 4th order (Fivemile Creek to mouth)</i>	Sedimentation/ Siltation; Chlorpyrifos; <i>E. coli</i>	<i>Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.</i> June 2015. Approved September 2015.  No TMDL(s) completed for temperature, pesticides, or other causes.
Nampa	Ten Mile Creek	ID17050114SW008_03- <i>Tenmile Creek - 3rd order below Blacks Creek Reservoir</i>	Sedimentation/Siltation Chlorpyrifos; <i>E. coli</i> Cause Unknown (Nutrients suspected)	<i>Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.</i> June 2015. Approved September 2015.  No TMDL(s) completed for pesticides, or other causes...
Nampa	Five Mile Creek	ID17050114SW010_03- <i>Fivemile Creek - 3rd order tributaries</i>	Sedimentation/Siltation Chlorpyrifos <i>E.coli</i> Cause Unknown (Nutrients suspected)	<i>Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.</i> June 2015. Approved September 2015.  No TMDL(s) completed for pesticides, or other causes.
		ID17050114SW010_02- <i>Fivemile Creek, Eightmile and Ninemile Creeks - 1st &amp; 2nd order</i>	<i>E.coli</i>	<i>Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.</i> June 2015. Approved September 2015.
Nampa	Willow Creek	ID17050114SW015_03 <i>Willow Creek - 3rd order</i>	Sedimentation/ Siltation	<i>Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.</i> June 2015. Approved September 2015.
<b>CLEARWATER BASIN</b>				
Moscow	Paradise Creek	ID17060108CL005_02 <i>Paradise Creek - Urban boundary to Idaho/Washington border</i>	Ammonia (Un-ionized) <i>E. coli</i> Fecal Coliform Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation Temperature	<i>Paradise Creek TMDL Water Body Assessment and Total Maximum Daily Load</i> <i>Paradise Creek Total Maximum Daily Load Implementation Plan</i> December 1999. Approved 2000.  <i>Paradise Creek TMDL 2015 Bacteria Addendum,</i> October 2015. Submitted to EPA.
Moscow	Paradise Creek (WA portion)	Paradise Creek 10443 (WA-34-1025) Paradise Creek 10439 (WA-34-1025) Paradise Creek 10444 (WA-34-1025)	Fecal Coliform Bacteria	<i>South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report</i> WDOE Publication No. 09-10-060. October 2009. Approved 2009.
Moscow	South Fork Palouse River	ID17060108CL002_03 <i>South Fork Palouse River-Gnat Cr. to Idaho/Washington border</i>	Nutrient/ Eutrophication; Biological Indicators; Sedimentation/Siltation Temperature	<i>South Fork Palouse River Watershed Assessment and TMDLs,</i> February 2007. Approved October 2007.

**Table 3: Impairment and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges**

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Moscow	South Fork Palouse River (WA portion)	South Fork (SF) Palouse River 6712 (WA-34-1020) SF Palouse River 6711 (WA-34-1020) SF Palouse River 6710 (WA-34-1020) SF Palouse River 6707 (WA-34-1020)	Fecal coliform bacteria PCBs	<i>South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report</i> WDOE Publication No. 09-10-060 October 2009. Approved 2009.  <i>Palouse River Chlorinated Pesticide and PCB Total Maximum Daily Load, Water Quality Improvement Report and Implementation Plan</i> ; Publication No. 07-03-018 July 2007. Approved November 2007.
Lewiston	Snake River	ID17060103SL001_08- <i>Snake River - Asotin River (Idaho/Oregon border) to Lower Granite Dam pool</i>	Temperature	No TMDL completed.
Lewiston	Tammany Creek	ID17060103SL014_02 <i>Tammany Creek - WBID 015 to unnamed tributary</i> ID17060103SL014_03 <i>Tammany Creek - Unnamed Tributary to mouth</i> ID17060103SL016_02 <i>Tammany Creek-source to Unnamed Tributary(T34N, R04W, Sec19)</i>	<i>E. coli</i> Nitrogen, Nitrate Total Phosphorus Sedimentation/ Siltation	<i>Tammany Creek Sediment TMDL, September 2001.</i>  <i>Tammany Creek Watershed (HUC 17060103) TMDL Addendum</i> ; September 2010. Approved December 2010.
Lewiston	Lower Granite Dam Pool	ID17060306CL001_07 <i>Lower Granite Dam Pool</i>	None- Fully Supporting beneficial uses.	Not applicable.
Lewiston	Lindsay Creek	ID17060306CL003_02 Lindsay Creek - <i>Source to mouth</i> ID17060306CL003_03 Lindsay Creek - <i>Source to mouth</i>	<i>E. coli</i> Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation	<i>Lindsay Creek Watershed Assessment and Total Maximum Daily Loads</i> , December 2006, Amended March 2007. Approved, June 2007.

### III. Basis for Permit Conditions

#### A. Statutory Requirements and Other Considerations

Permit conditions are based on Section 402(p)(3)(B) of the CWA, 33 U.S.C. § 1342(p)(3)(B), which requires any NPDES permit for MS4 discharges to: 1) *effectively prohibit non-precipitation related flows from entering the MS4*, and 2) *require controls necessary to reduce pollutants in municipal storm water discharges to the MEP, including management practices, control techniques, and system design and engineering methods, and/or other such provisions*

*determined to be appropriate by the NPDES permitting authority.*<sup>12</sup> EPA's permitting approach for municipal storm water discharges uses BMPs in the first five year permit, and expanded or better tailored BMPs in subsequent permits to provide for the attainment of water quality standards. In its subsequent guidance materials, EPA has reiterated this approach to address the appropriate incorporation of applicable WLAs for storm water discharges into NPDES permits.<sup>13</sup>

At a minimum, NPDES permits for regulated MS4s must require the operator to develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements under the CWA. The SWMP must include, at a minimum, the storm water control measures set forth in the federal regulations at 40 CFR §§122.26(d)(2)(iv) and 122.34(a) and (b).

## **B. Maximum Extent Practicable (MEP)**

In the MS4GP Part 3, EPA has defined the required SWMP control measures that regulated MS4 operators in Idaho must implement in order to “*reduce pollutants in discharges to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods.*”<sup>14</sup> MEP is the statutory standard that describes the level of pollutant reduction that MS4 operators must achieve, but also includes a recognition that the level of effort may be increased in some circumstances.<sup>15</sup>

EPA believes implementation of BMPs, expressed as narrative program actions and designed to control pollutants in storm water runoff from the MS4, is generally the most appropriate approach for reducing pollutants to satisfy the MEP standard. Neither the CWA nor the storm water regulations provide a specific definition of MEP. The lack of a detailed definition allows flexibility in MS4 permitting. The MEP standard should continually adapt to current conditions and BMP effectiveness. The iterative process of MEP over successive permit terms consists of the regulated MS4 operator developing a program consistent with specific permit requirements, implementing the program, evaluating the effectiveness of practices included as part of the program, revising those program elements that are not effective at controlling pollutants, implementing the revisions, and then evaluating again. This process continues until water quality standards are attained.<sup>16</sup>

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<sup>12</sup> EPA described the regulatory background for the municipal storm water program in other permit fact sheets supporting the issuance of prior individual MS4 permits in Idaho. These fact sheet documents are available in the Administrative Record for this action.

<sup>13</sup> EPA 1996; EPA 2002; EPA 2014a; EPA 2014b. .

<sup>14</sup> CWA §402(p)(3)(B)(iii).

<sup>15</sup> See EPA 1999, at page 68754.

<sup>16</sup> For example, see EPA's discussion of MEP in the “*MS4 Permit Improvement Guide*,” April 2010, EPA 833-R-10-001.

### C. Effluent Limitations

The MS4GP requires all Permittees to control pollutants in MS4 discharges through the development and implementation of a comprehensive SWMP using a suite of BMPs as the mechanism to achieve the required pollutant reductions.<sup>17</sup>

The SWMP requirements in the MS4GP (when compared to EPA’s previously issued individual MS4 permits in Idaho) reflects EPA’s iterative decision-making process to determine “*the controls necessary to reduce the discharge of pollutants from the MS4 to the MEP*” between NPDES permit terms. Accordingly, the MS4GP defines more prescriptive BMPs and program actions as minimum control measures when compared to the existing Phase II MS4 permits in Idaho. The requirements of the MS4GP are comparable to those found in the existing Phase I MS4 permit issued in the Boise/Garden City, Idaho area. EPA has determined that a permittee’s full implementation of the SWMP required by MS4GP Part 3 meets the MEP standard of CWA Section 402(p)(3)(B)(iii).

If a permittee’s MS4 discharges into waters that are meeting Idaho water quality standards, and there is no specific evidence to suggest that the permittee’s MS4 discharges would cause or contribute to exceedances of water quality standards, the permittee is subject only to the MS4GP’s MEP-based minimum control measures to protect water quality. Absent evidence to the contrary, EPA presumes that a MS4 operator that implements a SWMP (as required by Part 3 of the MS4GP) generally does not require more stringent limitations to meet Idaho water quality standards.<sup>18</sup> Accordingly, because there are no impaired waterbodies within the Idaho Falls UA (as identified in Table 3), the MS4GP does not contain any additional water quality-based effluent limit requirements on discharges from regulated MS4s within the Idaho Falls UA.

Section 402(p)(3)(B)(iii) of the CWA also requires EPA to include in MS4 permits “*such other provisions as [EPA] determines appropriate for the control of ...pollutants.*” This provision forms the basis for imposing water quality-based effluent limitations for certain regulated MS4 discharges covered by the MS4GP.<sup>19</sup> NPDES regulations for general permits state that, where sources within a specific category of discharges are subject to water quality based limits imposed pursuant to 40 CFR §122.44, the sources in that discharge category must be subject to the same water quality based limits.<sup>20</sup>

Table 3 identified the impaired waterbodies in Idaho where regulated Phase I and Phase II MS4s currently discharge. MS4 discharges to these waterbodies likely contribute, in some part, to exceedances of water quality standards and associated impairment(s). Implementing MEP-level SWMP control measures constitutes substantial progress towards reducing or eliminating the MS4 contribution to such exceedances; however, MEP-level controls alone may be insufficient to fully eliminate the MS4 contributions to exceedances of Idaho water quality standards.

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<sup>17</sup> See 40 CFR § 122.44(k).

<sup>18</sup> See EPA 1999, at page 68752.

<sup>19</sup> See *Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9th Cir. 1999); see also EPA 1999 at pages 68722, 68753, and 68788.

<sup>20</sup> See 40 CFR 122.28(a)(3).

Consequently, in consultation with IDEQ, and for reasons discussed elsewhere in this document, EPA determines that it is necessary and appropriate to include additional narrative effluent limits in the MS4GP for MS4 operators that discharge to impaired receiving waters. The applicable additional requirements in MS4GP Parts 4 and 5 as supplemented by Permit Appendix F are necessary and appropriate water quality controls pursuant to CWA Section 402(p)(B)(3)(iii).

#### **D. Other Considerations and Conclusion**

EPA also considered the following information while developing the MS4GP:

- MS4 permit related summary information as compiled by EPA, including *Post Construction Performance Standards and Water Quality Based Requirements – A Compendium of Permit Requirements* and EPA’s November 2014 Memo entitled *Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Waste load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs."*<sup>21</sup>
- EPA’s most recently issued MS4 permit in Idaho, NPDES Permit #IDS027561, for the regulated MS4s in the Boise/Garden City Area;
- Permit renewal application materials submitted by each Phase II MS4 entity listed in Appendix 1 of this document and MS4GP Appendix A.1, including information about existing SWMP implementation from Annual Reports submitted by existing MS4 Permittees;
- Conclusions and recommendations from the National Research Council Report entitled *Urban Storm water Management in the United States*, dated October 2008;
- Research and information on the effective, feasible methods for on-site management and treatment of storm water using practices commonly referred to as “low impact development” or “green infrastructure;” and,
- Other general permits and individual permits issued by EPA for regulated MS4s in Region 10, New England, and New Mexico, as well as recent State-issued MS4 permits.

#### **Conclusion**

EPA has determined that narrative effluent limits, expressed as BMPs, to be implemented and enforced through each Permittee’s comprehensive SWMP, are the most effective means of meeting the requirements of CWA Section 402(p) and the federal storm water permitting regulations. The comprehensive SWMP outlined in the MS4GP Part 3, additional requirements for discharges to impaired waters in MS4GP Part 4, and monitoring requirements in MS4GP Part

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<sup>21</sup> Available on EPA’s website at [http://water.epa.gov/polwaste/npdes/storm water/upload/sw\\_ms4\\_compendium.pdf](http://water.epa.gov/polwaste/npdes/storm%20water/upload/sw_ms4_compendium.pdf) and [http://water.epa.gov/polwaste/npdes/storm water/upload/EPA\\_SW\\_TMDL\\_Memo.pdf](http://water.epa.gov/polwaste/npdes/storm%20water/upload/EPA_SW_TMDL_Memo.pdf), respectively.

5, are designed to reduce the discharge of pollutants from regulated MS4s in Idaho to the MEP, and to comply with other water quality provisions of the CWA. Rationale for each of these requirements follows in Section III.E below.

EPA is not proposing numeric water quality-based effluent limitations at this time. Through the NPDES permit modification process outlined in 40 CFR §124.5, EPA or the State may elect at a future date to add numeric effluent limitations to the MS4GP after its issuance, but only after EPA or the State determines that State water quality standards are not being met due to the contributions of pollutants by MS4 storm water discharges. EPA or the State must further determine that such permit modifications are reasonably needed to ensure the attainment of the Idaho water quality standards.

## **E. Discussion of Specific Provisions**

### ***1. Facilities Eligible for Coverage (MS4GP Part 1.1)***

The MS4GP authorizes storm water discharges only from regulated MS4s meeting the definitions at 40 CFR §§122.26(b)(4), (7), and (16), respectively. Regulated MS4s are those that are located in an UA as determined by the latest Decennial Census (unless the NPDES permitting authority has granted a waiver). The MS4GP also authorizes discharges from MS4s designated by EPA as needing a permit, pursuant to 40 CFR §122.32(a) (2) or 40 CFR §122.26(f). A discussion of MS4 waivers and MS4 designations is provided below.

Most MS4s to be covered by the MS4GP are located entirely or partially within a UA. On March 26, 2012, the Census Bureau published the final listing of UAs for the Year 2010 Census. An UA encompasses a densely settled territory that consists of core census block groups or blocks that have a population of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile or are included to link outlying densely settled territory with a densely settled urban core.<sup>22</sup> UAs are not defined along political boundaries. Because of this non-political division, a municipality may be entirely or partially within an UA. In many UAs, multiple municipal entities may have responsibilities to obtain NPDES permit coverage. The NPDES regulations require a Phase II MS4 to implement its program, at a minimum, for discharges occurring within the UA; all Phase I regulations require MS4s to implement their SWMP on a jurisdiction-wide or system-wide basis.

The Year 2010 Census did not delineate any new UAs in Idaho; instead, the 2010 Census merely expanded the Year 2000 Census UA boundaries of the Coeur d'Alene, Lewiston, Nampa, Boise, Pocatello, and Idaho Falls UAs. As of [enter XXX date prior to start of public comment period] EPA has notified all new regulated MS4s that are now subject to the NPDES program as a result of the Year 2010 Census. All previously regulated MS4s subject to permitting based on the Year 2000 Census UA remain obligated to comply with the NPDES storm water permit regulations

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<sup>22</sup> The Census Bureau's definition of an Urbanized Area for the Year 2010 Census is explained in 76 Federal Register (FR) 53030, August 24, 2011, at <http://www.census.gov/geo/reference/pdfs/fedreg/fedregv76n164.pdf>

even if there is a change in the boundaries or reach of the “UA” because of a change in census data, unless the MS4 operator requests and is granted a waiver pursuant to 40 CFR §122.32.<sup>23</sup>

## **2. Geographic Area of Permit Coverage (MS4GP Part 1.2)**

For reasons previously discussed in Section I.F of this document, EPA proposes to define the minimum geographic Permit Area for regulated MS4s owned and/or operated by cities as *the entire incorporated area of the city*. For MS4s operated by counties, highway districts, ITD, colleges, universities, and/or drainage districts, the EPA is proposing to define the minimum geographic Permit Area to include *the area under the entity’s jurisdictional control within the Urbanized Area within the State of Idaho as defined by the U.S. Census*.

## **3. Eligibility Requirements (MS4GP Part 1.3)**

NPDES general permits may exclude specified sources from coverage.<sup>24</sup> After evaluating the MS4 renewal applications received from existing permittees (and other analysis available in the Administrative Record), EPA determines that all regulated MS4s listed in MS4GP Appendix A.1 are eligible for coverage under the MS4GP. Regulated MS4 operators listed in MS4GP Appendix A.2 may be determined eligible for permit coverage. After issuance of the final MS4GP, EPA intends to authorize discharges from the MS4s owned and operated by these entities under the MS4GP.

MS4GP Part 1.3 contains specific requirements for new applicants to document their discharge compliance status related to the Endangered Species Act, the Magnuson-Stevens Fisheries Management and Conservation Act and the National Historic Properties Act. EPA has proposed instructions for documenting such compliance in MS4GP Appendices C and D. After the permit effective date, any new MS4 operator applicant seeking coverage under the MS4GP must submit a timely and complete Notice of Intent (NOI) containing relevant identification and SWMP implementation information defined in Part 1.4 and Appendix B of the Permit. This NOI must include documentation of compliance with the Endangered Species Act, Essential Fish Habitat, or National Historic Properties Act as specified in Part 1.3 of the MS4GP.

## **4. Notice of Intent Requirements (MS4GP Parts 1.4)**

In accordance with 40 CFR §122.28(b)(2)(i), a NOI must be submitted by all dischargers seeking discharge authorization under the general permit.

For each regulated MS4 operator listed in Appendix 1 of this document, EPA received a MS4 permit renewal application on the date indicated. For MS4 permittee/applicant listed, the submitted permit application information (and Annual Reports) are contained in the Administrative Record. This information substantively fulfills the application requirements for an NOI requesting coverage under the MS4GP, and EPA has used this information to determine the eligibility for each MS4 operator listed therein under the MS4GP.

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<sup>23</sup> See: EPA 1999, at page 68752. Online links to maps of the Year 2000 UAs and Year 2010 UAs in Idaho are available in Appendix 2 of this document.

<sup>24</sup> See 40 CFR 122.28(a)(4)(ii).

Appendix B of the MS4GP identifies the information required in any NOI submitted after the permit effective date. Applicants may use the optional format provided in MS4GP Appendix B, or alternatively submit the required information as a letter, report or table with all necessary attachments. The information required in a NOI for coverage includes:

- The name of the municipal entity/tribe/state agency/federal agency, mailing address, and telephone number for both primary administrative and technical contacts;
- An indication of ownership status;
- A map and narrative physical description of the MS4 that includes where the MS4 is located; the latitude and longitude of an approximate center of the MS4; and general operational description of the MS4 with statistics summarizing number of outfalls, catch basins, etc.;
- A narrative summary of the major receiving water(s) including whether the MS4 discharges to a water listed as impaired by the State of Idaho or that is subject to an applicable TMDL analysis;
- A SWMP plan describing the manner in which the application intends to implement the required storm water control measures by MS4GP Parts 3 & 4, including interim implementation schedules and milestones leading to full implementation of all required measures;
- Documentation and certification of whether the applicant has met eligibility criteria for Endangered Species Act (ESA), Essential Fish Habitat (EFH), and protection of historic properties;
- If the MS4 applicant is relying on another entity to satisfy one or more of the permit obligations, in the context of a co-Permittee relationship or relying on another entity to satisfy the permit requirements, the identity of that entity(ies) and the element(s) they will be implementing; and
- A list of other permits or approvals under other environmental programs.

The MS4 applicant must sign the NOI in accordance with Part 7.5 of the MS4GP permit and must include the certification statement therein.

#### ***5. Authorization to Discharge (MS4GP Part 1.5)***

A regulated MS4 will be authorized to discharge under the MS4GP upon receipt of EPA's written notification that EPA has granted coverage and assigned the Permittee a unique permit number.

#### ***6. Requirements for Individual NPDES Permits (MS4GP Part 1.6)***

In accordance with federal regulations at 40 CFR §122.28(b)(3)(iii), if an otherwise eligible MS4 operator decides that an individual permit is desired, the operator may request to be excluded from coverage under the MS4GP by applying for an individual NPDES permit.<sup>25</sup> The operator must submit written requests to EPA no later than 90 days after the MS4GP effective date. Any

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<sup>25</sup> See also 40 CFR 122.33(b)(2)

request for an individual NPDES permit will be reviewed and processed in accordance with federal regulations at 40 CFR Part 124. EPA may grant the request by for an individual NPDES permit if the reasons cited by the MS4 owner/operator clearly demonstrate that inclusion under the general permit is inappropriate.

In accordance with 40 CFR §122.28(b)(3)(i), EPA may determine that providing coverage under the general permit is inappropriate for particular MS4s and may require such facilities to apply for an individual NPDES permit, for reasons outlined in MS4GP Part 1.6.3. The applicability of the general permit is automatically terminated on the effective date of the individual permit.

#### ***7. Notice of Termination Requirements under MS4GP Part 1.7***

A regulated MS4 Permittee covered by the MS4GP must terminate coverage using the procedure outlined in Appendix B.2 of the MS4GP if any of the following conditions are met:

- A new operator has assumed responsibility for the entire MS4; or
- The MS4 Permittee has ceased operations at the MS4; or
- The MS4 Permittee is able to eliminate the storm water discharges from the MS4.

To terminate coverage, the Permittee must submit a letter with the following information:

- Name, mailing address, and location of the MS4 for which the notification is submitted.
- The name, address and telephone number of the operator addressed by the Notice of Termination;
- The NPDES permit number for the MS4;
- An indication of whether another operator has assumed responsibility for the MS4, the MS4 Permittee has ceased operations at the MS4, or the storm water discharges have been eliminated. Sufficient details must be included in the request to substantiate the reason for the termination request.
- The request for termination must be signed/certified as required by Part 7.5 of the MS4GP. Note that in cases where co-Permittee relationships exist, coverage for the requesting Permittee may be terminated without affecting the coverage of the other co-Permittees subject to the permit. EPA will follow the NPDES regulations and the procedure identified in MS4GP Appendix B.3 when considering any request to terminate coverage under the MS4GP.

#### ***8. Discharges Authorized Under the MS4GP (Part 2.1)***

The MS4GP conditionally authorizes urban municipal storm water discharges, and certain allowable non-storm water discharges, from all parts of the operator's MS4 located within the Permit Area, provided the operator complies with the control measures limiting the discharge of pollutants from their MS4 to the MEP subject to the conditions and requirements of the MS4GP.

The MS4GP does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants that are not part of the normal operation of the MS4, as disclosed in the permit application and/or NOI. In instances where MS4 operators encounter particularly difficult pollutant control situations, the owner/operator may need to

submit an application for an individual NPDES permit. See Section III.B, *Requirements for Individual NPDES Permits*.

### **9. Limitations on Permit Coverage (MS4GP Part 2.2)**

The MS4GP further limits the operator's authorization to discharge municipal storm water in the following ways:

- A Permittee's MS4 discharges must not cause violations of State water quality standards;
- Snow disposal directly into waters of the United States, or directly to the MS4s, is prohibited, due to concerns that the accumulated snow and melt water may contain elevated levels of chloride and other salts, suspended sediment, turbidity, and metals associated with sediment and turbidity. Discharges of snow melt resulting from or associated with the Permittees' snow management practices (such as street plowing, and application of traction material) are conditionally authorized, provided such activities are conducted in a manner that minimizes adverse water quality impacts in accordance with Permit Part 3.4 (*Storm water Infrastructure Management*);
- Storm water runoff that is commingled with process wastewater, non-process wastewater, and/or storm water associated with industrial or construction activity (as defined in 40 CFR §122.26(b)(14) and (15)) may be discharged from the Permittee's MS4, provided the commingled flows are authorized by a separate individual or general NPDES permit (as necessary).
- Certain types of discharges unrelated to precipitation events (i.e., "non-storm water discharges"), listed in Permit Part 2.2.4 and 2.2.5, are conditionally allowed to enter into and discharge from the MS4s. Such non-storm water discharges cannot be sources of pollution to the waters of the United States, consistent with the Idaho Water Quality Standards and defined in Permit Part 2.2.6.<sup>26</sup> Permit Part 2.3.5 and Part 3.5 requires all MS4 Permittees to continue to prohibit, through ordinance or other enforceable means, all other non-storm water discharges into the MS4(s). Permittees are responsible for the quality of the discharge from their MS4, and therefore have an interest in locating and discontinuing any uncontrolled non-storm water discharges into their MS4.

### **10. Permittee Responsibilities (MS4GP Part 2.3)**

**Permit Parts 2.3.1 and 2.3.4** require each regulated MS4 operator to implement a comprehensive SWMP throughout the applicable Permit Area designed to reduce the

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<sup>26</sup> EPA includes non-stormwater discharges in the MS4GP pursuant to 40 CFR §§122.26(d)(2)(iv)(B)(1) and 122.34(b)(3)(iii), as well as specific discharges included in prior MS4 permits for MS4s in Idaho.

discharge of pollutants from the MS4 to the MEP and protect water quality in receiving waters.<sup>27</sup>

**Permit Part 2.3.2** provides that, where more than one public entity owns or operates MS4s within a geographic area, the operators may participate in a joint permit application as co-Permittees.<sup>28</sup> A written joint agreement between the parties is required to clarify agreed upon roles and responsibilities. Once EPA provides permit coverage, each co-Permittee is responsible for compliance with the permit terms and conditions related to the MS4 operated under their sole authority.

Several MS4 operators in the Boise, Pocatello, Lewiston, and Coeur d'Alene UAs previously identified through their most recent permit applications their intention to operate as co-Permittees and/or to share implementation responsibilities for the purposes of managing MS4 discharges. EPA encourages such working relationships, and reiterates that cooperative working relationships are available to all regulated MS4s covered by the MS4GP. EPA strongly encourages regulated MS4 operators to work cooperatively whenever possible to conduct the mandatory SWMP activities in a cost effective and productive manner.

**Permit Part 2.3.3** allows the Permittee to implement one or more of the required SWMP components by sharing responsibility with an entity other than another regulated MS4 Permittee.<sup>29</sup> A Permittee may delegate the responsibility to implement some or all of a required minimum control measure to another entity, only if: 1) the other entity in fact implements the control measure; 2) the particular control measure is at least as stringent as the corresponding permit requirement; and 3) the other entity agrees to implement the control measure on the Permittee's behalf. The Permittee must enter into binding agreements with such outside parties in order to minimize any uncertainty about the outside parties' responsibilities to the permittee. The Permittee remains responsible for compliance with the permit obligations in the event the other entity fails to implement the control measure (or any component thereof).

**Permit Part 2.3.5** requires MS4 operators to maintain adequate legal authority to implement and enforce the required SWMP control measures.<sup>30</sup> Without adequate legal authority, the MS4 operator would be unable to perform many vital SWMP functions, such as performing inspections, and requiring the installation and proper operation of pollutant control measures. Further, the Permittee may not be able to penalize and/or attain remediation costs from violators. Each Permittee covered by the MS4GP must maintain adequate legal authority, as allowed and authorized pursuant to applicable Idaho law.

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<sup>27</sup> See 40 CFR §§122.26(d)(2)(iv) and 122.34(a). Also, 40 CFR §122.44(a)(1) and (d)

<sup>28</sup> See 40 CFR §§122.26(a)(3)(iii) and 122.35.

<sup>29</sup> See 40 CFR §122.35(a).

<sup>30</sup> See 40 CFR §§122.26(d)(2)(i) and 122.34(b)(3)(ii)(B), (b)(4)(ii)(A), and (b)(5)(ii)(B)); also EPA 2010.

EPA expects all regulated MS4 operators to use their legal powers to control pollutants into and from the MS4 in six specific ways. First, regulated MS4s must effectively prohibit and eliminate pollutants to the MS4 from illicit discharges and illicit connections. They must effectively control spills, dumping or disposal of non-storm water materials to the MS4; and have the ability to control pollutants discharged from land disturbance and development activities. The MS4 operator must be able to control the contribution of pollutants from one MS4 into another, through interagency agreements as necessary or appropriate. The MS4 operator must be able to require compliance with applicable rules within their jurisdiction. Finally, the MS4 operator must have authority to carry out inspection, surveillance, and monitoring procedures necessary to determine compliance with the MS4GP.<sup>31</sup>

Different types of public entities in Idaho qualify as regulated MS4 operators, and EPA recognizes that each type of entity has different and unique legal powers under state law. The scope of such legal authority may include enforcement through statute, ordinance, policy, permit, contract, administrative order, and/or other means. Some MS4 Permittees cannot pass “ordinances” so legal authority may consist only of policies, standards, or specific contract language. Other Permittees may not have the authority to impose a monetary penalty.

EPA has included a requirement that each MS4 operator summarize in their SWMP Plan document how they impose their existing legal authorities, and/or use cooperative agreements with neighboring jurisdictions, to implement the required SWMP control measures. This summary helps clarify how the individual MS4 operator enforces the mandatory elements of the SWMP within their jurisdiction based on their unique legal powers under Idaho law.

EPA has reviewed the information previously submitted by the regulated MS4s listed in Appendix 1. It appears that MS4 entities in Idaho can maintain sufficient legal authority to impose and enforce the required SWMP control measure components within their jurisdictions.

**Permit Part 2.3.6** requires each Permittee to develop, and annually update, a SWMP Plan. The SWMP Plan summarizes the physical characteristics of the MS4, and describes how the MS4 operator conducts the required SWMP control measures within its jurisdiction. The Plan must describe any unique implementation issues, including cooperative or shared responsibilities with other entities. SWMP Plans address three audiences and purposes:

- 1) General Public – to inform and involve them in developing the local storm water program;
- 2) EPA and IDEQ- to report on plans for implementing the MS4GP requirements in the coming year; and
- 3) Elected officials and local staff - to use as an internal planning document.

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<sup>31</sup> See 40 CFR 122.26(d)(2)(i)

The SWMP Plan must be updated annually as new program components are implemented or added, and must be submitted with the required Annual Report. The SWMP Plan is a “looking forward” document that explains how the Permittee reduces pollutants in storm water discharges to the MEP in compliance with the MS4GP’s terms and conditions.<sup>32</sup> MS4GP Appendix E provides additional detail on suggested formats and content of the SWMP Plan; several existing MS4 Permittees have already developed such program summary documents.<sup>33</sup> EPA believes the Annual Report format used by the Permittees during the first permit term provides a suitable template for creating each Permittee’s SWMP documentation. The SWMP Plan outlines the Permittee’s legal authorities, identifies MS4 system characteristics, and discusses how SWMP requirements are implemented (particularly to identify when and where a SWMP component is not relevant to the specific Permittee’s jurisdictional role/responsibility). The SWMP document must summarize how each Permittee implements the required SWMP components of the permit.

**Permit Part 2.3.7** requires the Permittee to track MS4 program statistics and information to document and report on SWMP implementation progress.

**Permit Part 2.3.8** requires the Permittee to provide adequate financial support and staff capabilities to implement the SWMP control measures and other permit requirements. Each Annual Report must summarize annual expenditures for the prior 12-month reporting period. Permittees demonstrate compliance with Part 2.3.8 by fully implementing the requirements of the permit. The permit does not require specific staffing or funding levels, thus providing the Permittees with the flexibility and incentive to adopt the most efficient methods to comply with permit requirements. EPA encourages the Permittees to establish stable funding sources to support ongoing SWMP implementation, and to enter into cooperative working relationships with other regulated MS4s.

**Permit Part 2.3.9** requires each Permittee to extend their SWMP programs to all areas under their direct control, and to acknowledge or report changes in ownership or operational authority to EPA and IDEQ through the Annual Reports.

## **F. SWMP Control Measures (*MS4GP Part 3*)**

### ***I. Overview***

Clean Water Act Section 401(p)(B)(3) and EPA’s storm water regulations at 40 CFR §§122.26(d)(2)(iv) and 122.34(b) outline the framework for a comprehensive SWMP, and identify specific SWMP control measures that must be addressed by all regulated MS4

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<sup>32</sup> In contrast, the purpose of the Annual Report is to summarize the Permittee’s activities during the previous reporting period, and to provide an assessment or review of the Permittee’s compliance with the MS4GP.

<sup>33</sup> See, for example, SWMP plans by the City of Coeur d’Alene (<http://www.cdaid.org/files/Engineering/StormWaterManagementPlan.pdf>) and Boise State University ([http://www.partnersforcleanwater.org/media/182277/2014\\_boise\\_state\\_university\\_swmp.pdf](http://www.partnersforcleanwater.org/media/182277/2014_boise_state_university_swmp.pdf))

operators. NPDES permits for regulated MS4 discharges must require the operator to develop, implement and enforce a SWMP designed to reduce the discharge of pollutants from the MS4 to the MEP and protect water quality in receiving waters using management practices, control techniques and system, design, and engineering methods, and such other provisions as appropriate. In the MS4GP Part 3, EPA has combined the mandatory minimum SWMP control measures from the regulations as follows:

- Construction Site Runoff Control (*See Permit Part 3.2*)
- Storm Water Management for Areas of New Development and Redevelopment (*Permit Part 3.3*)
- Infrastructure/Street Management and Maintenance (*Permit Part 3.4*)
- Illicit Discharge Management (*Permit Part 3.5*)
- Education, Outreach and Public Involvement (*Permit Part 3.6*)

Each SWMP control measure is comprised of specific actions and ongoing activities; in the MS4GP, EPA refers to these specific actions and ongoing activities as *program components*.

A summary of each required SWMP control measure, and the associated program components necessary to implement the control measure, is shown below in Table 4.

**Table 4: SWMP Control Measures and Associated Components for the MS4GP**

	<b>Construction Site Runoff Control</b> <ul style="list-style-type: none"><li>•Ordinance Mechanism</li><li>•Specifications</li><li>•Site Plan Review &amp; Approval</li><li>•Inspections and Enforcement</li><li>•Enforcement Policy</li><li>•CGP Violation Referrals</li><li>•Training</li></ul>
	<b>SW Management for Areas of New Development &amp; Redevelopment</b> <ul style="list-style-type: none"><li>•Ordinance Mechanism</li><li>•Specifications</li><li>•Site Plan Review &amp; Approval</li><li>•Inspections &amp; Enforcement</li><li>•O&amp;M</li><li>•Training</li></ul>
	<b>SW Infrastructure &amp; Street Management</b> <ul style="list-style-type: none"><li>•Inventory &amp; Mapping</li><li>•Operating Procedures for Streets</li><li>•Inventory &amp; Mgmt of Street Maintenance Materials</li><li>•Street/Road/Parking Lot Sweeping</li><li>•Operating Procedures for Other Municipal Activities</li><li>•Pesticides/Herbicides/Fertilizers Reqmts</li><li>•SWPPPs for Permittee Facilities</li><li>•Litter Control</li><li>•Staff Training</li></ul>
	<b>Illicit Discharge Management</b> <ul style="list-style-type: none"><li>•Ordinance Mechanism</li><li>•Complaint Reporting &amp; Response</li><li>•Dry Weather Outfall Screening</li><li>•Illicit Discharge Followup</li><li>•Prevent &amp; Respond to Spills to the MS4</li><li>•Facilitate Disposal of Oil &amp; Toxic Materials</li><li>•Staff Training</li></ul>
	<b>Education, Outreach &amp; Public Involvement</b> <ul style="list-style-type: none"><li>•Public Involvement</li><li>•Education/Outreach Activities</li><li>•Target Audiences &amp; Topics</li><li>•Assessment</li><li>•Tracking</li><li>•Training for SWMP Control Measures</li><li>•Website</li></ul>

The EPA-issued individual MS4 permits in Idaho have each required implementation of the applicable minimum SWMP control measures. Existing MS4 Permittees listed in MS4GP Appendix A.1 now implement these control measures within their jurisdiction (based on their specific legal authorities as authorized pursuant to applicable Idaho law), in accordance with their administratively extended permit(s). New regulated MS4s, including new MS4 applicants (such as those entities listed in MS4GP Appendix A.2) have submitted application information to EPA that outlines their intended SWMP actions and activities, including estimated timelines for full implementation. EPA has considered these existing SWMP programs, and proposed programs as submitted by MS4 permit applicants, during the development of the MS4GP permit conditions to reduce pollutants in discharges to the MEP.<sup>34</sup>

In the MS4GP, EPA has refined the components of each SWMP control measure in order to clarify EPA's expectation of what constitutes an adequate level of effort necessary to reduce pollutants from regulated MS4s in Idaho. Through the MS4GP, EPA establishes consistent and appropriate storm water management expectations for all regulated MS4s in Idaho. It is EPA's intent that each operator's SWMP is broadly comparable and (based on their specific legal authorities as authorized pursuant to applicable Idaho law) complementary to those programs imposed by the neighboring regulated MS4 jurisdictions.

The MS4GP's new narrative descriptions for individual SWMP components may require some existing and new MS4 operators to review, and revise or adjust, the existing SWMP control measure already in place within that jurisdiction. EPA's newly articulated SWMP components provide greater specificity to Permittees, which EPA deems necessary to adequately define the control of pollutants in MS4 discharges to the maximum extent practicable, as required by the CWA and the applicable regulations.

## ***2. Compliance Dates (MS4GP Part 3.1)***

Permit Part 3.1 addresses compliance dates for implementing the specific components of each control measure. EPA has specified compliance dates for development and implementation of any new program component (and/or to refine an existing program activity) to comply with the MS4GP. Existing MS4 permittees must continue implementation of all existing SWMP control measures while working to develop or impose any new program components. For each SWMP control measure identified in Permit Parts 3.2 through 3.6, EPA identifies applicable compliance dates in a unique subpart (see Permit Parts 3.2.1, 3.3.1, 3.4.1, etc.).

Existing permittees must implement additional or new program components no later than the compliance date(s) specified. The Permittee may establish interim milestones and/or measurable goals to plan for full implementation, and EPA encourages Permittees to outline such interim milestones/goals within the SWMP Plan.

NPDES regulations allow a new regulated MS4 (including those operators covered for their regulated MS4 discharges for the first time under the MS4GP) up to 5 years (the duration of the first full permit term) to fully implement the required SWMP control measures.<sup>35</sup> Therefore, new

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<sup>34</sup> See 122.26(d)(2)(iv), and 123.35(f)

<sup>35</sup> 40 CFR 122.34(a) and 123.35(e)

regulated MS4s may use the compliance date(s) specified in MS4GP Part 3 as target implementation deadlines for the particular control measure, and MS4 permittees can prioritize their program development accordingly to ensure full SWMP implementation no later than the MS4GP expiration date.

### ***3. Construction Site Runoff Control (MS4GP Part 3.2)***

This SWMP control measure requires the MS4 operator to control construction site runoff discharges into their MS4s. At a minimum, the MS4GP requires the Permittee to develop, implement, and enforce a program to reduce discharges of pollutants and control storm water runoff from construction activity that results in land disturbance of 5,000 square feet or more occurring within its jurisdiction.

EPA's rationale for revising the land disturbance threshold for triggering SWMP controls, from "*land disturbance of one acre or greater*" as in the existing Phase II MS4 permits, to "*land disturbance of 5,000 square feet or more,*" and other the requirements of this control measure, is discussed in detail below.

The existing Phase II MS4 Permits for the regulated MS4s in Idaho require the MS4 Permittee to use an ordinance or regulatory mechanism to require proper construction site controls for sediment, erosion, and waste management at sites with land disturbance of one or more acres. The program must also apply to sites disturbing less than one acre, but are part of a common plan of development that exceeds one acre. This program must include procedures for site plan review that considers potential water quality impacts; procedures for site inspection and enforcement; and procedures for the receipt and consideration of information submitted by the public.

In addition, the MS4 permits explicitly state that storm water discharges from any construction site disturbing one or more acres in Idaho are regulated independently through the *NPDES General Permit for Storm Water Discharges from Construction Activity* (Construction General Permit or CGP), currently issued as #IDR12-0000 by EPA. As previously mentioned in Section III.E.8 of this document, storm water discharges from construction sites that comply with the CGP may discharge through the MS4.

These requirements continue as mandatory components under the MS4GP, as follows:

**Permit Part 3.2.1** provides a compliance deadline of four years from the permit effective date for MS4 operators to update their existing construction site runoff control program, and/or to impose the new program components, within the Permit Area. This timeframe allows sufficient time for all Permittees to work with their stakeholders to amend existing local requirements if necessary. Many existing MS4 operators already impose appropriately scaled erosion and sediment control expectations on construction sites that disturb less than 1

acre.<sup>36</sup> Depending on the type of MS4 operator, different levels of effort will likely be necessary. For example, a city may need more time to revise a local ordinance, whereas a highway district may need comparably less time to amend its applicable contract or policy language. EPA anticipates that regulated MS4 operators within the same UA will work together in a cooperative manner to find efficiencies and to speed implementation.

**Permit Part 3.2.2** outlines the expected scope of the MS4 operator's program to reduce and prevent runoff from construction sites disturbing 5,000 square feet (ft<sup>2</sup>) or more, including the enforcement of an ordinance or other regulatory mechanism that requires sediment, erosion, and waste management controls at construction sites, and includes sanctions to ensure compliance.

**Permit Part 3.2.3** requires written specifications to define appropriate site level controls within the Permittee's jurisdiction.

**Permit Part 3.2.4** requires a preconstruction site plan review and approval process that includes consideration of public input.

**Permit Part 3.2.5** requires the Permittee to conduct construction site inspections and enforce local requirements as needed.

**Permit Part 3.2.6** requires the Permittee to develop a written enforcement response policy to guide and prioritize such oversight efforts.

**Permit Part 3.2.7** outlines the option for the Permittee to refer to EPA any potential CGP violators who fail to comply with locally applicable requirements.

**Permit Part 3.2.8** specifies the requirement to provide proper training for construction staff conducting plan review and inspection, and to allow opportunity for site operators who work in the MS4 service area to learn how to comply with local requirements.

EPA is using its discretion to revise the site disturbance size threshold triggering local requirements for construction site runoff controls from "*sites disturbing 1 or more acres*" to "*sites disturbing 5,000 ft<sup>2</sup> or more*" in order to enhance the control of pollutants in runoff from construction sites within all urban MS4 Permit Areas across the state of Idaho. This revision is justified for the following reasons:

- DEQ lists receiving waters in all UAs (except the Idaho Falls UA) as being "impaired" for sediment, siltation, nitrogen, and/or total phosphorus. The proposed construction site runoff control measures in the MS4GP is fully consistent with applicable TMDLs, and TMDL implementation plans calling for control of total suspended sediments and

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<sup>36</sup> For example, Pocatello, Chubbuck, Nampa, Caldwell, Coeur d'Alene, and Post Falls each require erosion & sediment controls at any construction site within their jurisdiction. See EPA's *Permittee Summary Information* in the Administrative Record.

nutrients. Controlling runoff from additional, though smaller, construction sites within the Permit Area will prevent sediment-laden runoff from a larger number of construction activities, and will contribute to the overall attainment of Idaho Water Quality Standards in each of the impaired receiving waters listed in Table 3. Establishing reasonable erosion, sediment and onsite waste management control expectations at most, if not all, active construction sites within these urban areas is a reasonable and effective way to prevent these pollutants from reaching receiving waters via discharge through the MS4.

- The federally required minimum site size threshold of “1 or more acres” triggering the construction site runoff controls in small MS4 jurisdictions<sup>37</sup> is insufficient to ensure the adequate control of pollutant sources from these numerous, though smaller, construction sites within UAs. Given the average lot size within more densely populated Urbanized Areas, comparatively few construction sites are likely to disturb 1+ acres within these areas. To ensure greater pollutant reductions in impaired watersheds, and to better protect non-impaired waterbodies from sediment and phosphorus-laden construction discharges, EPA has determined that Permittees should impose their local requirements on sites disturbing less than 1 acre.
- EPA’s proposal to revise the minimum site size threshold triggering local MS4 program requirements to 5,000 ft<sup>2</sup> or more will also address an existing MS4 program discrepancy between the existing Phase I MS4 permit area, and the other regulated MS4 areas within the State of Idaho. Since the initial issuance of the Phase I MS4 permit for the Boise-Garden City Area MS4s in November 2000, the applicable construction requirements under NPDES Permit #IDS-027561 for MS4s within the Cities of Boise and Garden City impose the SWMP construction program controls on most construction projects occurring within the Permit Area. The current threshold established in Permit #IDS027561 triggers runoff controls for construction sites disturbing at least 5,000 ft<sup>2</sup>.<sup>38</sup> In contrast, EPA issued the initial round of Phase II MS4 permits in Idaho and required the similar construction site runoff controls to apply to sites disturbing only 1 or more acres, consistent with federal minimum requirements outlined in 40 CFR §122.34(b)(4).

By requiring regulated MS4s in Idaho to use their local authority to control pollutants from smaller construction sites, EPA does not suggest that all construction activity requires using the same level of erosion/sediment controls, or receiving the same inspection type or frequency, and/or receiving the same level of local oversight. Smaller-scale construction projects do not require the same planning or detail, but effective and appropriate BMPs are available and reasonable depending on the nature of a given project.

For example, erosion and sediment control at a single residential lot, or portion of a lot, may require less rigorous detail, because such projects can manage with basic (but

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<sup>37</sup> See 40 CFR §122.34(b)(4).

<sup>38</sup> See: EPA 2012.

effective) prevention-type BMPs. Moreover, because the projects are relatively small, they tend to be completed relatively quickly during dry seasons of the year. Documentation of applicable controls for smaller construction sites can occur in MS4 jurisdictions in a relatively concise manner. EPA expects that MS4 operators will continue to use their discretion to scale and prioritize their site plan review procedures, site inspection priorities, and any associated enforcement activities, as appropriate to their jurisdiction, through consideration of the typical project type, size, and relative risk to receiving waters.<sup>39</sup> Revising the mandatory site disturbance threshold for the construction site runoff control program, from “1 acre or more” in the Phase II MS4 areas to a threshold of 5,000 ft<sup>2</sup> across all regulated MS4 areas of Idaho, is practical way to ensure broader application of appropriate erosion and sediment control at construction sites within urban Idaho watersheds.

#### ***4. Storm Water Management for Areas of New Development and Redevelopment***

**Permit Part 3.3** requires MS4 Permittees to implement and enforce a program to control runoff from new development and redevelopment project sites, including projects involving streets and roads. In the previously issued MS4 permits, these requirements were entitled *Post-Construction Storm Water Management in New Development and Redevelopment*. EPA’s prior Phase II MS4 permits in Idaho followed the federal minimum site threshold, by directing the Permittee to address runoff from new development and redevelopment projects disturbing one or more acres, using a locally appropriate combination of structural and/or non-structural BMP requirements.<sup>40</sup> The Permittee was required to enforce the requirements using an ordinance or other regulatory mechanism, to the extent allowable under state or local law, and the MS4 operator must ensure the adequate long-term operation and maintenance of these BMPs. For the Phase I MS4s, EPA’s permit requirements for the management of runoff from new development and redevelopment sites were derived from the regulations at 40 CFR §122.26(d)(2)(iv)(A)(2).<sup>41</sup>

All MS4s cited in Appendix 1 of this document are adequately implementing their existing post-construction storm water management programs, pursuant to their previously issued MS4 permits.

In the MS4GP, EPA has revised the title of the control measure in Part 3.3 to *Storm water Management for Areas of New Development and Redevelopment* to reflect EPA’s expectations with regard to implementation of the measure. EPA uses the term “permanent storm water controls” instead of “post-construction storm water management controls” to mean those controls that will treat or control pollutants in storm runoff from the development site on a permanent basis once construction is complete. This updated control measure requires the Permittee to continue to enforce a program to address their post-construction (aka, permanent)

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<sup>39</sup> See EPA 2015b.

<sup>40</sup> “Non-structural requirements” include, but are not limited to, planning, zoning, and other local requirements such as buffer zones. “Structural controls” include, but are not limited to, the use of storage, infiltration basins, or vegetative practices such as rain gardens or artificial wetlands. *See*: 40 CFR§122.34(b)(5)(iii).

<sup>41</sup> See EPA 2012; EPA 2009; 40 CFR §§122.26(d)(iv)(A)(2) and (D), and §122.34(b)(5).

storm water runoff from areas of new development and redevelopment occurring in their jurisdiction.

As previously explained, EPA believes that it is necessary to require site level storm water management controls more broadly within the populated urban watersheds. Therefore, EPA has established lower the site disturbance threshold to trigger the application of appropriate permanent storm water control requirements, from “*sites disturbing 1 or more acres,*” to “*sites disturbing 5,000 ft<sup>2</sup>.*”

EPA is also proposing an onsite storm water management design standard for new development and redeveloped sites, which will prevent the creation of excess storm water discharges- and pollutant loadings- that result from the additional impervious surfaces associated with urban development. Use of onsite storm water management controls at new and redevelopment sites proactively protects Idaho receiving waters, and ensures that such water quality protections continue over time.

It is well understood that uncontrolled runoff from new development and redeveloped areas negatively affects receiving water bodies.<sup>42</sup> Pavement and other impervious surfaces in urban settings prevent infiltration, and the resulting runoff increases in both volume and velocity, which in turn causes the erosion of stream banks and scouring of streambeds. Fine sediments and pollutants from automobiles, landscape pesticides, and fertilizers enter nearby streams, and can damage fish spawning areas and other aquatic habitat. Traditional storm water management practices typically employ engineered, end-of-pipe practices, which tend to control only peak flow rates and total suspended solids concentrations. Such conventional practices fail to address the widespread and cumulative hydrologic modifications within an urban watershed that increase storm water volumes and runoff rates, and cause excessive erosion and stream channel degradation. Traditional practices also fail to treat for pollutants typically found in urban settings, such as nutrients, pathogens, and metals.<sup>43</sup>

Individual controls on storm water discharges can be inadequate when used as the sole solution to storm water in urban watersheds. Instead, storm water control measures that involve prevention- such as product substitution and better site design, downspout disconnection, and conservation of natural areas - as well as watershed and land use planning, can dramatically reduce both the volume of runoff and pollutant loads from new development. In particular, site-level storm water control measures that harvest, infiltrate, and evapotranspire storm water are critical to reducing the volume and pollutant loading associated with small storms.<sup>44</sup>

“Green infrastructure” is a term used to describe the type of long-term storm water management techniques that are cost-effective, sustainable, and environmentally friendly. Green infrastructure and/or “Low Impact Development” (LID) techniques at new development or redevelopment

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<sup>42</sup> EPA 1985.

<sup>43</sup> Shaver, et al., 2007. Holz, 2008; and Horner, 2008.

<sup>44</sup> NRC 2008.

projects involve both storm water management and land development strategies that emphasize the conservation and integration of natural features with small scale engineered hydrologic controls to more closely mimic predevelopment hydrologic function. A comprehensive approach to long-term storm water management seeks to:

- Preserve, protect and enhance natural landscape features, such as undisturbed forests, meadows, wetlands, and other undisturbed areas that provide natural storm water management;
- Reduce overall land consumption, and use land efficiently, to reduce total watershed or regional impervious cover;
- Recycle land by directing new development to already degraded land, e.g., parking lots, vacant buildings, abandoned malls; and
- Direct storm water into the ground near where it fell through infiltration, prevent rainfall from falling to the ground through interception, return water back to the atmosphere through evapotranspiration, and/or otherwise manage storm water through reuse techniques.<sup>45</sup>

Many MS4 permittees in Idaho currently require onsite retention and infiltration practices at development sites, and integrate aspects of a green infrastructure/LID approach for new development and redevelopment. While existing MS4 permittees became familiar with controlling storm water on new development and redeveloped sites during the previous permit term, EPA is now requiring a consistent, statewide approach to deal with post-construction storm water discharges. Such an approach is warranted because storm water from urbanized areas continues to contribute to impaired water quality in adjacent receiving waters, and such onsite management techniques are known to effectively mitigate these impacts in urban watersheds.

Since 2008, EPA has advocated for local jurisdictions to employ a volume-based approach to storm water management at new and redevelopment sites. This approach includes the design, construction, and maintenance of permanent storm water practices to manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events of a certain size. A volume-based approach is appropriate to include in the MS4GP for Idaho because it directly addresses the need to restore and maintain predevelopment hydrology for duration, rate, and volume of storm water flows.

In the previously issued Phase I MS4 Permit in Idaho, EPA determined the 95<sup>th</sup> percentile storm event volume was an appropriate design target for new development sites, because it provided onsite management for the majority of smaller sized storms typically occurring within the Boise area, and ensures that only the largest sized storms generate runoff from such sites. In addition, this approach employs use of natural treatment and flow attenuation methods that existed on a site prior to human disturbance.

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<sup>45</sup> See: American Rivers 2013; EPA 2006; EPA 1999, at pages 68725 – 68728 and 68759; EPA, et al., 2007; and EPA 2009.

- EPA is proposing in the MS4GP that all MS4 permittees in Idaho incorporate similar onsite stormwater management approaches into their local design guidelines to effectively manage the total rainfall volume from the calculated 95<sup>th</sup> percentile storm event for their geographic area. This approach is intended to enhance the site design specifications, guidelines, and other policy documents that are currently required by existing and new MS4 permittees. The provision provides a consistent, statewide performance expectation for stormwater management at new development and redevelopment sites across all regulated MS4 areas.

EPA acknowledges that, in certain locations, onsite management of the total volume of storm water may not be technically feasible. Therefore, EPA has included several options for alternative storm water mitigation or treatment requirements, in lieu of compliance with the onsite storm water management design standard.

The 95<sup>th</sup> percentile rainfall event is the rainfall event that is greater than 95% of all rainfall events over a period of record (typically > 30 years). This calculation excludes small rainfall events that are 0.1 of an inch or less, because small rainfall events, in general, do not result in any measureable site runoff due to absorption, interception, and evaporation by permeable, impermeable, and vegetated surfaces.<sup>46</sup> EPA proposes in the MS4GP that the MS4 Permittee use their local ordinances or regulatory mechanisms to require the volume of water from storms less than or equal to the 95<sup>th</sup> percentile event to be managed onsite, and not discharged to surface waters, in order to better protect water quality in receiving waters of Idaho.

Using available information from the National Oceanic and Atmospheric Administration representing the 24-hour precipitation data through 2012[NOTE: THIS TABLE WILL BE UPDATED PRIOR TO THE PUBLIC COMMENT PERIOD], EPA analyzed the average rainfall depth occurring within the Permit Areas of the MS4GP. See Table 5. Statewide, approximately 95% of all storms occurring in the MS4GP Permit Areas result in approximately 0.82 inches or less, and range between 0.57 inches to 0.82 inches.

**Table 5: Analysis of the 95th Percentile Storm Runoff Volumes for Idaho MS4 Permit Areas**

Urbanized Area/ Permit Area	Rainfall Depth (in)	NOAA Station Location; Period of Record
	95 <sup>th</sup>	
Coeur d' Alene	0.81888	COEUR D ALENE, ID (GHCND:USC00101956); 1895-2012
Moscow	0.8188	MOSCOW U OF I, ID (GHCND:USC00106152); 1893-2012
Caldwell	0.6102	BOISE AIR TERMINAL, ID (GHCND:USW00024131); 1940-2012

<sup>46</sup> See: Hirschman and Kosco, 2008.

Urbanized Area/ Permit Area	Rainfall Depth (in)	NOAA Station Location; Period of Record
	95 <sup>th</sup>	
Nampa	0.5708	NAMPA 2 NW, ID US ZIP:83687; 1948-2012
Boise	0.6102	BOISE AIR TERMINAL, ID (GHCND:USW00024131); 1940-2012
Lewiston	0.6299	LEWISTON NEZ PERCE CO AIRPORT, ID (GHCND:USW00024149); 1940-2012
Pocatello	0.6495	POCATELLO REGIONAL AIRPORT, ID (GHCND:USW00024156); 1939-2012
Idaho Falls	0.688	IDAHO FALLS, ID 83402 ZIP:83402; 1913-2012

To accommodate the predicted, incremental increase in storm event volumes over time, EPA believes it is appropriate to establish the statewide design standard for onsite retention in the MS4GP as a calculated runoff volume (i.e., as the runoff volume associated with the 95<sup>th</sup> percentile storm). EPA believes that such an expression is preferred over a static, specific rainfall amount (e.g., “0.6 inches total rain”) or a stated volume calculated from a statistical storm frequency return interval that is based on historic rainfall data. Using the climate change projections in the EPA’s *Climate Resilience Evaluation and Analysis Tool* (CREAT), EPA evaluated the extreme storm event return interval for 24-hour storm events in each of the Permit Areas covered by the Idaho MS4GP.<sup>47</sup> These projections reflect the changes in climate conditions for 30-year averages centered around the years 2035 and 2060, compared to historical or present-day climate conditions under a variety of scenarios. Under all climate scenarios, the predicted trends for all MS4 Permit Areas covered by the MS4GP demonstrate a general increase in ambient temperatures throughout the year, as well as increased magnitudes of storms for all return frequencies (i.e., the 5 year, 10 year, . . . , and 100 year events). The projections also suggest a significant decrease in summer precipitation throughout the state, balanced by increased precipitation in other seasons. In anticipation of this incremental predicted climate change, EPA believes it to be more effective to express a design standard for onsite storm water retention as a calculated runoff volume in order to define the long term performance expectation for increased water quality protection.

EPA encourages MS4 permittees to explore the use of multiple techniques, like water reuse and/or water harvesting, in addition to infiltration techniques, as a possible means to control runoff volumes from new development and redevelopment sites in their areas. EPA believes that a design standard target, requiring the capture of runoff volumes representing the 95<sup>th</sup> percentile storm, for new development and redevelopment sites will enhance the long-term water quality protection by reducing pollutant loadings into the impaired receiving waters listed in Table 3.

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<sup>47</sup> The *Climate Resilience Evaluation and Analysis Tool* (CREAT) is the EPA-developed software to assist drinking water and wastewater utility owners and operators in understanding potential climate change threats, and in assessing the related risks at their individual utilities; it is available online at <http://water.epa.gov/infrastructure/watersecurity/climate/creat.cfm>. EPA Region 10’s analysis of the extreme storm event return interval for the Idaho MS4GP Permit Areas is available as part of the Administrative Record.

The other components proposed for this control measure are summarized below:

**Permit Part 3.3.1** establishes a compliance deadline of four years from the permit effective date for MS4 operators to update their existing runoff control program, and/or to impose the new program components, within the Permit Area. EPA believes this timeframe is justified to allow MS4 Permittees to adjust their existing programs as necessary to apply the provisions on a wider range of projects within the Permit Area.

**Permit Part 3.3.2**, as explained above, requires the permittee to update their ordinance or other regulatory mechanism to incorporate an onsite retention standard for new development and redevelopment sites that disturb 5,000 square feet or more. The provision allows for alternative mitigation or treatment alternatives in situations where complete onsite retention of the target volume is infeasible. Developed land changes the hydrology of sites, leading to higher storm water discharge volumes and higher pollutant loads. The purpose of this design standard is to help maintain or restore stable hydrology in nearby receiving waters, and to better protect water quality from the impacts of post-construction storm water flows from development within the Permit Area.

**Permit Part 3.3.3** requires the permittees to maintain written specifications for the approved or acceptable permanent storm water controls for their jurisdiction.

**Permit Part 3.3.4** requires the permittee to review and approve site plans for permanent storm water controls. Specific standards are a critical component of the program, but even the best local requirements must be supported by a review component to ensure that the locally established performance standards are met. To comply with this requirement, the Permittee must have the authority to withhold approvals when it determines that the site does not meet the applicable design or control standards.

**Permit Part 3.3.5** outlines the requirement for inspection and enforcement of permanent storm water controls. Inspection of permanent control measures is key to ensuring the protection of water quality. Without periodic inspection or maintenance, the permanent control measures become pollutant sources, rather than a means of reducing pollutants. An effective local inspection process, combined with appropriate corrective enforcement if necessary, helps to ensure that onsite controls are built according to approved plans and specifications, and that proper materials and construction techniques are used.

**Permit Part 3.3.6** addresses the requirement to ensure the long-term operation and maintenance of permanent storm water controls through use of a database inventory to track and manage the operational condition of permanent storm water controls within its jurisdiction. Ongoing maintenance is necessary to ensure that the BMPs will continue to perform as designed. In fact, lack of adequate maintenance is the primary shortcoming for most local storm water programs across the country. As with any infrastructure, deferred maintenance can increase costs and negatively affect receiving waters. Unmaintained BMPs will ultimately fail to perform their design functions, and can become a nuisance or pose safety problems.

**Permit Part 3.3.7** requires the Permittee to ensure that both their staff and appropriate local audiences are sufficiently educated regarding the selection, design, installation, operation, and maintenance of permanent storm water controls.

#### ***5. Storm Water Infrastructure and Street Management (MS4GP Part 3.4)***

Municipal operation and maintenance is an integral part of all SWMPs, and, when coupled with good housekeeping and pollution prevention principles, reduces the risk of water quality problems.

The requirements for this control measure are outlined in the federal regulations for Phase II MS4s at 40 CFR §122.34(b)(6) (*Pollution Prevention/Good Housekeeping for Municipal Operations*) and for Phase I MS4s at 40 CFR §§122.26(d)(2)(iv)(A)(1), (3), (4), and (6). These provisions require the implementation of an operation and maintenance program that includes a staff training component, and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The Phase I MS4 requirements specifically mention appropriate operation and maintenance practices for streets, roads and highways to reduce impacts on receiving waters.

Permittees have been required to develop and implement an operation and maintenance program “intended to prevent or reduce pollutant runoff from municipal operations”; to develop an employee training program; and to prepare site-specific storm water pollution prevention plans (SWPPPs) at the Permittee’s own maintenance buildings and similar facilities. EPA is clarifying the expectations for this control measure by adding more explicit provisions that address the operation and maintenance of specific activities. Because roads and streets function as an integral part of the drainage conveyance system in many urban Idaho areas, EPA is adding specific provisions for the appropriate stormwater management through operation and maintenance activities for roads and streets.

EPA has retitled this mandatory requirement as *Storm Water Infrastructure and Street Management*, in acknowledgement of the broad and inclusive scope of this SWMP control measure.

In previously issued MS4 permits, EPA included the requirement for mapping the MS4 pipes and outfalls in the permit section related to illicit discharge detection and elimination. Because maintaining an updated map of the MS4 directly reflects the overall understanding and management of the storm water/MS4 infrastructure, EPA has chosen to move the requirement for MS4 mapping to this section of the MS4GP.

All Permittees must continue to focus on maintenance of their Permittee-owned portions of the MS4s to protect water quality. Because of the diverse nature of the Permittees’ MS4 facilities (which include the streets and parking lots, but also storm water ponds, underground pipes, drainage ditches, etc.), appropriate procedures and schedules for inspection and maintenance are necessary for each type of infrastructure/facility. The operating procedures should include a protocol for testing and safely disposing of any waste materials and decant water.

**Permit Part 3.4** requires that all Permittees properly operate and maintain their MS4s, associated Permittee-owned/operated facilities, and related activities, to prevent or reduce the discharge of pollutants from the MS4 in accordance with the Permit.

Individual components of the Storm Water Infrastructure and Street Management control measure are summarized below:

**Permit Part 3.4.1** establishes a compliance deadline of three years from the permit effective date for all MS4 operators to update their existing runoff control program, and/or to fully impose any new program components, within the Permit Area. EPA believes this timeframe is justified to allow Permittees adequate opportunity to adjust their existing programs, as necessary, and ensure the required actions are sufficiently addressed within the Permit Area.

**Permit Part 3.4.2** continues to require all MS4 Permittees to maintain a current MS4 map, and has added a requirement for an accompanying MS4 Inventory of the features that comprise the MS4 system. EPA has refined the expected content of the MS4 Outfall Map and Inventory, and requires these updated materials be submitted to EPA as part of the 4<sup>th</sup> Year Annual Report. The purpose of the outfall inventory is to record and verify outfall locations and other descriptive characteristics. EPA expects that each MS4 operator knows the locations and characteristics of all outfalls that it owns, as well as where they discharge. Permittees are encouraged to couple this inventory with the dry weather screening and investigation requirements in Permit Part 3.5.

**Permit Part 3.4.3** outlines EPA's expectations for the inspection of all Permittee catch basins and inlets at least every two years, and requires appropriate cleaning and/or maintenance action based on those inspections.

**Permit Part 3.4.4** requires Permittees to review and update their operation and maintenance procedures for streets, roads, highways and parking lots comprising more than 3,000 square feet of impervious surface and that are owned, operated, and/or maintained by the Permittee, to ensure such procedures are protective of water quality and effectively reduce the discharge of pollutants through the MS4.

**Permit Part 3.4.5** requires Permittees with street maintenance responsibilities to ensure that road material stockpiles (such as sand, salt, or sand with salt stockpiles) are managed in a manner that prevents pollutants in runoff from discharging to the MS4 or into any receiving waterbody. An inventory of all such street materials must be maintained. Prior to the permit expiration date, the Permittee must assess each of their storage locations for water quality impacts, and must describe any structural or non-structural improvements made by the Permittee to prevent runoff from discharging into the MS4 or directly into a receiving water.

**Permit Part 3.4.6** establishes EPA's minimum expectations for street, road, highway and parking lot sweeping, and has included a requirement that Permittees responsible for such activities evaluate and improve equipment and practices used for sweeping arterial and collector streets.

**Permit Part 3.4.7** requires Permittees to review and update their operation and maintenance procedures for other municipal activities, and ensure such procedures protect water quality and reduce the discharge of pollutants through the MS4.

**Permit Part 3.4.8** requires the Permittees to ensure that their staff, and others operating in public areas owned or operated by the Permittees, are appropriately handling the use of pesticides, herbicides, and fertilizers.

**Permit Part 3.4.9** requires Permittees to manage onsite materials at their maintenance yards and to prevent pollutants in storm water runoff through use of storm water pollution prevention plans (SWPPPs). Plans developed for such locations can use the basic SWPPP framework identified in various EPA guidance materials, and may follow a “template plan” to establish basic requirements that can be tailored to the location/responsible staff.

**Permit Part 3.4.10** establishes expectations for the ongoing control of litter within the Permit Area.

**Permit Part 3.4.11** requires appropriate training for responsible staff to ensure that operation and maintenance activities are conducted properly and with attention to potential water quality impacts.

#### **6. *Illicit Discharge Management (MS4GP Part 3.5)***

Permit Part 3.5 addresses illicit discharges and spill response. At a minimum, EPA requires the MS4 operator to have the ability to prohibit, detect, and eliminate illicit discharges from the MS4.

The purpose of this program is to provide ongoing surveillance and deterrence of pollutant loadings caused by illicit discharges into the MS4. Illicit discharges can enter a MS4 through direct connections (*e.g.*, wastewater piping mistakenly or deliberately connected to the storm drains) or through indirect connections (*e.g.*, infiltration into the MS4 from cracked sanitary systems, spills collected by drain inlets, or paint or used oil dumped directly into a drain). Both types of illicit discharge can contribute pollutants to the system, and in turn can negatively affect water quality. Eliminating such illicit discharges from the MS4 improves water quality.

Previously issued Phase II MS4 permits in Idaho contained the four required Illicit Discharge Detection and Elimination (IDDE) program components, based on the regulations at 40 CFR §122.34(b)(3). The existing Phase I MS4 permit contains similar provisions based on 40 CFR §122.26(d)(iv)(B). Together, these regulations broadly require MS4 operators to conduct the following activities to manage illicit discharges into the storm drain system:

- Maintain a map of the MS4 showing the location of all outfalls and names of the receiving waters; (as previously discussed, EPA has moved the requirement to maintain a map of the MS4 to MS4GP Part 3.4.2.);

- Effectively prohibit discharges of non-storm water to the MS4 through the use of an ordinance or other regulatory mechanism, and provide for enforcement of that prohibition as needed;
- Develop and implement a program plan to detect and address non-storm water discharges, including procedures to identify problem areas in the community, determine sources of the problem(s), remove the source if one is identified, and document the actions taken; and
- Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste, and publicize appropriate public reporting of illicit discharges when they occur.

Each of the existing MS4 Permittees has an established program to prohibit, detect, and respond to illicit discharges, as appropriate to their jurisdiction and overall responsibilities. Permittees are encouraged to work together to fully implement this program within their shared Permit Area.

Existing Permittees must continue, and new Permittees must develop, an illicit discharge complaint reporting and response program that includes community education and detailed response procedures. EPA expects these programs to be promoted to the public in concert with the public education requirements in Permit Part 3.6.

Existing Permittees currently have systems and protocols in place to track calls from citizens and to direct reports of discharges/dumping to appropriate staff and/or emergency response authorities. Staff assigned to handle calls should be trained in storm water issues and emergency response in order to gather and transfer the right information to responders. Conducting an investigation as soon as possible after the initial complaint report is crucial to the success of this program.

Sources of illicit discharges are often intermittent or mobile, yet the frequency or severity of such discharges can have lasting effects on water quality. The nature, extent, and conclusions of each inspection should be recorded with the original complaint to provide a full picture of each incident. This information provides detailed information about the types and locations of discharges, their possible sources, and other information pertinent to targeting future inspection, outreach, and education activities. Additionally, a complete file documenting an incident can provide better evidence in cases where a citation or civil penalty is needed.

**In Permit Part 3.5**, EPA defines specific elements for appropriate illicit discharge management by MS4 operators. The individual program components are described in the following paragraphs:

**Permit Part 3.5.1** establishes a compliance deadline of two years from the permit effective date for MS4 operators to update their existing illicit discharge program activities, and/or to fully impose the new program components. New MS4 Permittees may use this compliance date as a target for full implementation within the permit term.

**Permit Part 3.5.2** requires the Permittee to effectively prohibit non-storm water discharges into the MS4 through enforcement of an ordinance or other regulatory mechanism to the extent allowable under Idaho state law. Part 3.5.2 identifies the minimum prohibitions that EPA expects each Permittee to be able to enforce within its jurisdiction, if necessary. EPA has reviewed the local ordinances and regulatory mechanisms currently imposed by existing MS4 Permittees, and EPA generally believes the existing ordinances/mechanisms can fully authorize the specific prohibitions in Part 3.5.2. EPA clarifies that it is unnecessary for a local ordinance/mechanism to cite the individual prohibitions listed in 3.5.2, provided that the Permittee's existing regulatory mechanism would address such discharges, were they to be found discharging into the MS4. This provision provides a minimum expectation for the local ordinance/regulatory mechanism to fully prohibit the breadth of possible non-storm water discharges that could negatively impact water quality.

As previously noted, EPA recognizes that some MS4 operators in Idaho -such as highway districts- may not have the legal authority to enact enforceable local ordinances; in such case, the operator may evaluate and cite to any of its existing policies, standard operating procedures, or other means in ensuring that any non-storm water discharges will be eliminated when needed.

**Permit Part 3.5.3** describes EPA's expectations for a Permittee's Complaint Reporting and Response Program. The Permittee must maintain, and advertise, a publicly accessible and available means for the public to report illicit discharges; such reports must be answered within two day, and records regarding actions taken must be maintained.

**Part 3.5.4** requires Permittees to conduct dry weather outfall screening to identify non-storm water flows. EPA has added prescriptive expectations for prioritized screening of 50% of the outfalls throughout the jurisdiction, for using appropriate screening and monitoring protocols when flows are identified during dry weather, and for recordkeeping/documentation. Data collected through the reporting of illicit discharges and connections, as well as through regular dry weather outfall screening, can reveal important trends in the types of pollutants generated and transported into the MS4. EPA has included a requirement that the Permittees locate and map the occurrences of illicit discharges. EPA recommends that samples taken during dry weather screening should be sampled for pH, total chlorine, detergents, total copper, total phenols, fecal coliform bacteria, and turbidity.

Appropriate threshold limits for dry weather monitoring results are important to helping distinguish pollutant spikes from normal background conditions at a particular outfall. For example, through its Storm Water Investigation Manual, the Ada County Highway District established threshold levels which, when exceeded, result in retesting to determine whether the sample was an isolated event or an ongoing water quality issue. The Permittees should also consider establishing a visual baseline for each outfall type, to establish what constitutes "normal" dry weather flows, and to distinguish between background conditions (uncontaminated ground water sources, for example) versus abnormal, non-storm water flows that are prohibited by the permit.

**Permit Part 3.5.5** requires mandatory follow-up actions for recurring illicit discharges (identified by complaints or through Permittee screening activities); such response activities must begin within 15 days of identifying elevated concentrations of screening parameters, and action must be taken to eliminate problem discharges within 45 days.

**Permit Part 3.5.6** requires Permittees to respond to spills and maintain all appropriate spill prevention and response capabilities, as appropriate to their jurisdiction and overall responsibilities, through coordination with appropriate entities to provide maximum water quality protection at all times.

**Permit Part 3.5.7** requires coordination with appropriate agencies to ensure the proper disposal of used oil and toxic materials by employees and the public. Permittees should encourage recycling and proper disposal of used oil and household hazardous waste through community outreach and public education.

**Permit Part 3.5.8** requires the Permittee to train appropriate municipal and state staff to respond to spills, complaints, and illicit discharges/connections to the MS4. Municipal staff can be the “eyes and ears” of the storm water program if they are trained to identify illicit discharges and spills or evidence of illegal dumping.

### ***7. Education, Outreach and Public Involvement (MS4GP Part 3.6)***

**Permit Part 3.6** addresses the education, outreach, and public involvement requirements consistent with the (combined) relevant regulatory requirements of 40 CFR §122.26(d)(iv) and 40 CFR §§122.34(b)(1) and (2).

The purpose of this SWMP control measure is to reduce or eliminate behaviors and practices that cause storm water impacts on receiving waters, by motivating audience understanding of actions they can take to prevent pollutants in storm water runoff entering the MS4 and local waters. This control measure also provides opportunities for public participation in the review and implementation of the SWMP. Education and opportunities for public involvement are important elements of successful water quality protection programs at the local level. At a minimum, these requirements include the distribution of educational materials to the community (or equivalent outreach activities) about the impacts of storm water discharges on water bodies, and require Permittees to comply with applicable state, tribal, and local public notice requirements when engaging their local stakeholders.

Previously issued MS4 permits in Idaho contain these basic requirements, and all of the existing MS4 Permittees continue to conduct a wide range of successful and creative public education

/public involvement efforts related to storm water management. These programs appear to successfully reach their intended target audiences.

Within different areas, individual permittees with public education resources and expertise have taken the lead on the SWMP public education and outreach, often through shared working arrangements on behalf of their fellow MS4 permittees. EPA strongly encourages such cooperative outreach efforts to continue, and hopes that the MS4GP might inspire additional cross-area and/or interstate outreach and education efforts among the Permittees.

The MS4GP contains the following Education, Outreach and Public Involvement program components:

**Permit Part 3.6.1** establishes a compliance deadline of one year from the permit effective date for MS4 operators to begin their existing public education, outreach, and public involvement program, and/or to impose new program components, within the Permit Area. EPA believes this timeframe is justified to allow MS4 Permittees to adjust the existing programs as necessary within the Permit Area.

**Permit Part 3.6.2** specifies overall requirements for the Education, Outreach and Public Involvement Program. To the extent allowable pursuant to the respective authority granted the individual Permittee under Idaho law, the Permittee must work to educate and engage interested stakeholders in the development and implementation of the SWMP control measures.

**Permit Part 3.6.3** requires the Permittee to distribute at least two educational messages to each of four audiences, for a total distribution of eight educational messages during the term of the Permit; the distribution of such materials to each audience must be spaced at least a year apart.

**Permit Part 3.6.4** identifies the target audiences (i.e., General Public; Business/Industrial/Commercial/Institutions; Construction/Development Professionals; and Elected Officials, Land Use Policy and Planning Staff). For each audience, the permit includes a non-exclusive list of suggested educational topics for the Permittee to consider as its focus during the Permit term.

**Permit Part 3.6.5** requires the Permittee to assess, or to participate in an effort to assess, the understanding and adoption of behaviors by the target audiences

**Permit Part 3.6.6** requires the Permittee to maintain records of their education, outreach, and public involvement activities.

**Permit Part 3.6.7** allows such education efforts to be conducted in conjunction with Education and Training for other specific SWMP Control Measures.

**Permit Part 3.6.8** requires the Permittee to maintain and promote at least one publicly-accessible website to provide access to relevant SWMP information, including the Permittee's SWMP plan, appropriate contact information and educational materials.

## IV. Other EPA Determinations Related to MS4 Discharges in Idaho

### A. Waivers for Small MS4s in Urbanized Areas

NPDES regulations at 40 CFR §122.32(d) and (e) provide a mechanism for granting waivers from MS4 permit requirements to those entities automatically designated as regulated MS4s by virtue of their location within a UA.

**A waiver may be available for small MS4s serving a population of less than 1,000 people within a UA**, where the MS4 is not contributing substantially to the pollutant loadings of a physically interconnected regulated MS4. In addition, if the MS4 discharge includes any pollutant that has been identified as a cause of impairment of any receiving water body, the NPDES permitting authority must determine that storm water controls are not needed based on waste load allocations that are part of an EPA-approved or established TMDL that addresses the pollutant of concern. See also 40 CFR §123.35(d)(1).

**A waiver may be available for small MS4s serving a population of under 10,000 people within a UA**, when storm water controls are not needed based on WLAs that are part of an EPA-approved or established TMDL that address the pollutants of concern. In such cases, the NPDES permitting authority must evaluate all waters of the U.S that receive a discharge from the otherwise regulated MS4, and must determine that such controls are not needed. Alternatively, if a TMDL has not been developed or approved, the NPDES permitting authority must conduct an equivalent analysis that determines sources and allocations for the pollutant(s) of concern. In this situation, a “pollutant(s) of concern” includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation), pathogens, oil and grease, and any pollutant identified as a cause of impairment of any water body that receives a discharge from the MS4. Further, the NPDES permitting authority must have determined that future discharges from the MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts. See also 40 CFR §123.35(d)(2).

At a minimum, any waivers granted by the NPDES permitting authority under 40 CFR §123.35(d)(2) must be reevaluated at least every five years to determine if the information required for granting the waiver has changed, and/or in light of any new evidence provided as part of a petition.

***Editorial Note: THE FOLLOWING TEXT WILL BE UPDATED PRIOR TO THE PUBLIC COMMENT PERIOD:***

EPA previously accepted MS4 permit waiver requests, pursuant to 40 CFR 122.32(d), from the City of Hayden Lake, Fernan Lake Village, and the Idaho National Laboratory. In 2012, EPA also received a MS4 permit waiver request from the Notus-Parma Highway District.

EPA evaluated these waiver requests using the procedure posted on EPA’s Region 10 website, and has determined that it is appropriate to waive these entities from the MS4 permitting

requirements. Materials supporting EPA's decisions are available for review and comment, upon request, as part of the Administrative Record for the MS4GP.

### **B. EPA Consideration of Petitions under 40 CFR §122.26(f)**

MS4s may be required to obtain NPDES permit coverage as a result of a petition submitted to EPA as outlined in 40 CFR §122.26(f). Any MS4 operator may petition EPA to require a NPDES permit for any discharge into an MS4. Any person may petition EPA to require a permit for a discharge composed entirely of storm water which contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States, and/or for the designation of a large-, medium- or small MS4 as defined in 40 CFR §122.26(b). To date, EPA has not received any formal petitions. In the event that EPA receives a petition to designate a MS4 in the future, EPA proposes to use the Agency-recommended evaluation criteria, available on the EPA Region 10 website, to make any final determination within the timeframes required by the federal regulation.

### **C. EPA Designation to Regulate Other MS4s**

***EDITORIAL NOTE: THIS SECTION TO BE UPDATED PRIOR TO THE PUBLIC COMMENT PERIOD:***

EPA has authority under the CWA to designate additional storm water discharges, beyond those defined in the NPDES regulations, as needing to obtain a permit when necessary to protect water quality or remedy localized water quality impacts. See 40 CFR §122.26(a)(1)(v). In addition, EPA must also evaluate and consider designating certain additional small MS4s as needing permit coverage. EPA must consider designation when a candidate MS4 is located outside of an urbanized area and serves a jurisdiction with a population density of 1,000 people per square mile and a population of at least 10,000 people. EPA must also consider whether to designate a candidate MS4 when discharges from the MS4 contribute substantially to the pollutant loadings of a physically interconnected regulated MS4. See 40 CFR §123.35(b)(3) and (4).

EPA developed criteria to use when evaluating other MS4s for designation. The criteria are very similar to the draft guidance recently developed by IDEQ.<sup>48</sup> When EPA decides to designate a MS4 as needing NPDES permit coverage, EPA will provide public notice and an opportunity for the public to comment on the designation decision. Once designated, the MS4 would be eligible to apply for coverage under the MS4GP. Alternatively, EPA could require the candidate MS4 to submit an application for an individual NPDES permit.

***EDITORIAL NOTE: THIS SECTION WILL BE SUBSTANTIALLY UPDATED PRIOR TO THE PUBLIC COMMENT PERIOD:***

EPA proposes to designate discharges from the MS4s owned and/or operated by the following entities as needing NPDES permit coverage; EPA's rationale supporting these decisions are available for public review as part of the Administrative Record for this permit action:

1. City of Moscow, Idaho
2. University of Idaho in Moscow, Idaho

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<sup>48</sup> See: IDEQ 2016.

EPA notified the City of Moscow in 2008 of its intention to designate the City as a MS4 needing permit coverage, and in August 2009, City of Moscow responded to EPA's request for a permit application for MS4 discharges occurring within its jurisdiction. Therefore, EPA is now proposing to cover the City of Moscow as a new MS4 under the MS4GP upon issuance of the final permit.

Upon issuance of the final permit, the University of Idaho in Moscow, Idaho, must submit a Notice of Intent for coverage under the MS4GP pursuant to the deadlines established by MS4GP Part 1.4.

***EDITORIAL NOTE: THIS SECTION TO BE UPDATED PRIOR TO THE PUBLIC COMMENT PERIOD:***

EPA is also evaluating whether certain other MS4 discharges should be regulated in Idaho communities located outside of UAs that the population thresholds identified above. Specifically, EPA must evaluate the following communities: Mountain Home; Rexburg; Blackfoot; Twin Falls; Jerome; and Burley, ID. EPA requests public comment on these additional designation determinations.

## V. Special Conditions for MS4 Discharges to Impaired Waters

Special Conditions in MS4GP Part 4 apply water quality based requirements to specific MS4 discharges into impaired waters.

**Permit Part 4.1** defines the phrase, *Affected Permittee*, to mean any MS4 operator covered by the MS4GP that must uniquely comply with specific requirements based on discharges into a water with an applicable TMDL, as specified in MS4GP Appendix F. The phrase also refers to any permitted MS4 operator required to comply with additional requirements to reduce or eliminate pollutants of concern in the MS4 discharges to an impaired water as described therein.

An *Applicable TMDL* is any TMDL analysis that EPA approved on or before the issuance date of this Permit. An *impaired water* means any water body that does not meet applicable water quality standards for one or more beneficial uses by one or more pollutants, and that IDEQ includes in its 2012 Integrated Report, Appendix J as a Category 5 Water of the state where a TMDL is necessary. The phrase *pollutant of concern* means the water quality parameter that the specific waterbody does not meet.

**Permit Part 4.2** outlines the general requirements for Affected Permittees, and requires the Permittee's compliance with the applicable requirements for the specific receiving waterbody. Affected Permittee(s) must include a description of the TMDL or impaired water-related requirements in their SWMP Plan, and document their interim compliance with the applicable requirements in each Annual Report. The section highlights the four basic categories of additional water quality based requirements identified for Affected Permittees, namely: *Wet Weather/Stormwater Discharge Monitoring*; *Receiving Water Monitoring*; *Additional Dry Weather Outfall Screening*; and *Industrial/Commercial Storm Water Discharge Assessment and Management*. While Parts 4.2.1 through 4.2.3 briefly refer to more detailed monitoring requirements in Part 5 of the MS4GP, EPA proposes that the *Industrial/Commercial Storm Water Discharge Assessment and Management* activities should apply to all Affected Permittees listed in Permit Appendix F. as a reasonable and effective approach to address sources of the impairment pollutants in a particular watershed. Part 4.2 requires the Affected Permittees to select potential Industrial or Commercial sources of the relevant impairment pollutant(s) within their jurisdiction, and to focus education and inspection efforts to ensure that such sources continue to be adequately controlled by the existing SWMP requirements.

**Permit Appendix F.1 through Appendix F.6** contains the pertinent additional requirements for all Affected Permittees, listed by Urbanized Area and Waterbody Assessment Unit.

Appendices 3 and 4 of this document describe, in detail, EPA's rationale for the additional water quality based additional requirements to address MS4 discharges into these impaired waters.

Each TMDL document contains an individual waterbody description and problem assessment, and identifies the receiving water's capacity for the pollutant at issue in order to meet water quality standards. A TMDL analysis sets pollutant waste load and load allocations for all point- and non-point sources, respectively, and includes a margin of safety designed to achieve the

applicable water quality standard. Implementation plans often supplement the TMDL, serving as a road map to identify relevant watershed stakeholders, and explain how to attain the necessary pollutant reductions. Implementation plans often contain recommended BMPs or actions that, when fully implemented, are likely to reduce the discharge of the pollutant of concern consistent with the TMDL's established WLAs and LAs.

In consultation with IDEQ, EPA reviewed and considered each relevant TMDL analysis report and implementation plan (if available), to define applicable storm water management actions for affected Permittees that are appropriate and necessary to control pollutants of concern in the MS4 discharges.

As previously mentioned in Sections II.E and III.C of this document, the primary purpose for EPA's proposed actions in MS4GP Appendix F is to include "*such other provisions as [EPA] determines appropriate for the control of ...pollutants.*" pursuant to CWA Sec.402(p)(3)(B)(iii) for water quality-based effluent limitations for certain regulated MS4. NPDES regulations for general permits state that, where sources within a specific category of discharges are subject to water quality based limits imposed pursuant to 40 CFR §122.44, the sources in that discharge category must be subject to the same water quality based limits to address and reduce the potential MS4 contribution to the identified water quality impairment. Where EPA determines that analytical or other monitoring is necessary to measure relative progress towards meeting the intended pollutant reduction target(s), affected Permittees must conduct such monitoring according to Permit Part 5.

In some UA/waterbodies areas, EPA proposes to continue the unique storm water management actions that are similar to those required during the prior MS4 permit term(s). In other areas, EPA proposes new or updated actions consistent with applicable TMDLs that EPA approved since 2012 (when EPA last issued a final MS4 Permit in Idaho). Where MS4 discharges are likely contributors to a water quality impairment, but a TMDL has not yet been finalized, EPA also proposes new or updated actions in areas where it is necessary to target reductions of specific pollutants of concern in impaired waters.

EPA considered three types of actions to address the applicable TMDL-requirements, assess the presence of pollutants in receiving waters where TMDLs are not yet completed, and/or to further reduce pollutants from MS4 discharges into impaired receiving waters:

1. Actions already addressed by implementation of the SWMP control measures in MS4GP Part 3, (such as implementation of a public education program or ongoing maintenance of the MS4). In such situations, EPA clarifies that the specific TMDL is not listed in MS4GP Appendix F, because for the Affected Permittee or group of Permittees, compliance with Part 3 of the MS4GP constitutes compliance with the specific TMDL.
2. Actions that require an Affected Permittee must refine a specific SWMP requirement to a specific area or activity (such as, focusing their illicit discharge screening program in the drainage area discharging into the impaired water, or investigating businesses within their jurisdiction identified as likely sources of a

pollutant of concern). MS4GP Appendix F lists these actions, with a reference to the basic SWMP program component in Permit Part 3, and identifies the targeted area, activity, and/or implementation timeline;

3. Actions relevant to the MS4 discharge, in addition to the mandatory SWMP, that address the contribution of pollutants of concern in an impaired water body that may or may not yet have an EPA-approved TMDL. For example, EPA includes specific monitoring requirements for certain impairment parameters, and/or includes specific actions/activities to address industrial or commercial sources within the jurisdiction, or to otherwise address a unique pollutant of concern (such as PCBs).

## **VI. Monitoring, Recordkeeping and Reporting Requirements**

### **A. Basis**

Section 308 of the CWA and federal regulation 40 CFR §122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather effluent and surface water data to determine if additional effluent limitations are required and/or to monitor effluent impacts on receiving water quality

Although the MS4 regulations do not explicitly require MS4s to conduct ongoing analytical monitoring, EPA acknowledges that such water quality monitoring is useful and necessary in order to substantiate compliance with permit conditions and/or water quality standards. EPA has stated that it expects such monitoring only in identified locations for relatively few pollutants of concern.<sup>49</sup> Further, EPA's guidance documents specify that, when using narrative BMPs as permit limitations to implement applicable WLAs and load reduction targets for municipal storm water, the NPDES permit must include monitoring activities as necessary to assure compliance with the WLA/target.

MS4 operators must evaluate program compliance, keep records, and submit implementation progress reports, as specified in the federal regulations for storm water at 40 CFR §§122.26(d)(2)(v) and 122.34(g).

The types of monitoring in MS4 permits in Idaho include (1) storm water discharge monitoring to characterize storm water quality; (2) dry weather outfall screening and monitoring as part of the illicit discharge detection and elimination programs; and (3) in certain watersheds, ambient water quality monitoring to characterize water quality conditions.

*NOTE: The preliminary draft MS4GP includes a placeholder for EPA discussion with IDEQ about the appropriateness of including any type of biological monitoring requirements. To date, requirements for biological monitoring, such as sampling fish tissue for methylmercury and/or macroinvertebrate monitoring, have not been included in Idaho MS4 permits. If IDEQ believes*

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<sup>49</sup> See EPA 1999, page 68769.

*that such requirements are appropriate for any of the MS4 Permit Areas, and specifies such requirements, EPA would consider how to include them in the MS4GP.*

EPA organized MS4GP Part 5 by first outlining the requirements for recordkeeping and reporting that are relevant to all regulated MS4 Permittees. The following sections outline more specific provisions related to storm water discharge and receiving water monitoring, including specific requirements for sampling for PCBs; Part 5 concludes with the corresponding quality assurance requirements applicable to different MS4 Permittees based on their receiving water.

**Part 5.1** requires each Permittee to assess their compliance with the requirements of the MS4GP on an annual basis, and to document such evaluation through the submittal of an Annual Report.

#### **B. Recordkeeping Requirements (MS4GP Part 5.2)**

**Part 5.2** requires the Permittee to keep all records required by the MS4GP for a period of at least five years, and submit such records only when requested by EPA. The Permittee's SWMP materials must also be available to the public; MS4 operators may charge a reasonable fee for copies, and may require a member of the public to provide advance notice of their request. As previously described, Part 3.6 also requires the Permittee to provide their SWMP materials to the public electronically via a dedicated website.

#### **C. Reports, Including Electronic Submission and Alternative Formats (MS4GP Part 5.3)**

The MS4GP describes both the schedule and expected content for both SWMP progress reports, and data reports to be submitted to EPA. At a minimum, Permittees must submit their reports to both EPA and IDEQ at the addresses listed in Part 5.4, unless EPA provides an alternative means of reporting, as referenced below. The Annual Reports must contain an evaluation of the SWMP for compliance with the terms of the permit, and documentation of the Permittee's progress towards achieving the implementation goals of the Permit. The Annual Report must also contain a summary of any information that has been collected and analyzed, including relevant data and discharge monitoring reports. A draft Annual Report from in Permit Appendix E will help to streamline the MS4GP reporting process for Permittees.

Permit Part 5.4 instructs the Permittee on the appropriate addresses for the submittal of all reports required by the MS4GP. MS4GP includes new provisions that intend to allow the Permittee the option to submit Annual Reports and other materials or data electronically using NetDMR. NetDMR is a national web-based tool allowing the electronic submittal of NPDES permit via a secure Internet application. NetDMR allows participants to discontinue mailing in paper forms and documents under 40 CFR §122.41 and §403.12. Once it is available for use, the MS4 Permittee may use NetDMR after requesting and receiving permission from the EPA Region 10.

Under NetDMR, all required reports submitted to the EPA may take the form of one or more electronic attachments to a preformatted DMR form. Once a Permittee begins submitting reports using NetDMR, it is no longer required to submit paper copies of reports or documents to the EPA and/or IDEQ.

This web-based tool is still under development for use by the national MS4 Permit program; in the interim, EPA intends to provide all MS4 Permittees covered by the Idaho MS4GP with appropriate reporting formats and instructions that will be compatible with NetDMR. When it becomes available for the MS4 Permit program, EPA will encourage all MS4 Permittees to sign up for NetDMR. EPA is conducting free training on the use of NetDMR as used for other existing NPDES permits. Further information about NetDMR, including upcoming trainings and contacts, is available on the following website: <http://www.EPA.gov/netdmr>.

#### **D. Stormwater Discharge Monitoring**

EPA required storm water discharge monitoring in prior Idaho MS4 permits to fulfill three monitoring objectives: namely, to estimate the pollutant loading (or pollutant loading reductions) discharged from the MS4s; to assess the effectiveness and adequacy of control measures implemented through the applicable MS4 permit; and to identify and prioritize those portions of the MS4 requiring additional controls.

EPA required the Boise/Garden City Area Phase I MS4 permittees to monitor for a list of parameters that was based on the federal regulations for characterization monitoring in preparation of the original Phase I MS4 permit application. EPA subsequently selected different monitoring parameters for some, but not all, of the regulated Phase II MS4s, based on IDEQ's listings of receiving water impairment. In both Phase I and Phase II MS4 permits, EPA tried to address the fundamental absence of monitoring data representing MS4 discharge quality to support IDEQ's TMDL development or TMDL refinement. Table 6 below summarizes the variety of monitoring parameters and collection methods that EPA has previously required or allowed as part of prior Phase I and Phase II MS4 permits in Idaho. Table 6, below, illustrates the basic disparity of these prior data collection efforts.

The Phase I MS4s in Boise/Garden City area have collected seasonal, automated, time-weighted composite storm water discharge monitoring at five locations in the Lower Boise River since 1999. Beginning in 2006, EPA required most of the Phase II MS4 operators discharging to impaired waters to conduct grab samples of MS4 discharges at selected outfalls. Based on an area's rainfall patterns, the required number of grab samples per year varied between 1-6 samples. Unfortunately, EPA did not require these Permittees to submit the data reports or analyses according to any standard format.

The requirements in prior MS4 permits address different watersheds over different implementation timelines, and result in a statewide dataset that is highly variable and difficult to interpret. The Phase I MS4 dataset is the most robust characterization of urban storm water discharges within the Lower Boise River within Ada County. The Phase II MS4 dataset continues to grow as more data points are collected.

Given the inherent difficulty and overall expense associated with MS4 discharge monitoring, EPA has considered various ways to accommodate the need for monitoring options under the MS4GP. One option EPA considered is to eliminate the requirement for MS4 outfall sampling by regulated MS4s, and require only programmatic assessments of SWMP implementation. This option would likely increase the focus on the effectiveness of the Permittee's on-the-ground

implementation, and over time, will provide little objective or illustrative information about receiving water quality or the relative pollutant contribution from MS4 outfalls in each UA. A second option EPA considered allows for individual MS4 permittees to propose their own unique methods of collecting MS4 monitoring data to assess discharge quality; this option may provide maximum flexibility for the MS4 Permittee, and IDEQ, to establish the appropriate sampling necessary for the individual waterbody, but does not result in MS4 discharge information that would be more readily available or even comparable between the UAs in Idaho.

EPA has also considered specifying that storm water discharge monitoring continue in the same manner as currently conducted and directed by the prior MS4 permits.

EPA believes the value of acquiring at least some limited amount of analytical monitoring data (on which to judge the relative success of SWMP control measures, and whether MS4 discharges cause or contribute to violations of Idaho WQS) outweighs any advantage gained from discontinuing the MS4 data collection efforts. Continuing to build upon the limited dataset MS4 characterization dataset statewide, and provide (albeit) limited analytical information for each UA in Idaho, EPA proposes that under the MS4GP, all MS4 permittees discharging to impaired waters conduct wet weather monitoring of all pollutants of concern, at existing MS4 outfall locations.

For Affected Permittees required to monitor stormwater discharges, EPA proposes to revise the list of required monitoring parameters to include a single list of thirteen pollutants of concern as listed below in Table 7. EPA is requiring monitoring of all parameters, which will allow Permittees to begin collection of a comparable set of data that can characterize MS4 discharges across the state.

<b>Parameter</b>	<b>Time Weighted Composite Sampling, Collected by the Phase I MS4 Permittees- At 5 locations in Boise River</b>	<b>Grab sampling, Collected by a Phase II MS4 Permittee- in the Receiving Waters Indicated</b>
Ammonia	Yes	Yes – in Portneuf River, Pocatello Creek
Arsenic – Total	Yes	n/a
Biological Oxygen Demand (BOD5)	Yes	n/a
Cadmium- Dissolved	Yes	n/a
Cadmium- Total	Yes	n/a
Chemical Oxygen Demand (COD)	Yes	n/a
Copper – Dissolved	Yes	n/a
Dissolved Oxygen	Yes	n/a
E. coli	Yes	Yes-in Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain
Flow/Discharge, Volume, in cubic feet	Yes	Yes- in Lake Coeur d’Alene, Spokane River, French Gulch, Fernan Creek Portneuf River, Pocatello Creek, Lower Boise

<b>Table 6: A Comparison of the Parameters used to Characterize Stormwater Discharge Quality in Idaho (Boise Area vs. Other Urban Areas)</b>		
<b>Parameter</b>	<b>Time Weighted Composite Sampling, Collected by the Phase I MS4 Permittees- At 5 locations in Boise River</b>	<b>Grab sampling, Collected by a Phase II MS4 Permittee- in the Receiving Waters Indicated</b>
		River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain
Hardness (as CaCO <sub>3</sub> )	Yes	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek
Lead - Dissolved	Yes	n/a
Lead – Total	Yes	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek
Mercury – Total	Yes	n/a
Nitrate + Nitrite	Yes	Yes- in Portneuf River , Pocatello Creek
Nitrogen, Total	n/a	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain
Nitrogen, Total Kjeldahl (TKN)	Yes	n/a
Oil and Grease	n/a	Yes- in Portneuf River, Pocatello Creek
Orthophosphate, Dissolved	Yes	n/a
pH	Yes	n/a
Phosphorus - Total	Yes	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain
Polychlorinated Biphenyls (PCBs)	n/a	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek
Temperature	Yes	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek
Total Dissolved Solids	Yes	n/a
Total Suspended Solids (TSS)	Yes	Yes – from outfalls discharging to Lake Coeur d'Alene; Spokane River; French Gulch; Fernan Creek; Portneuf River; Pocatello Creek; Lower Boise River; Indian Creek; Mason Creek; Wilson Drain; Willow Drain
Turbidity	Yes	n/a
Zinc – Dissolved	Yes	n/a
Zinc- Total	Yes	Yes – from outfalls discharging to Lake Coeur d'Alene; Spokane River; French Gulch; Fernan Creek

EPA proposes that Affected Permittees continue to monitor storm water discharges from the existing MS4 outfall monitoring locations, and EPA encourages permittee to work together in a collaborative, watershed-based fashion to accomplish such sampling during the permit term.

EPA proposes to eliminate the collection of manual grab samples from MS4 discharges, and instead focus on the collection of automated flow-weighted composite samples reflecting a revised list of parameters, as indicated in Table 7 below. In addition, EPA is amending the objective of the storm water discharge monitoring, and intends for the required monitoring to characterize MS4 discharges occurring at a given location from at least two individual storm

events during each calendar year. The overall objective of such monitoring is to assess the quality of the affected Permittee’s MS4 discharges relative to the Idaho water quality standards and associated TMDL or watershed goals.

EPA acknowledges that Permittees should revise existing Quality Assurance Project Plans to accommodate such monitoring. Ideally, EPA envisions the possible development of a statewide template QAPP for the desired MS4 data collection effort in order to guide the consistent collection of wet weather discharges. EPA encourages regulated MS4s to conduct such monitoring through a cooperative consortium of all MS4 entities within a specific watershed or UA.

**Table 7: Proposed Parameters for Stormwater Discharge Monitoring under the MS4GP**

<i>Cadmium, Total</i>	
<i>Copper, Total and Dissolved</i>	
<i>Dissolved Oxygen</i>	Oil and Grease
	Orthophosphate, Dissolved
<i>E. coli</i>	pH
Flow/Discharge, Volume, in cubic feet	Phosphorus - Total
Hardness (as CaCO3)	Polychlorinated Biphenyls (PCBs)*
Lead – Total	Temperature
Nitrogen, Total	Total Suspended Solids (TSS)
Total Inorganic Nitrogen, as Nitrate + Nitrite +Ammonia	Zinc- Total

**E. Surface Water Monitoring**

Affected MS4 Permittees in the Pocatello UA discharging to the Portneuf River must continue receiving water monitoring at the established locations upstream and downstream of the Pocatello UA.

**F. Dry Weather Discharge Screening**

Monitoring MS4 flows during dry weather is a necessary component of the IDDE program outlined in Permit Part 3.5, and EPA has proposed enhanced dry weather discharge characterization for affected MS4 permittees in compliance with the Lower Boise River Phosphorus TMDL. See Section II.F.6 and Appendix 3.D.2 of this document for additional discussion of these requirements.

**G. Summary of Monitoring Requirements (MS4GP Part 5.5)**

The MS4GP requires monitoring only by Affected Permittees discharging into impaired waters, as discussed previously in Section V of this document.

**Part 5.5.1** outlines the objectives of the MS4 monitoring plans, and proposes that monitoring activities in compliance with the MS4GP begin immediately upon revising the applicable monitoring and quality assurance project plan, 180 days after the permit effective date.

**Part 5.5.2** describes a proposed option for two or more MS4 permittees to share responsibility to accomplish any of the required monitoring required for compliance with applicable requirements in Part 4 or Appendix F.

**Part 5.5.3** cites the federal requirement that all samples must be representative of the volume and nature of the monitored discharge.

**Part 5.5.4** specifies that any additional monitoring data collected, beyond that which is required by the MS4GP, must be submitted to EPA as required by federal regulations at 40 CFR Part 122.

**Part 5.5.5** summarizes (as described above) the requirements for Affected Permittees to conduct wet weather storm water discharge monitoring pursuant to Permit Part 4, Appendix F.

**Part 5.5.6** summarizes the requirements for Affected Permittees to conduct surface water quality sampling pursuant to Permit Part 4. In general, EPA is proposing surface water monitoring only for Affected Permittees covered by the MS4GP in specific watersheds for pollutants of concern as identified by IDEQ that the water quality criteria are dependent, in conjunction with the need to collect data for determining whether the MS4 discharges are attaining the goals of the applicable TMDL.

Part 5.5.7 outlines the requirements for monitoring of PCBs in storm water discharge and in sediment collected from catch basins using EPA Method 1668C.,

**Part 5.2.8** *(TBD-placeholder for any permit requirements for biological or other media monitoring (such as mercury fish tissue sampling or benthic macroinvertebrate sampling as directed by IDEQ, as well as sediment or materials sampling associated with PCBs) to assess the impacts of regulated MS4 discharges on receiving waters impaired for biological indicators and/or toxic constituents.*

**Part 5.5.9** describes the requirements for Quality Assurance Project Plans associated with any monitoring. If applicable, the MS4 Permittee is required to update (or for new Permittees, create) their Quality Assurance Plan within 180 days of the effective date of the final permit. The Quality Assurance Plan must include of standard operating procedures the Permittee must follow for collecting, handling, storing and shipping samples, laboratory analysis, and data reporting. Permittees must complete a new or revised QAPP, and must be acknowledge its completion as part of the 1<sup>st</sup> Year Annual Report. Permittees must provide a copy of the QAPP to the EPA and the IDEQ upon request

**Part 5.5.10** clarifies EPA's expectations regarding use of appropriate analytical methods when conducting monitoring in compliance with the MS4GP.

## **VII. Other Permit Conditions**

### **A. Standard Permit Provisions**

**Parts 6 and 7** of the MS4GP contain standard regulatory language that must be included in all NPDES permits. The standard regulatory language covers requirements such as monitoring, recording, and reporting requirements, compliance responsibilities, and other general requirements.

### **B. Duty to Reapply and Continuation of the Expired General Permit**

In accordance with 40 CFR §122.46(a), NPDES permits shall be effective for a fixed term not to exceed five (5) years. Therefore, the MS4GP will expire five years from the effective date of the final

permit. Part 7.2 of the MS4GP requires any MS4 that intends to continue its operational control and management of MS4 discharges to submit a NOI of coverage under a new GP, or an individual permit application.

MS4GP Part 7.2.1 of the MS4GP describes the procedure that applies if EPA does not reissue the MS4GP prior to its expiration date. If the MS4GP is not reissued or replaced prior to its expiration date, existing MS4 discharges will be authorized under an administrative continuance, in accordance with the Administrative Procedure Act and 40 CFR §122.6, and the conditions of the MS4GP remain in force and in effect for discharges authorized prior to permit expiration. A Permittee will be covered by the MS4GP following the submittal of a complete NOI at least 180 days prior to the expiration date of the MS4GP, until EPA provides subsequent authorization under a reissued or replacement Permit. Alternatively, EPA may issue or deny an individual permit for the Permittee's discharge; or EPA may formally decide not to reissue the MS4GP, at which time the Permittee must seek authorization under an alternative general permit or an individual permit.

## VIII. Other Legal Requirements

### A. Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high, and adverse human health or environmental effects of its programs, policies, and activities.” The EPA strives to enhance the ability of overburdened communities to participate fully and meaningfully in the permitting process for EPA-issued permits, including NPDES permits. “Overburdened” communities can include minority, low-income, tribal, and indigenous populations, or communities that potentially experience disproportionate environmental harms and risks. As part of an agency-wide effort, the EPA Region 10 will prioritize enhanced public involvement opportunities for EPA-issued permits that may involve activities with significant public health or environmental impacts on already overburdened communities. For more information, please visit <http://www.epa.gov/compliance/ej/plan-ej/>.

As part of the permit development process, the EPA Region 10 conducted a screening analysis to determine whether this permit action could affect overburdened communities. The EPA used a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify permits for which enhanced outreach may be warranted.

The Nampa/Caldwell, Moscow, and Pocatello/Chubbuck areas are potentially overburdened communities because of **[EPA will update this section prior to the public comment period to be described, list the primary EJScreen indices that exceed the 80th percentile]**. In order to ensure that individuals near these MS4 areas are able to participate meaningfully in the permit process, EPA is conducting the following enhanced outreach activities **[describe here]**.

Regardless of whether a regulated MS4 discharge is located near a potentially overburdened community, the EPA encourages Permittees to review (and to consider adopting, where appropriate) Promising Practices for Permit Applicants Seeking EPA-Issued Permits: Ways To Engage Neighboring Communities (see <https://www.federalregister.gov/articles/2013/05/09/2013-10945/epa-activities-to-promote-environmental-justice-in-the-permit-application-process#p-104>).

## **B. Endangered Species Act**

The Endangered Species Act requires federal agencies to consult with the National Oceanic and Atmospheric Administration – National Marine Fisheries Service (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS) regarding potential effects an action may have on listed endangered species.

EPA is currently evaluating the potential effects of the proposed MS4Gp, through development of a Biological Evaluation (BE). The BE will determine whether issuance of the MS4GP is likely to adversely affect any threatened or endangered species. EPA will complete its preliminary evaluation (*In The Near Future- Prior To Proposing The Permit For Public Comment*) and has begun preliminary consultation discussions with NOAA-Fisheries and USFWS as required by the Endangered Species Act.

## **C. Essential Fish Habitat**

Essential fish habitat (EFH) is the waters and substrate (sediments, etc.) necessary for fish spawning, breeding, feeding, or growing to maturity. The Magnuson-Stevens Fishery Conservation and Management Act requires EPA to consult with the NOAA-Fisheries if a proposed action has the potential to adversely affect (by reducing the quality and/or quantity of) EFH. EPA is currently evaluating the impacts of EPA's issuance of this permit and will complete EFH consultation if necessary in the near future.

The EFH regulations define an adverse effect as any impact which reduces quality and/or quantity of EFH and may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species' fecundity), site specific, or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. The EPA has prepared an EFH assessment which appears in **(insert reference to appropriate portion of the BE document/appendix)**.

Because of the location of these municipal storm water discharges, EPA has determined that the issuance of the permit will not affect any EFH species in the vicinity of the discharges, therefore consultation is not required for this action.

EPA determined that issuance of this permit is not likely to adversely affect EFH near the MS4 discharges. The EPA has provided NOAA Fisheries with copies of the draft permit and fact sheet during the public notice period. EPA will consider any comments received from NOAA Fisheries regarding EFH prior to the issuance of the MS4GP.

## **D. National Historic Preservation Act**

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of federal undertakings on historic properties listed on, or eligible for listing on, the National Register of Historic Places. The term federal "undertaking" in NHPA regulations to include a project, activity, or program of a federal agency that can result on changes in the character or use of historic properties, if nay historic properties are located in the area of potential effects for that project, activity or program. See 36 CFR §802(o). Historic Properties include prehistoric or historic districts, sites, buildings, structures, or objects that are included in, or are eligible for inclusion in, the National Register of Historic Places. See 36 CFR §802(e).

Federal undertakings include the EPA's issuance of a general NPDES permit. To ensure compliance with the NHPA, the MS4GP authorizes storm water discharges only under the following circumstances:

1. The MS4 storm water discharges, and discharge related activities by the Permittee, do not affect a property listed or that has been reviewed and determined eligible for listing on the National Register of Historic Places; or
2. The MS4 operator complies with a written agreement with the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) that outlines all measures that will be undertaken to mitigate or prevent adverse effects to historic properties.

These requirements are implemented via the eligibility requirements of the MS4GP (see Permit Part 1.3.3 and Permit Appendix D) which restricts eligibility for new MS4 applicants to those storm water discharges and discharge related activities which meet either of the above criteria. These criteria are based on the similar criteria used by the EPA Regions 1 (Northeastern U.S.) and 6 (Southwestern U.S) in those respective MS4 general permits. Region 10 believes these conditions are appropriate for new MS4 applicants. Appendix D of the MS4GP contains additional direction to new permit applicants that submit NOIs requesting coverage under the MS4GP after the effective date.

EPA previously addressed these NHPA conditions in prior MS4 permits issued in Idaho. With regard to the existing and new regulated MS4s listed in Permit Appendix A.1, the reduction of pollutants in runoff from these MS4s will not result in the disturbance of any site listed or eligible for listing in the National Historic Register. EPA believes that actions of existing and new regulated MS4s listed in Permit Appendix A.1 in accordance with the MS4GP will substantively comply with the terms and conditions of the National Historic Preservation Act. Therefore, EPA finds that the MS4s listed in Appendix A.1 are eligible for coverage under the MS4GP without further documentation. EPA reminds all Permittees that they must comply with applicable state, Tribal and local laws concerning protection of historic properties and must include documentation of permit eligibility in the Storm Water Management Program Plan document.

EPA has provided a copy of the permit proposal package to the Idaho State Historic Preservation Office.

#### **E. National Environmental Policy Act (NEPA) [42 USC § 4321 et seq.] and Other Federal Requirements**

Regulations at 40 CFR §122.49, list the federal laws that may apply to the issuance of permits i.e., ESA, National Historic Preservation Act, the Coastal Zone Act Reauthorization Amendments (CZARA), NEPA, and Executive Orders, among others. The NEPA compliance program requires analysis of information regarding potential impacts, development, and analysis of options to avoid or minimize impacts; and development and analysis of measures to mitigate adverse impacts. Because regulated MS4s do not have any EPA-promulgated effluent limitation guidelines (ELGs) or new source performance standards (NSPS) specific to their discharges, EPA has determined that no Environmental Assessments (EAs) or Environmental Impact Statements (EISs) are required under NEPA.

Idaho is not located in the U.S. coastal zone, so CZARA does not apply. In addition, the MS4GP will not authorize the construction of any water resources facility or the impoundment of any water body or have any effect on historical property. No regulated MS4s are located in areas with Wild and Scenic River designations. Therefore, EPA has determined that the Fish and Wildlife Coordination Act, 16 USC § 661 et seq., and the Wild and Scenic Rivers Act, 16 USC § 470 et seq., also do not apply to the issuance of the MS4GP.

## **F. State Certification**

Section 401 of the CWA, 33 USC 1341, requires the EPA to seek a certification from the state that the conditions of the MS4GP are stringent enough to comply with Idaho WQS, including the state anti-degradation policy, before issuing the final permit. Federal regulations at 40 CFR §124.53 allow for the state to stipulate more stringent conditions in the permit, if the certification cites the CWA or state law upon which that condition is based.

A certification must include statements of the extent to which each condition of the permit can be less stringent without violating the requirements of state law. EPA previously requested that the IDEQ review the Draft MS4GP and provide a draft certification pursuant to 40 CFR §124.53. The IDEQ provided EPA with their draft CWA § 401 certification for the draft GP on XXX. See Appendix 6 of this document..

After EPA evaluates and addresses all public comments, EPA will send a preliminary final MS4GP to the State to begin the final certification process. If the State authorizes different or additional conditions as part of the certification, EPA may change the permit to reflect these conditions.

## **G. Permit Expiration**

The permit will expire five years from the effective date.

## **H. Presidential Oversight of Federal Regulations [Executive Order 12866]**

The White House Office of Management and Budget (OMB) has exempted this action from the review requirements of Executive Order 12866 providing for presidential oversight of the regulatory process pursuant to Section 6 of that order. EPA has determined that this general permit is not a “significant regulatory action” under the terms of Executive Order 12866 and is therefore not subject to OMB review.

## **I. Economic Impact [Executive Order 12291]**

EPA has reviewed the effect of Executive Order 12291 on the Draft MS4GP and has determined that it is not a major rule under that order.

## **J. Paperwork Reduction Act [44 USC § 3501 et seq.]**

EPA has reviewed the requirements imposed on regulated facilities in the Draft MS4GP under the. Under the provisions of the Paperwork Reduction Act, 44 USC 3501 et seq. OMB previously approved the information collection requirements in submissions the Agency made for the NPDES permit program, and assigned OMB control numbers 2040-0086 and 2040-0110.

## **IX. References**

The following is a partial list of references supporting the development of the Idaho MS4GP; additional references are available in the Administrative Record for this permit action.

American Rivers 2013. *Permitting Green Infrastructure: A Guide to Improving Municipal Storm water Permits and Protecting Water Quality*; American Rivers. January 2013.

*Defenders of Wildlife v. Browner*. 191 F.3d 1159 (9th Cir. 1999).

EPA 1985. National Urban Runoff Program (NURP).

EPA 1990. NPDES Storm water Phase I Regulations Final Rule (55 FR 47990, November 16, 1990)

EPA 1996. *Interim Permitting Policy for Water Quality Based Effluent Limitations in Storm Water Permits* (61 FR 43761, November 26, 1996).

EPA 1999 NPDES Storm water Phase II Regulations Final Rule (64 FR 68722, Dec. 8, 1999).

EPA 2002. EPA Office of Water Memo (November 22, 2002) “*Establishing Total Maximum Daily Load Waste load Allocations for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs.*”

EPA 2006. *National Management Measures to Control Nonpoint Source Pollution From Urban Areas*, EPA-841-B-05004, January 2006.

EPA et al, 2007a. *Report to West Virginia Department of Environmental Protection: Options for WV’s General Storm water Permit under NPDES Phase II*, US EPA and Tetratex, Inc, November 2007.

EPA 2007b. EPA [Fact sheet for IDS028118 \(City of Caldwell\)](#) pages 21-23,

EPA 2009. *Technical Guidance on Implementing Section 438 of the Energy Independence and Security Act*, US EPA, December 2009.

EPA 2010. *MS4 Permit Improvement Guide*, April 2010. EPA 833-R-10-001.

EPA 2012. EPA Region 10’s *Response to Comments on the NPDES Permit No. IDS-027561, December 11, 2012 – Final.* EPA Responses to Comments #18 and #22.

EPA 2012b. [Fact Sheet for IDS027561 \(Boise-Garden City Area MS4s\)](#), pages 22-25

EPA 2014a. EPA Office of Water memo (November 26, 2014) “*Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs;"* and

EPA 2014b. EPA Office of Water document (June 2014) “*Municipal Separate Storm Sewer System Permits- Post Construction Performance Standards and Water Quality Based Requirements- A Compendium of Permitting Practices,*” June 2014. EPA 833-R-14-003.

EPA. 2015a. *Helpful Practices for Addressing Point Sources and Implementing TMDLs in NPDES Permits*, Prepared by EPA Region 9; June 2015.

EPA 2015b. *Small Residential Lot Stormwater Pollution Prevention Plan Template - 2012 EPA Construction General Permit*. December 2015.  
cgp\_small\_residential\_lot\_swppp\_template\_final\_draft\_11-30-15\_0.docx

EPA 2016. *NPDES Municipal Separate Storm Sewer System General Permit Remand, Proposed Rule* (81 FR 415, January 6, 2016.)

Hirschman and Kosco. 2008. *Managing Storm water in Your Community: A Guide for Building an Effective Post-Construction Program*, Center for Watershed Protection,.

Holz testimony, 2008. Written Direct Testimony of Thomas W. Holz (Phase I) *POLLUTION CONTROL HEARINGS BOARD FOR THE STATE OF WASHINGTON PCHB NOS. 07-021, 07-026, 07-027, 07-028, 07-029, 07-030, 07-037*. Horner, 2008. Direct Testimony of Dr Richard Horner (Phase 1); *POLLUTION CONTROL HEARINGS BOARD FOR THE STATE OF WASHINGTON PCHB NOS. 07-021, 07-026, 07-027, 07-028, 07-029, 07-030, 07-037*.

IDEQ 2016. *Idaho Pollutant Discharge Elimination System Designation Criteria and Selection Process for Small Municipal Separate Storm Sewer Systems*. Idaho Department of Environmental Quality, January 2016. Available at: <https://www.deq.idaho.gov/media/60177866/ipdes-designation-criteria-selection-process-small-municipal-separate-storm-sewer-systems-012916.pdf>

National Research Council (NRC). 2008. *Urban Stormwater Management in the United States*, Committee on Reducing Stormwater Discharge Contributions to Water Pollution of the National Research Council; October 2008.

Shaver, Horner, et al. 2007. *Fundamentals of Urban Runoff Management: Technical and Institutional Issues*, 2nd Edition, 2007.

U.S Bureau of the Census. 2011. Bureau's definition of an Urbanized Area for the purposes of the Year 2010 Census is found in Federal Register, August 24, 2011. Vol. 76 No. 164 p. 53030. At <http://www.census.gov/geo/reference/pdfs/fedreg/fedregv76n164.pdf>

Tetra Tech's Review of State Performance Standards prepared for EPA's development of the SW rulemaking re: size thresholds

EPA *Fact Sheet for IDS027561 (Boise-Garden City Area MS4s)*, pages 22-25

EPA *Fact sheet for IDS028118 (City of Caldwell)* pages 21-23,

## Appendix 1: Regulated MS4s Discharges to be Authorized under the MS4GP

**EDITORIAL NOTE: THIS TABLE IS BEING UPDATED PRIOR TO THE START OF THE PUBLIC COMMENT PERIOD,** This Appendix lists relevant information considered by EPA during the development of the MS4GP related to existing MS4 Permittees, new MS4 applicants, and newly regulated MS4s. Further information is available as part of the Administrative Record. EPA is proposing to cover entities listed herein under the MS4GP upon the permit effective date; EPA Region 10 will send each MS4 operator written authorization to discharge under the MS4GP..

Previous NPDES Permit #	Operator	Census Defined Urbanized Area <sup>50</sup>	Receiving Waters	Impaired Water/ TMDL?- See Appendix F	MS4 Application/ NOI Date	Annual Reports Available	Existing MS4/ New MS4 Applicant/ New Regulated MS4
<b>Lower Boise River Watershed</b>							
IDS-027561	City of Boise+	Boise UA	Boise River	Yes	Yes-dated 3/11/20xx	2011-2012 2014	Existing MS4
IDS-027561	Garden City+	Boise UA	Boise River	Yes	Yes-dated 3/11/03	Yes	Existing MS4
IDS-027561	Boise State University+	Boise UA	Boise River	Yes	Yes-dated 3/11/03		Existing MS4
IDS-027561 and IDS-028185	Ada County Highway District+ *	Boise UA	Boise River	Yes	Yes-dated 1-15-2014	2011-2012 (Yr 3) 2012-2013 (Yr 4) 2013-2014 (Yr 5)	Existing MS4
IDS-027561	Ada County Drainage District #3+	Boise UA	Boise River	Yes			Existing MS4
IDS-027561 and IDS-028177	Idaho Transportation Department District #3+ *	Boise UA and Nampa UA	Boise River	Yes	Yes-dated 10-9-2014	2012-2013 2011-2012 2010-2011 2009-2010	Existing MS4
IDS-028100	City of Middleton	Nampa UA	Willow Creek, Mill Slough, Boise River	Yes	Yes – dated 6-19-2014	2011-2012 (Yr 3) 2012-2013 (Yr 4) 2013-2014 (Yr 5)	Existing MS4

<sup>50</sup> Maps of the UAs associated with Coeur d’Alene, Lewiston (ID)-Clarkston (WA), Caldwell, Boise, Pocatello and Idaho Falls UAs can be viewed at [http://www2.census.gov/geo/maps/dc10map/UAUC\\_RefMap/ua/](http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/)

Previous NPDES Permit #	Operator	Census Defined Urbanized Area <sup>50</sup>	Receiving Waters	Impaired Water/ TMDL?- See Appendix F	MS4 Application/ NOI Date	Annual Reports Available	Existing MS4/ New MS4 Applicant/ New Regulated MS4
IDS-028126	City of Nampa	Nampa UA	Indian Creek, Mason Creek, Lower Boise River	Yes	Yes- dated 7-7-2014	2013-2014 (Yr 5) 2012-2013 (Yr 4) 2011-2012 (Yr 3)	Existing MS4
IDS-028142	Nampa Highway District #1	Nampa UA	North Robinson Lateral; 12 <sup>th</sup> Avenue Drain, Duval Lateral; Elijah Drain, Moses Drain, Indian Creek, Mason Creek, Wilson Creek	Yes	Yes- dated 4-23-2014	2013-2014 (Yr 5) 2012-2013 (Yr 4) 2011-2012 (Yr 3) { Confirm receiving waters}- 11 outfalls- find yrs 1 & 2)	Existing MS4
IDS-028118	City of Caldwell	Nampa UA	Indian Creek, Mason Creek, Boise River via tributaries	Yes	Yes- dated 6-30-2014		Existing MS4
	Ada County		Boise River via tributaries	Yes			
IDS-028134	Canyon Highway District #4	Nampa UA		Yes	Yes- dated 6-18-2014	2012-2013 (Yr 4)	Existing MS4
<b>Spokane River-Lake Coeur d'Alene</b>							
IDS-028193	Post Falls Highway District+	Coeur d'Alene UA	Spokane River, Spring Creek  25 outfalls	Yes		2014 (Yr 6) 2013 (Yr 5) 2012 (Yr 4) Need to find:2011 (Yr 3) 2010 (Yr 2) 2009 (Yr1)	Existing MS4

Previous NPDES Permit #	Operator	Census Defined Urbanized Area <sup>50</sup>	Receiving Waters	Impaired Water/ TMDL?- See Appendix F	MS4 Application/ NOI Date	Annual Reports Available	Existing MS4/ New MS4 Applicant/ New Regulated MS4
IDS-028231	City of Post Falls	Coeur d'Alene UA	Spokane River	Yes	6-4-2013		
IDS-028207	Lakes Highway District+	Coeur d'Alene UA	Hayden Lake, Lake Coeur D'Alene, Spokane River			2014 (Yr 6) 2013 (Year 5)	
IDS-028215	City of Coeur d'Alene	Coeur d'Alene UA	Spokane River, Lake Coeur d'Alene		5-13-2013	2014 (Yr 6) 2013 (Year 5) 2012 2011 2010	Existing MS4
IDS-028223	Idaho Transportation Department District #1	Coeur d'Alene UA	Fernan Gulch		6-27-2013	2013 (Yr 5)	
	Eastside Highway District+	Coeur d'Alene UA	Fernan Lake				Newly Regulated: (Yr 2010 Census UA)
<b>Portneuf River</b>							
IDS-028053	Bannock Co+		Portneuf River Pocatello Creek	Yes		2013-2014 (Yr 7)	
IDS-028053	Idaho State University+			Yes		2012-2013 (Yr 6)	<i>New applicant</i>
IDS-028053	City of Pocatello+					2011-2012 (Yr 5)	
IDS-028053	Idaho Transportation Department District #5+					2010-2011 (Yr 4) 2009-2010 (Yr 3) 2008-2009 (Yr 2) 2007-2008 (Yr 1)	
<b>Snake-Clearwater</b>							
IDS-028061	City of Lewiston+	Lewiston UA	Tammany Creek, Lindsay Creek, Lower Granite Dam Pool	Yes		No	Newly Regulated
	Lewis-Clark State College+	Lewiston UA	Lower Granite Dam Pool	Yes			New applicant

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 For Idaho DEQ Review & Comment Only

NPDES Permit #IDR040000  
 April 8 2016

Previous NPDES Permit #	Operator	Census Defined Urbanized Area <sup>50</sup>	Receiving Waters	Impaired Water/ TMDL?- See Appendix F	MS4 Application/ NOI Date	Annual Reports Available	Existing MS4/ New MS4 Applicant/ New Regulated MS4
IDS-028258	Idaho Transportation Department District #2	Lewiston UA	Lower Granite Dam Pool	Yes			Newly Regulated
	U.S. Army Corps of Engineers-Clarkston	Lewiston UA	Lower Granite Dam Pool	Yes			Newly Regulated
<b>Snake River</b>							
IDS-028070	City of Idaho Falls+	Idaho Falls UA	Snake River	No		2013-2014 (Yr 7) 2012-2013 (Yr 6)	Existing MS4
IDS-028070	Idaho Transportation Department District #6+	Idaho Falls UA		No		2011-2012 (Yr 5) 2010-2011 (Yr 4) 2009-2010 (Yr 3) 2008-2009 (Yr 2) 2007-2008 (Yr 1)	Existing MS4
<b>Palouse River</b>							
	City of Moscow	None	Paradise Creek, South Fork Palouse River	Yes	Yes	Yes	New Regulated
	University of Idaho (Moscow, Idaho)	None	Fork Palouse River	Yes	No		New Regulated



## Appendix 2: Maps

A national list of all Urbanized Areas is available at  
[http://www2.census.gov/geo/maps/dc10map/UAUC\\_RefMap/ua/](http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/).

<b>Maps of Urbanized Areas in the State of Idaho, as defined by the U.S. Bureau of Census</b>		
Coeur d'Alene	UA – Census 2000	<a href="http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua18451/ua18451_01.pdf">http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua18451/ua18451_01.pdf</a>
	UA – Census 2010	<a href="http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua18451_coeur_dalene_id/">http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua18451_coeur_dalene_id/</a>
Lewiston	UA – Census 2000	<a href="http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua49312/">http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua49312/</a>
	UA – Census 2010	<a href="http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua49312_lewiston_id--wa/">http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua49312_lewiston_id--wa/</a>
Nampa	UA – Census 2000	<a href="http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua60976/">http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua60976/</a>
	UA – Census 2010	<a href="http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua60976_nampa_id/">http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua60976_nampa_id/</a>
Boise	UA – Census 2000	<a href="http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua08785/">http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua08785/</a>
	UA – Census 2010	<a href="http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua08785_boise_city_id/">http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua08785_boise_city_id/</a>
Pocatello	UA – Census 2000	<a href="http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua70426/ua70426_01.pdf">http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua70426/ua70426_01.pdf</a>
	UA – Census 2010	<a href="http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua70426_pocatello_id/">http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua70426_pocatello_id/</a>
Idaho Falls	UA – Census 2000	<a href="http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua40996/ua40996_01.pdf">http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua40996/ua40996_01.pdf</a>
	UA – Census 2010	<a href="http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua40996_idaho_falls_id/">http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua40996_idaho_falls_id/</a>
<b>Maps of Idaho Jurisdictions/Areas Designated by EPA as Needing MS4 Permit Coverage</b>		
Moscow	Census Block – Census 2010	<a href="http://www2.census.gov/geo/maps/dc10map/GUBlock/st16_id/place/p1654550_moscow/">http://www2.census.gov/geo/maps/dc10map/GUBlock/st16_id/place/p1654550_moscow/</a>

## Appendix 3: Rationale for Requirements to Comply with Applicable TMDLs

This appendix outlines EPA’s rationale for the additional SWMP requirements pursuant to the MS4GP Part 4, and detailed in MS4GP Appendix F, for affected MS4 Permittees.

This appendix also provides EPA’s rationale to not include otherwise applicable TMDLs in MS4GP Appendix F, where EPA has determined that compliance with the MS4GP constitutes compliance with the WLAs for those Affected MS4 Permittees.

### A. Fernan Lake

**Summary:** EPA requires no additional SWMP requirements for affected MS4 permittees to ensure compliance with the WLAs in the applicable TMDL for Fernan Lake. Implementation of the comprehensive SWMP (as directed in MS4GP Part 3) is consistent with the EPA-approved TMDL.

Urbanized Area	Receiving Water	Waterbody Assessment Unit	Impairment Pollutant	TMDL Status
Coeur d’Alene	Fernan Lake	ID17010303PN033_0L <i>Fernan Lake</i>	Total Phosphorus	<i>Coeur d’Alene Lake and River Subbasin Assessment and Total Maximum Daily Loads: 2013 Fernan Lake Addendum, October 2013. Approved November 2013.</i>

**Discussion:** Fernan Lake does not meet the Idaho WQS narrative criteria due to periodic blooms of blue-green algae. In the *Coeur d’Alene Lake and River Subbasin Assessment and Total Maximum Daily Loads: 2013 Fernan Lake Addendum* (Fernan Lake TMDL), approved by EPA on November 6, 2013, IDEQ established a total phosphorus (TP) target of 20 µg/L for all sources, and a target load reduction from current conditions of 35% is assigned to all contributing sources.<sup>51</sup>

Regulated MS4s discharging to Fernan Lake include City of Coeur d’Alene, Idaho Transportation Department and Eastside Highway District from the MS4 Permit Area.<sup>52</sup>

The Fernan Lake TMDL states that regulated MS4s must implement a comprehensive SWMP to control pollutants in storm water discharges to the maximum extent practicable. The TMDL does not specify any additional, mandatory actions or activities for regulated MS4 discharges. Compliance with the load reduction targets will be determined using data collected by the Citizen’s Volunteer Monitoring Program from the Fernan Lake deep monitoring station. No TMDL Implementation Plan for Fernan Lake exists at this time. IDEQ expects attainment of the beneficial uses in Fernan Lake within 20 years (by Year 2033).

**Conclusion:** SWMP control measures in MS4GP Part 3 will reduce sediment and total phosphorus loading in discharges from the MS4s operated by the entities listed above. These measures include

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<sup>51</sup> See: [http://www.deq.idaho.gov/media/1075241-cda\\_lake\\_river\\_sba\\_tmdl\\_fernan\\_lake\\_addendum\\_1013.pdf](http://www.deq.idaho.gov/media/1075241-cda_lake_river_sba_tmdl_fernan_lake_addendum_1013.pdf); in particular, see: Figure 17- *Map of the 2010 Census-Delineated Urbanized Area near Fernan Lake* (page 35) and Table 16- *TP load allocations for Fernan Lake, by source* (page 60).

<sup>52</sup>See *Fernan Lake TMDL Appendix B*.

enforceable requirements for erosion and sediment control; permanent storm water management controls for development occurring at sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures. Implementation of the comprehensive SWMP by City of Coeur d'Alene, Idaho Transportation Department and Eastside Highway District is fully consistent with the Fernan Creek TMDL. No additional requirements are necessary to ensure compliance with the load reduction target/WLA assigned to these MS4 discharges.

## B. Hayden Lake

**Summary:** There are no WLAs established by the EPA-approved TMDL for Hayden Lake. Implementation of the comprehensive SWMP by Lakes Highway District (as directed in MS4GP Part 3) is consistent with the EPA-approved TMDL.

Urbanized Area	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Coeur d'Alene	Hayden Lake	ID17010305PN005L_0L Hayden Lake	Total Phosphorus	<i>Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie (17010305)</i> , November 2000. Approved January 2001. <sup>53</sup>

**Discussion:** Hayden Lake does not meet the Idaho WQS narrative criteria due to periodic algae blooms. EPA approved the *Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie (17010305)* (Hayden Lake TMDL) on January 31, 2001. IDEQ established a TP target of 7 µg/L for the lake, and a TP load reduction target of 10.7% from all nonpoint sources discharging into the lake, including residential storm water runoff. IDEQ did not assign WLAs to any point sources discharging into Hayden Lake.<sup>54</sup>

The Hayden Lake Watershed Association continues to provide ongoing public education resources regarding appropriate best management practices for homeowners that serve to reduce sediment and associated phosphorus loading into Hayden Lake.

Lakes Highway District operates roadside storm water conveyances within the MS4 Permit Area in unincorporated Kootenai County at the southern end of Hayden Lake. Lakes Highway District must continue to implement SWMP control measures as described in the MS4GP Part 3. These required SWMP measures will substantively reduce sediment and associated total phosphorus loading from the MS4, and include enforceable requirements for erosion and sediment control; onsite storm water management controls for road development occurring at project sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). EPA encourages Lakes Highway District to work cooperatively with the Hayden Lake Watershed Association to continue using effective erosion control strategies in sub-sewershed drainage areas that could affect Hayden Lake water quality.

<sup>53</sup> The TMDL is available online at [http://www.deq.idaho.gov/media/452833-upper\\_spokane\\_entire.pdf](http://www.deq.idaho.gov/media/452833-upper_spokane_entire.pdf)

<sup>54</sup> See: Hayden Lake TMDL, pages 31-35.

**Conclusion:** Lakes Highway District continued implementation of the comprehensive SWMP is consistent with the EPA-approved TMDL for Hayden Lake; no additional requirements are necessary to ensure compliance with the Hayden Lake TMDL’s target for total phosphorus.

### C. Portneuf River

**Summary:** EPA requires additional SWMP requirements in MS4GP Appendix F.1 for affected MS4 permittees discharging to the Portneuf River. Additional requirements are necessary to comply with the WLAs established in the EPA-approved Portneuf River TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Pocatello	Portneuf River	ID17040208SK001_05 <i>Portneuf R.-Marsh Creek to American Falls Reservoir</i>	Total Nitrogen Oil and Grease Total Phosphorus <i>E. coli</i> Sedimentation/ Siltation	<i>Portneuf River TMDL</i> , April 2001. <i>Portneuf River TMDL Revision and Addendum</i> February 2010. Approved July 2010. <sup>55</sup>
	Pocatello Creek	ID17040208SK025_02 <i>South Fork Pocatello Creek - source to mouth</i>	Sedimentation/ Siltation	

**Discussion:** The main stem Portneuf River within the MS4 Permit Area does not meet the Idaho water quality standards narrative criteria for *E.coli*, nutrients (Total Phosphorus), oil and grease, and sedimentation/siltation. The *Portneuf River TMDL Revision and Addendum* (Portneuf TMDL) approved by EPA on July 29, 2010, quantifies pollutant sources, and allocates responsibility for load reductions needed to meet water quality standards and/or the targets described therein.<sup>56</sup>

Regulated MS4s that discharge directly or indirectly to the Portneuf River within the MS4 Permit Area includes City of Chubbuck; City of Pocatello; Bannock County; Idaho State University and Idaho Transportation Department District #5.

IDEQ assigned urban storm water WLAs to the NPDES-regulated MS4s discharging to the Portneuf River main stem for total phosphorus, and oil & grease. IDEQ defined load reduction targets for suspended sediment and *E. coli*.

The Portneuf TMDL sets TSS target concentrations for the main stem at 35 mg/L (low flow) and 80 mg/L (high flow), and TP targets for the main stem of 0.07 mg/L (low flow) and 0.125 mg/L (high flow). Corresponding WLAs for the MS4 Permittees represent the median daily TSS and TP loads translated from daily turbidity monitoring data collected during calendar years 2004 through 2006 and relevant instream monitoring stations upstream of Pocatello at the Edson Fichter Nature Area (ENFA) at River Mile 22.5, and downstream of Pocatello at Batiste Road at River Mile 13.4. IDEQ used the difference in discharge between Batiste and EFNA monitoring stations and the

<sup>55</sup> Available online at :

[http://deq.idaho.gov/media/464542\\_water\\_data\\_reports\\_surface\\_water\\_tmdls\\_portneuf\\_river\\_portneuf\\_river\\_revision\\_addendum\\_final.pdf](http://deq.idaho.gov/media/464542_water_data_reports_surface_water_tmdls_portneuf_river_portneuf_river_revision_addendum_final.pdf)

<sup>56</sup> See *Portneuf River TMDL Revision and Addendum* (Portneuf TMDL) :

[http://deq.idaho.gov/media/464542\\_water\\_data\\_reports\\_surface\\_water\\_tmdls\\_portneuf\\_river\\_portneuf\\_river\\_revision\\_addendum\\_final.pdf](http://deq.idaho.gov/media/464542_water_data_reports_surface_water_tmdls_portneuf_river_portneuf_river_revision_addendum_final.pdf)

corresponding TSS and TP targets to estimate storm water target loads/load allocations. The affected MS4 Permittees must reduce TSS and TP by up to 84% and 75%, respectively (during high flow/wet weather events occurring typically in the month of April) in order to meet the TMDL's most stringent monthly targets.<sup>57</sup>

The Portneuf TMDL establishes an oil and grease WLA target of 5 mg/L. Prior monitoring indicates oil and grease is present in the Portneuf River as it passes through the Pocatello UA, entering through storm drains during or immediately following storm events. IDEQ's TMDL recommends regular and event-focused monitoring of oil and grease to describe background concentrations and characterize their temporal and spatial loading patterns in the lower Portneuf River. Where possible, affected Permittees should consider using BMPs to minimize oil and grease loading to the River.<sup>58</sup> The Permittees continue to impose such BMPs. For example, in 2015, the City of Pocatello and IDEQ began collaborating with a major industrial landowner in the UA to identify structural BMP project(s) to mitigate pollutant contributions entering through the City's MS4 to the River. EPA strongly encourages such collaborative projects to continue during the MS4 General Permit.

The Portneuf TMDL establishes a load reduction target for *E.coli* of 126 organisms/100 mL, corresponding with water quality criteria for secondary contact recreation.<sup>59</sup>

No specific timeframe is established by DEQ in the Portneuf TMDL for attaining beneficial uses in the main stem of the Portneuf River. The TMDL states, however, that:

*“Substantial progress towards the reduction of current pollutant loads is expected to occur within the next 10 years....Development of appropriate monitoring programs is vital to understanding the success of individual BMPs and to quantify the benefits to subwatersheds and the larger subbasin.”*<sup>60</sup>

The TMDL states that targeted and continuous sampling of storm water discharges is necessary to characterize the concentration of constituents introduced into the Portneuf River during precipitation or melting events. IDEQ recommends sampling of multiple storm water outfalls to characterize the range of variation detected among outfalls. Instream sampling is necessary to estimate storm water loads associated with urban sources within the Pocatello UA.

The TMDL further recommends that sampling of storm water discharges is appropriate to evaluate the efficacy of storm water BMPs, citing two existing storm water basins used by City of Pocatello that successfully treat storm water within the UA (near First Street and at Day Street-Sacajawea Park, respectively).<sup>61</sup> EPA encourages the MS4 permittees, collectively, to pursue both structural and treatment practices within the UA. Based on the data collected during the previous MS4 permit term,

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<sup>57</sup> See Portneuf TMDL, Table 5.4-page 110, and Table 5.8-page 118.

<sup>58</sup> See Portneuf TMDL, page 129-131.

<sup>59</sup> See Portneuf TMDL, pages 95-96.

<sup>60</sup> See Portneuf TMDL, page 154.

<sup>61</sup> See Portneuf TMDL, Page 87

EPA recommends that the affected MS4 permittees consider locating future structural treatment devices in drainage areas leading to the Halliday and Lander Street outfalls. <sup>62</sup>

**Conclusion:** Continued implementation of the comprehensive SWMPs by City of Pocatello, City of Chubbuck, Bannock County, Idaho Transportation Department District #5 and Idaho State University (as directed in MS4GP Part 3) is consistent with the Portneuf TMDL as approved by EPA.

The SWMP control measures in the MS4GP Part 3 will substantively reduce sediment and associated total phosphorus loading into the MS4s, and will include enforceable requirements for erosion and sediment control; permanent storm water management controls for development occurring at sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity’s implementation of the required SWMP measures.

Monitoring of both storm water discharges and instream water quality is necessary to assess compliance with the applicable WLAs and load reduction targets. MS4GP Appendix Part F.3 requires storm water discharge monitoring at the currently monitored outfall locations; storm water outfall monitoring is appropriate to ensure compliance with the load reduction targets/WLAs assigned to these affected MS4 discharges.

**D. Lower Boise River**

**Summary:** EPA requires additional SWMP requirements in MS4GP Appendix F.2 for affected MS4 permittees discharging to segments of the Lower Boise River (LBR) for which EPA-approved TMDLs for sediment, bacteria, and total phosphorus apply.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Boise/ Nampa	Boise River	ID17050114SW001_06 <i>Boise R. - Indian Creek to mouth</i>  ID17050114SW005_06 <i>Boise R.-Veterans Memorial Pkwy to Star Bridge</i>  ID17050114SW005_06a- <i>Boise R –Star to Middleton</i>  ID17050114SW005_06b <i>Boise R.-Middleton to Indian Creek</i>	Fecal Coliform  Sedimentation /Siltation	<i>Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads, September 1999. Approved January 2000.</i>  <i>Sediment and Bacteria Allocations Addendum to the Lower Boise River TMDL, April 2008. Approved 2008.</i>
Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutant	TMDL Status
Boise/ Nampa	Boise River	ID17050114SW001_06 – <i>Boise R.-Indian Creek to the mouth</i>  ID17050114SW005_06b <i>Boise R-Middleton to Indian Creek</i>	Total Phosphorus	<i>Lower Boise River TMDL: Subbasin Assessment, Total Maximum Daily Loads (September 1999. Approved January 2000.</i>  <i>Lower Boise River TMDL 2015 Total Phosphorus Addendum. August 2015. Approved December 2015.</i>

<sup>62</sup> See Portneuf TMDL, Page 92.

### **1. Discussion of LBR Sediment and Bacteria WLAs**

In 1999, IDEQ originally established the Lower Boise River TMDL: Subbasin Assessment, Total Maximum Daily Loads (1999 LBR TMDL) for sediment and bacteria impairments in the segments representing the main stem of the Lower Boise River.

Regulated MS4s discharging directly or indirectly to the main stem LBR from the portion of the watershed located within the MS4 Permit Area of Ada and Canyon Counties include: ACHD, Boise, Garden City, Ada County Drainage District #3, Boise State University, City of Middleton; City of Caldwell; City of Nampa; Idaho Transportation District #3; Ada County; Canyon Highway District #4; and Nampa Highway District #1.

The 1999 LBR TMDL establishes sediment allocations for reaches of the LBR upstream of Middleton equal to the 1995 baseline conditions (e.g., the allocations represent a 0% reduction in sediment, or no net increase). The TMDL considers urban and suburban land uses upstream of Middleton as contributing sediment sources to the main stem LBR, and states that the comprehensive municipal SWMP, as implemented through a NPDES permit, is likely sufficient to meet the sediment TMDL allocations.<sup>63</sup>

IDEQ's bacteria TMDL assigned estimated bacteria load allocations to various tributaries based on meeting a fecal coliform target concentration. The TMDL estimates that more than 70% of the nonpoint source bacteria load must be reduced from the area upstream of the Middleton compliance point.<sup>64</sup> In 2007, IDEQ revised its WQS indicator for bacteria from fecal coliform to *E. coli*, represented as 126 cfu/100 ml, based on the geometric mean of five samples taken 3-7 days apart over a 30-day period. The *2003 Implementation Plan for the Lower Boise Watershed* (2003 LBR Plan) references the federal NPDES storm water requirements, and cites a menu of activities expected to reduce sediment and bacteria from upstream urban and suburban land uses, such as: targeted public education, construction site runoff control, and on-site management of post-construction runoff from new development and redevelopment.<sup>65</sup>

**Conclusion, Sediment and Bacteria:** In addition to implementation of comprehensive SWMPs by each regulated MS4 as directed in MS4GP Part 3, EPA is proposing three additional SWMP control measures to address the allocations for MS4 discharges of sediment and bacteria established by the LBR Sediment and Bacteria TMDL. These SWMP actions further support the pollutant reduction goals of the Lower Boise River TMDLs by requiring the permittees to focus their assessment, education, and enforcement efforts on facilities that are most likely to discharge pollutants of concern. Permittees may model or replicate the similar programs currently conducted within the Boise/Garden City MS4 Permit Area by the Ada County Highway District, City of Boise, City of Garden City, and other co-permittees.

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<sup>63</sup> See: *Lower Boise River TMDL Subbasin Assessment* (1999), Table 14, pg 58-61.

<sup>64</sup> See *Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads*, Revised: September 29, 1999; pages 70-72; [http://www.deq.idaho.gov/media/451243-\\_water\\_data\\_reports\\_surface\\_water\\_tmdls\\_boise\\_river\\_lower\\_boise\\_river\\_lower\\_entire.pdf](http://www.deq.idaho.gov/media/451243-_water_data_reports_surface_water_tmdls_boise_river_lower_boise_river_lower_entire.pdf)

<sup>65</sup> See: *Implementation Plan for the Lower Boise TMDL*, December 2003, [http://www.deq.idaho.gov/media/451449-water\\_data\\_reports\\_surface\\_water\\_tmdls\\_boise\\_river\\_lower\\_boise\\_river\\_lower\\_plan\\_entire.pdf](http://www.deq.idaho.gov/media/451449-water_data_reports_surface_water_tmdls_boise_river_lower_boise_river_lower_plan_entire.pdf)

- Affected MS4 permittees must maintain an inventory and map of certain industrial and commercial activities, including all animal related facilities, within the Permit Area to target and reduce the discharge of sediment and bacteria from industrial and commercial operations to the MS4.
- The purpose of the inventory is to assist permittees in identifying problem areas, with particular emphasis on sources likely to contribute sediment or bacteria to receiving waters. To ensure the inventory and map are current and accurate permittees should update both inventory and map at least semi-annually using information obtained from field activities and intra-agency sources (such as business licenses, pretreatment permits, sanitary sewer hookups, etc.)
- For any facilities identified as needing separate NPDES permit coverage under the federal storm water requirements, the affected MS4 permittees may inform facilities of their obligation directly, and/or may notify EPA by providing basic facility information through EPA's compliance program for further Agency action.
- Affected MS4 permittees must collectively identify at least two specific industrial/commercial activities not adequately addressed through existing programs within the watershed, develop best management practices for each activity, and educate selected industrial/commercial audiences regarding performance expectations. Examples of such activities may include mobile power washing services; commercial car/truck washing operations; restaurant and/or fast food services; commercial animal services, such as kennels; wholesale or retail agricultural and construction supply businesses; urban agricultural activities; home gardening or agricultural supply establishments; landscaping businesses; and automobile repair shops.
- Affected MS4 permittees must cooperatively prioritize and inspect such inventoried industrial and commercial facilities/activities that discharge to receiving waters and/or to the MS4s, to educate such facilities about the control of the pollutants of concern.

MS4GP Appendix Part F.4 requires that storm water discharge monitoring for sediment and bacteria occur at the existing outfall locations currently monitored by Middleton, Caldwell, Nampa, ITD District #3, and ACHD. EPA encourages a watershed-based approach to such assessment efforts, and is interested in defining specific requirements that will fulfill the necessary objectives of the 2003 LBR Plan implementation efforts. EPA believes that continued outfall monitoring data will substantiate any future modelling efforts to estimate pollutant loading from MS4 outfalls. Monitoring is therefore appropriate and necessary for IDEQ and EPA to determine compliance with the load reduction targets/WLAs assigned to the affected MS4 discharges.

## ***2. Discussion of the LBR Total Phosphorus WLAs***

The Lower Boise River, from Middleton to its confluence with the Snake River, does not meet the narrative criteria for excess nutrients in the Idaho WQS. The *Lower Boise River TMDL 2015 Total Phosphorus Addendum* (LBR Phosphorus TMDL), approved by EPA on December 22, 2015, quantifies TP pollutant sources, and identifies responsibility for load and waste load allocations

needed to achieve the WQS.<sup>66</sup> IDEQ's numeric target to describe nuisance aquatic growth within impaired AUs of the main stem lower Boise River is the mean monthly benthic (periphyton) chlorophyll a  $\leq 150 \text{ mg/m}^2$ , year round.<sup>67</sup>

Regulated MS4s that discharge directly or indirectly to the main stem LBR from the portion of the watershed located within the MS4 Permit Area of Ada and Canyon Counties are the same as listed above: ACHD, Boise, Garden City, Ada County Drainage District #3, Boise State University, Middleton; Caldwell; Nampa; Idaho Transportation District #3; Ada County; Canyon Highway District #4; and Nampa Highway District #1.

IDEQ assigned two types of WLAs for total phosphorus to these NPDES-regulated MS4s discharging to the LBR: one WLA for storm water discharges occurring during wet weather, representing a 42% TP load reduction on average across all regulated MS4s; and a second WLA for dry weather discharges from MS4s, representing an 84% TP load reduction on average across all MS4s.

IDEQ acknowledges that it based the WLAs and load reduction targets on limited data and conservative assumptions. Because the plumbing of MS4 systems is intricate, and the quantity of the non-storm water inputs is unknown, IDEQ asked MS4 permittees to provide initial estimates for the percentage of their non-storm water discharge that originates from nonpoint sources. IDEQ expects these estimates to be refined through monitoring and mapping in future permit cycles and as part of TMDL implementation. Further, IDEQ recommends that TMDL-related activities be determined on a watershed basis, such that all regulated MS4 entities are conducting the same or similar types of actions. EPA agrees that it is necessary to verify all existing MS4 outfalls discharging during dry weather, and to characterize such flows by type and source. It is also necessary to confirm whether such ground water and/or irrigation water flows are indeed uncontaminated. If dry weather flows from the MS4 are uncontaminated, they may be allowable non-storm water discharges, as conditionally provided by MS4GP Part 2.2.5.

IDEQ states that it encourages discharge or pollutant trading (between with other sectors and sources) to facilitate cost effective load reductions. The TMDL recognizes that retrofitting the existing infrastructure may require considerable time and resources; and recommends that runoff from new urban development be managed carefully, using appropriate BMPs consistent with the overall TP reduction goals.<sup>68</sup>

**Conclusion, Wet Weather WLA:** To address the WLA for wet weather discharges established by the LBR Phosphorus TMDL:

1. EPA determines that continued implementation of the comprehensive SWMPs, as directed in MS4GP Part 3 by each regulated MS4, is sufficient to meet the numeric target for nuisance aquatic growth in the LBR, and that no additional SWMP requirements are necessary at this time. Specific SWMP control measures in the MS4GP Part 3 include

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<sup>66</sup> See: LBR Phosphorus TMDL at: <http://www.deq.idaho.gov/media/60177413/lower-boise-river-tmdl-total-phosphorus-addendum-0815.pdf>.

<sup>67</sup> LBR Phosphorus TMDL, page 64.

<sup>68</sup> LBR Phosphorus TMDL page 98

enforceable requirements for erosion and sediment control; permanent storm water management controls for development occurring at sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). These practices, imposed throughout the Permit Area, will result in reductions of total phosphorus loading from the MS4s during wet weather. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures.<sup>69</sup>

2. MS4GP Appendix Part F.4 requires that storm water discharge monitoring for total phosphorus and total nitrogen occur at the existing outfall locations currently monitored by Middleton, Caldwell, Nampa, ITD District #3, and ACHD. EPA encourages a watershed-based approach to such assessment efforts and is interested in defining specific requirements that will fulfill the necessary objectives of the LBR Phosphorus TMDL implementation efforts. EPA believes that continued SW outfall monitoring data will substantiate future modelling efforts to estimate pollutant loading from MS4 outfalls. Monitoring is therefore appropriate and necessary for IDEQ and EPA to determine compliance with the load reduction targets/WLAs assigned to the affected MS4 discharges. As IDEQ acknowledges uncertainty in the assumed loading from wet weather/storm water MS4 discharges, and states that this uncertainty will be addressed during implementation planning through additional monitoring, and/or further characterization of storm water; such characterization activities may include additional modeling.<sup>70</sup>

**Conclusion, Dry Weather WLA:** To address the WLA for dry weather discharges established by the LBR Phosphorus TMDL, all affected MS4 permittees must conduct enhanced dry weather screening surveys to locate and document the occurrence of dry weather discharges from their MS4s, in addition to the mapping and discharge screening requirements for Illicit Discharge Management in MS4GP Part 3.5. The affected Permittees must monitor identified dry weather flows, in order to distinguish between groundwater and agricultural sources. Such diagnostic testing can be conducted using field test parameters and protocols recommended by EPA guidance.<sup>71</sup> These additional actions are necessary in order to begin the multi-year (and possibly multi-permit term) effort to field verify the location of all existing MS4 outfalls discharging to the LBR during dry weather; in addition, identified dry weather flows should be sufficiently characterized to confirm whether such flows originate from ground water and/or irrigation. Finally, identified dry weather flows must be mitigated as necessary so that the discharges are indeed uncontaminated (and therefore, qualify as “allowable”) non-storm water discharges from the MS4.

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<sup>69</sup> LBR Phosphorus TMDL pages 93-100

<sup>70</sup> See LBR Phosphorus TMDL pages 74 and 86.

<sup>71</sup> See: *Illicit Discharge Detection and Elimination: A Guidance Manual*, October 2004; Chapters 7, 11, and 12.

**E. Indian, Mason, Fifteenmile, Tenmile, Fivemile, and Willow Creeks**

**Summary:** EPA requires additional SWMP requirements in MS4GP Appendix F.4 for affected MS4 permittees discharging to segments of the waterbodies listed above for which EPA-approved TMDLs for sediment, and bacteria apply.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Nampa	Indian Creek	ID17050114SW002_04 <i>Indian Creek - Sugar Ave. to Boise River</i>  ID17050114SW003b_03 <i>Indian Creek Reservoir to New York Canal</i>  ID17050114SW003d_02 <i>Indian Creek above Reservoir – 1st and 2nd order</i>  ID17050114SW003d_03 <i>Indian Creek above Reservoir – 3rd order</i>	Sediment, <i>E. coli</i>	<i>Lower Boise River TMDL 2015 Sediment and Bacteria Addendum. June 2015. Approved September 2015.</i>
Nampa	Mason Creek	ID17050114SW006_02 <i>Mason Creek - entire watershed</i>	Sediment, <i>E. coli</i>	
Nampa	Fifteenmile Creek	ID17050114SW007_04- <i>Fifteenmile Creek 4th order (Fivemile Creek to mouth)</i>	Sediment, <i>E. coli</i>	
Nampa	Fifteenmile Creek	ID17050114SW007_04- <i>Fifteenmile Creek 4th order (Fivemile Creek to mouth)</i>	Sediment, <i>E. coli</i>	
Nampa	Tenmile Creek	ID17050114SW008_03- <i>Tenmile Creek - 3rd order below Blacks Creek Reservoir</i>	Sediment, <i>E. coli</i>	
Nampa	Fivemile Creek	ID17050114SW010_02- <i>Fivemile Creek, Eightmile and Ninemile Creeks - 1st &amp; 2nd order</i>	<i>E.coli</i>	
		ID17050114SW010_03- <i>Fivemile Creek - 3rd order tributaries</i>	Sediment, <i>E. coli</i>	
Nampa	Willow Creek	ID17050114SW015_03 <i>Willow Creek - 3rd order</i>	Sediment	

**Discussion:** IDEQ established bacteria and sediment targets for the impaired segments of Indian, Mason, Fifteenmile, Tenmile, Fivemile, and Willow Creeks in the *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum (LBR 2015 TMDL Addendum)*.

Regulated MS4s that discharge directly or indirectly to these waters from the portion of the watershed located within the MS4 Permit Area of Ada and Canyon Counties include ACHD, Boise, Garden City, Ada County Drainage District #3, Boise State University, Middleton; Caldwell; Nampa; Idaho Transportation District #3; Ada County; Canyon Highway District #4; and Nampa Highway District #1.

The LBR 2015 TMDL Addendum establishes applicable storm water targets, of 20 mg/L, less 2.5 mg/L for natural background for sediment, and 126 cfu/100 mL for *E. coli*. These targets are not end-of pipe limits, but instead are averages (4-month average for sediment and 30 days average for *E. coli*) that only apply to MS4 outfalls discharging over the entire averaging period. Where such long-duration discharges from MS4 outfalls occur, the same target concentrations apply to every storm water outfall. However, because wet weather MS4 discharges typically last only a few hours or days, the TMDL considers such wet weather discharges to be short duration pollutant sources; DEQ provides the following narrative interpretation of the TMDL WLAs for short-term discharges of bacteria and sediment:

- “1. Storm water entities must continue management practices that reduce sediment and E. coli; [and]  
 2. Storm water entities must continue to identify and characterize inputs to their systems pollutant.”<sup>72</sup>

**Conclusion:** The requirements for the comprehensive SWMP as directed in MS4GP Part 3, and the additional illicit discharge management activities required above for compliance with the 1999 LBR TMDL and the LBR Phosphorus TMDL, are appropriate and necessary to ensure progress towards complying with the LBR 2015 TMDL Addendum. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity’s implementation of the required SWMP measures.

**F. Paradise Creek in Idaho**

**Summary:** There are no WLAs established by the EPA-approved TMDL for the Idaho portion of Paradise Creek. Implementation of the comprehensive SWMP pursuant to MS4GP Part 3, by the regulated MS4s designated by EPA (i.e., City of Moscow and University of Idaho), is consistent with the EPA-approved TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Moscow	Paradise Creek	ID17060108CL005_02 Paradise Creek - Urban boundary to Idaho/Washington border	Ammonia (Un-ionized) E. coli Fecal Coliform Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation Temperature	Paradise Creek TMDL Water Body Assessment and Total Maximum Daily Load, December 1997. Approved February 1998.  Paradise Creek Total Maximum Daily Load Implementation Plan December 1999.  Paradise Creek TMDL 2015 Bacteria Addendum, October 2015. Submitted to EPA.

**Discussion:** EPA approved IDEQ’s *Paradise Creek Water Body Assessment and TMDL* (Paradise Creek TMDL) in 1998; the TMDL addresses ammonia, nutrients, sediment, bacteria, and temperature. . The Paradise Creek TMDL identifies urban runoff, discharged from within the City of Moscow boundaries, as a contributing source of pollutants to Paradise Creek. Urban runoff is included as part of the non-point source load allocation for each parameter.

As previously discussed in Section XX of this document, EPA proposes to designate MS4 discharges to Paradise Creek within the boundaries of the City of Moscow as requiring NPDES permit coverage under the MS4GP. At a minimum, EPA proposes to consider the MS4s operated by City of Moscow and University of Idaho to be “regulated MS4s” upon the MS4GP effective date.

<sup>72</sup> See: *Lower Boise River TMDL: 2015 Sediment and Bacteria Addendum*, pages 51-55.

The Paradise Creek TMDL establishes load allocations in the form of in-stream targets for fecal coliform, TSS, and total phosphorus. IDEQ subsequently developed the *Paradise Creek TMDL 2015 Bacteria Addendum (Paradise Creek 2015 Addendum)*, to update the bacteria indicator from fecal coliform to *E. coli* based on the current Idaho WQS criterion for secondary contact recreation. The combined instream targets are established for *E. coli* at 126 cfu/100 mL (collected as a 5-sample geometric mean over 30 days); total phosphorus, at 0.136 mg/l during the summer months; and TSS, at 50 mg/l over background for 10 consecutive days. The TMDL(s) identify land development, urban storm water systems, resident and business activities, roadways, and parking lots as among the primary nonpoint sources of bacteria, TSS, and total phosphorus in the Paradise Creek watershed.<sup>73</sup>

The TMDL states that regulated MS4 operators must “obtain an NPDES permit from EPA, implement a comprehensive municipal storm water management program, and use BMPs to control pollutants in storm water discharges to the maximum extent practicable.”<sup>74</sup>

**Conclusion:** EPA determines that implementation of the comprehensive SWMP, pursuant to MS4GP Part 3, by the regulated MS4s designated by EPA (including, but not limited to, City of Moscow and University of Idaho) is consistent with the EPA approved TMDL for Paradise Creek. No additional requirements are necessary to ensure compliance with the Paradise Creek TMDL’s bacteria, TSS, and total phosphorus targets.

**G. Paradise Creek, downstream of Idaho/Washington border**

**Summary:** EPA requires additional SWMP requirements in MS4GP Appendix F.5 for affected MS4 permittees discharging to Paradise Creek in order to comply with the WLA established in the EPA-approved TMDL established by the Washington Department of Ecology (Ecology).

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Moscow	Paradise Creek (WA portion)	Paradise Creek 10443 (WA-34-1025) Paradise Creek 10439 (WA-34-1025) Paradise Creek 10444 (WA-34-1025)	Fecal Coliform Bacteria	<i>South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report</i> WDOE Publication No. 09-10-060 October 2009. Approved 2009.

**Discussion:** The South Fork of the Palouse River, downstream of the Idaho/Washington border is impaired for fecal coliform. EPA approved Ecology’s *South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report (SF Palouse River FC Bacteria TMDL)*, in 2009. Ecology conducted wet and dry season sampling in Paradise Creek at the Washington-Idaho state line as part of the assessment study, and found a large average pollutant load at the state line-monitoring site during the dry season. Ecology requires that discharge meet the Washington fecal coliform standards in Paradise Creek at the state border so that sufficient capacity remains in the river for other Washington sources in the South Fork Palouse River.

<sup>73</sup> See *Paradise Creek TMDL*, pages 24 and 45; and *Paradise Creek 2015 Addendum*, page 13.

<sup>74</sup> See *Paradise Creek 2015 Addendum*, page 29.

**Conclusion:** EPA determines that additional controls are necessary to reduce bacteria loading to meet the load reduction targets for fecal coliform established by Ecology's *SF Palouse River FC Bacteria TMDL*. In addition to implementation of a comprehensive SWMP pursuant to MS4GP Part 3 by regulated MS4s designated by EPA (including but not limited to, City of Moscow and University of Idaho), the illicit discharge management control measures implemented by the affected permittees should be targeted to investigate and remove sources of bacteria entering the storm drain system.

EPA is proposing the following three additional, or enhanced, SWMP control measures to meet Ecology's load reduction targets for fecal coliform. These actions require the permittees to focus assessment, education, and enforcement efforts on facilities that are most likely to discharge pollutants of concern. Permittees may model or replicate the similar programs currently conducted within the Boise/Garden City MS4 Permit Area by the Ada County Highway District, City of Boise, City of Garden City, and other permittees.

- Affected MS4 permittees must maintain an inventory and map of certain industrial and commercial activities, including all animal related facilities, within the Permit Area to target and reduce the discharge of sediment and bacteria from industrial and commercial operations to the MS4. The purpose of the inventory is to assist permittees in identifying problem areas, with particular emphasis on sources likely contribute sediment or bacteria to receiving waters. To ensure the inventory and map are current and accurate, MS4 permittees should update both at least semi-annually using information obtained from field activities and intra-agency sources (such as business licenses, pretreatment permits, sanitary sewer hookups, etc.) For any facilities identified as needing separate NPDES permit under the federal storm water requirements, MS4 permittees may inform sources of their obligation directly, and/or may notify EPA by providing basic facility information for further Agency action.
- Affected MS4 permittees must collectively identify two specific industrial/commercial activities not adequately addressed through existing programs within the watershed, develop best management practices for each activity, and educate selected industrial/commercial audiences regarding performance expectations.
- Affected MS4 permittees must cooperatively prioritize and inspect such inventoried industrial and commercial facilities/activities that discharge to receiving waters and/or to the MS4s.

## **H. South Fork Palouse River in Idaho**

**Summary:** There are no WLAs established by the EPA-approved TMDL for the portion of the South Fork Palouse River within Idaho. For regulated MS4s discharging to the South Fork Palouse River in Idaho (i.e., City of Moscow, as EPA has proposed to designate City of Moscow as a regulated MS4), implementation of the comprehensive SWMP (as directed in MS4GP Part 3) is consistent with the EPA-approved TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Moscow	South Fork Palouse River	ID17060108CL002_03 South Fork Palouse River-Gnat Cr. to Idaho/Washington border	<i>E. coli</i> Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation Temperature, water	South Fork Palouse River Watershed Assessment and TMDLs, February 2007. Approved October 2007.

**Discussion:** In 2007, IDEQ established instream targets for *E. coli*, nutrients, temperature, and sediment for the impaired segment of the South Fork Palouse River within Idaho as part of its *South Fork Palouse River Watershed Assessment and TMDLs* (SF Palouse TMDL).

EPA is using its authority to designate the City of Moscow as a regulated MS4; a portion of the Moscow MS4 discharges to the South Fork Palouse River.

The SF Palouse TMDL does not establish WLAs for urban storm water sources; IDEQ established a year round percent reduction target for *E. coli* of 41%.

**Conclusion:** Implementation of the comprehensive SWMP pursuant to MS4GP Part 3, by City of Moscow is consistent with the EPA approved SF Palouse TMDL; no additional requirements are needed to ensure compliance with the Idaho TMDL's targets for *E. coli*, nutrient, temperature and sediment.

### I. South Fork of the Palouse River, downstream of ID/WA border

**Summary:** EPA requires additional SWMP requirements in MS4GP Appendix F.5 for affected MS4 permittees discharging to the South Fork Palouse River, to comply with the WLAs established in the EPA-approved TMDLs established by Washington Department of Ecology.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Moscow	South Fork Palouse River (WA portion)	South Fork (SF) Palouse River 6712 (WA-34-1020) SF Palouse River 6711 (WA-34-1020) SF Palouse River 6710 (WA-34-1020) SF Palouse River 6707 (WA-34-1020)	Fecal coliform bacteria  Chlorinated Pesticides  Polychlorinated Biphenyls (PCBs)	South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report WDOE Publication No. 09-10-060 October 2009. Approved  <i>Palouse River Chlorinated Pesticide and PCB Total Maximum Daily Load, Water Quality Improvement Report and Implementation Plan</i> ; Publication No. 07-03-018 July 2007. Approved November 2007.

**Discussion regarding Bacteria:** The South Fork of the Palouse River, downstream of the Idaho/Washington border, is impaired for fecal coliform. EPA approved Ecology's *South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report (SF Palouse River FC Bacteria TMDL)*, in 2009. Sampling conducted by Ecology in the Washington portion of the upper SF Palouse River (between the Idaho-Washington state line to the boundary limits of the City of Pullman, above Paradise Creek) demonstrates that the majority of bacteria loading to the upper SF Palouse River during both the wet season (56%) and dry season (67%) was from upstream sources in Idaho. Ecology states there is a "linear relationship between TSS concentrations and FC bacteria concentrations in the upper SF Palouse River, indicating that the control of runoff processes (soil-erosion control) could result in lower FC concentrations." Ecology then concludes that, "While the bacteria counts at the Idaho border were within standards, the average wet-season FC bacteria load appears to use up most of the downstream load capacity in the upper SF Palouse."<sup>75</sup> Because EPA intends to designate Moscow and other MS4s upstream of the state line as needing coverage under a MS4 permit, Ecology recommends the permit include specific actions to reduce wet and dry season bacteria loads.<sup>76</sup>

**Conclusion:** EPA determines that regulated MS4s must implement additional to sufficiently reduce bacteria loading and meet the load reduction targets for fecal coliform established by Ecology's *SF Palouse River FC Bacteria TMDL*. In addition to implementation of the SWMP pursuant to MS4GP Part 3, affected regulated MS4s designated by EPA (including City of Moscow and University of Idaho), the additional control measures identified for compliance with *SF Palouse River FC Bacteria TMDL* in Paradise Creek, will be sufficient to investigate and remove sources of bacteria entering the storm drain system.

**Discussion regarding PCBs:** The South Fork of the Palouse River, downstream of the Idaho/Washington border, does not meet the Washington WQS for polychlorinated biphenyls (PCBs). Ecology's current water quality criterion for total PCBs is 170 picograms per liter (pg/L).

The *Palouse River Chlorinated Pesticide and PCB Total Maximum Daily Load, Water Quality Improvement Report and Implementation Plan* (Palouse River PCB TMDL), completed in 2007 and subsequently approved by EPA later that year, establishes the instream target and describes how controls will be implemented within the Palouse River will achieve WQS for PCBs and dieldrin. The TMDL identifies municipal SWMPSWMP activities in the urban boundary of the City of Pullman (conducted by the City and by Washington State University) as necessary to reduce PCB loading to the Palouse River.

**Conclusion:** For reasons outlined in Appendix 4.B of this document, (pertaining to PCB pollutant load reductions necessary within the Idaho portion of the Spokane River), additional SWMP activities and monitoring for PCBs must be conducted by regulated MS4s discharging to the South Fork Palouse River. EPA proposes to designate City of Moscow and University of Idaho as needing MS4 permit coverage.

The additional SWMP activities and monitoring reflect EPA's recommended NPDES permit conditions related to PCB impairments for regulated MS4 discharges. As noted in Appendix 4.B,

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<sup>75</sup> SF Palouse River FC Bacteria TMDL, page 36-39, and page 83

<sup>76</sup> SF Palouse River FC Bacteria TMDL, page 100

EPA expects such actions to contribute the necessary upstream reductions in PCB loading affecting impaired segments of the South Fork Palouse River downstream within Washington State.<sup>77</sup>

## J. Tammany Creek

**Summary:** EPA requires additional SWMP requirements and monitoring in MS4GP Appendix F.6 for Affected MS4 Permittees discharging to Tammany Creek in order to comply with the WLAs established in the EPA-approved TMDLs.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Lewiston	Tammany Creek	ID17060103SL014_02 <i>Tammany Creek - WBID 015 to unnamed tributary</i> ID17060103SL014_03 <i>Tammany Creek - Unnamed Tributary to mouth</i> ID17060103SL016_02 <i>Tammany Creek-source to Unnamed Tributary(T34N, R04W, Sec19)</i>	<i>E. coli</i> Nitrogen, Nitrate Total Phosphorus Sedimentation Siltation	<i>Tammany Creek Sediment TMDL</i> , September 2001.Approved February 2002.  <i>Tammany Creek Watershed (HUC 17060103) TMDL Addendum</i> , September 2010. Approved December 2010.

**Discussion:** In 2010, IDEQ updated established waste load allocations for storm water point sources discharging nutrients (total phosphorus and nitrite plus nitrate as nitrogen), bacteria, and sediment to the impaired segments of Tammany Creek in its *Tammany Creek Watershed TMDL Addendum* (Tammany Creek TMDL).

Regulated MS4s discharging to Tammany Creek includes, but is not limited to, the City of Lewiston. EPA has not issued a NPDES permit to the City of Lewiston, thus, the City of Lewiston, and potentially other regulated MS4s discharging to Tammany Creek, has not yet fully implemented a comprehensive Storm water Management Program in compliance with an applicable NPDES permit for MS4 discharges.

The Tammany Creek TMDL allocates 6% of the total load allocations for each pollutant to the City of Lewiston and other regulated MS4s within the watershed. Another 1.5 % of the available loading allows for future development growth in the watershed. The TMDL sets monthly sediment targets, and IDEQ estimates that sediment reductions of up to 83% are necessary to attain the sediment target(s). IDEQ also sets an instream target for *E. coli* equal to the Idaho WQS for secondary contact recreation (i.e., 30-day geometric mean concentration of 126 cfu/100ml), estimating that a 72% reduction is need from all contributing bacteria sources in order to meet the instream target. IDEQ provides a numeric interpretation of the Idaho WQS to represent nutrients, (i.e., 0.072 mg/l and 0.03 mg/L for nitrite plus nitrate as nitrogen and total phosphorus, respectively) representing a needed reduction in nitrates of approximately 98%, and reduction in total phosphorus loads up to 89%.

**Conclusion:** Tailored SWMP requirements and monitoring, in addition to implementation of the comprehensive SWMP pursuant to MS4GP Part 3, are necessary to ensure pollutant reductions identified as necessary in the Tammany Creek TMDL. The SWMP control measures include

<sup>77</sup> See EPA's Plan for Addressing PCBs in the Spokane River, Appendix B, pages. 5-8, Defendants' Response to the Remand by the Court, Sierra Club, et al. v. McLerran, No. C11-1759-BJR (July 14, 2015).

enforceable requirements for erosion and sediment control; permanent storm water management controls for development occurring at sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity’s implementation of the required SWMP measures. Additional provisions to address animal facilities will ensure that the regulated MS4(s) target sources of bacteria. .

EPA is proposing the following three additional, or enhanced, SWMP control measures to meet IDEQ’s load reduction targets for *E. Coli*. These actions require the MS4 permittee(s) to focus assessment, education, and enforcement efforts on facilities that are most likely to discharge pollutants of concern. Permittees may model or replicate the similar programs currently conducted within the Boise/Garden City MS4 Permit Area by the Ada County Highway District, City of Boise, City of Garden City, and other permittees.

- Affected MS4 permittees must maintain an inventory and map of certain industrial and commercial activities, including all animal related facilities, within the Permit Area to target and reduce the discharge of sediment and bacteria from industrial and commercial operations to the MS4. The purpose of the inventory is to assist permittees in identifying problem areas, with particular emphasis on sources likely contribute sediment or bacteria to receiving waters. To ensure the inventory and map are current and accurate, MS4 permittees should update both at least semi-annually using information obtained from field activities and intra-agency sources (such as business licenses, pretreatment permits, sanitary sewer hookups, etc.) For any facilities identified as needing separate NPDES permit under the federal storm water requirements, MS4 permittees may inform sources of their obligation directly, and/or may notify EPA by providing basic facility information for further Agency action.
- Affected MS4 permittees must collectively identify two specific industrial/commercial activities not adequately addressed through existing programs within the watershed, develop best management practices for each activity, and educate selected industrial/commercial audiences regarding performance expectations.
- Affected MS4 permittees must cooperatively prioritize and inspect such inventoried industrial and commercial facilities/activities that discharge to receiving waters and/or to the MS4s.

### K. Lindsay Creek

**Summary:** EPA requires additional SWMP requirements and monitoring in MS4GP Appendix F.6 for affected MS4 permittees discharging to Lindsay Creek in order to comply with the WLAs established in the EPA-approved TMDLs.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Lewiston	Lindsay Creek	ID17060306CL003_02 Source to mouth ID17060306CL003_03 Source to mouth	<i>E. coli</i> Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation	<i>Lindsay Creek Watershed Assessment and Total Maximum Daily Loads</i> , December 2006, Amended March 2007. Approved, June 2007.

**Discussion:** EPA approved the *Lindsay Creek Watershed Assessment and Total Maximum Daily Loads* (Lindsay Creek TMDL) in 2007, wherein IDEQ allocated a portion of the pollutant loads as a waste load allocation for urban storm water in order to control bacteria and sediment in Lindsay Creek. The TMDL assigns no WLA to urban runoff for nutrients.

Regulated MS4s that discharge to Lindsay Creek include, but may not be limited to, the City of Lewiston. City of Lewiston, and other potential regulated MS4s discharging to Lindsay Creek, has not yet fully implemented a comprehensive Storm water Management Program in compliance with an applicable NPDES permit.

The TMDL sets the instream target for *E. coli* equal to the Idaho WQS (30-day geometric mean concentration of 126 cfu/100ml), and estimates that a 66% reduction is needed from all contributing bacteria sources in order to meet the instream target. The TMDL sets an average monthly target of 50 mg/L TSS, not to exceed a maximum daily average of 80 mg/L. Sediment reductions of up to 81% necessary are likely necessary during certain months in order to attain the sediment target.

The TMDL allocates 3% of the total load allocations for bacteria and sediment to the City of Lewiston and other regulated MS4s within the watershed, and allows another 8% of the available loading, per pollutant, to allow for future development growth within the Lewiston Orchards area of the watershed. IDEQ states that these WLA and reserve allocation for growth are temporary, and subject to future revision, until more current and applicable data becomes available.<sup>78</sup>

**Conclusion:** Tailored SWMP requirements and monitoring, in addition to implementation of the comprehensive SWMP pursuant to MS4GP Part 3, are required to ensure pollutant reductions identified as necessary in the Lindsay Creek TMDL. The SWMP control measures include enforceable requirements for erosion and sediment control; permanent storm water management controls for development occurring at sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures. Additional targeted provisions to address animal facilities, as previously described for MS4 discharges into Tammany Creek, will ensure that the affected Permittees address sources of bacteria.

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<sup>78</sup> See "Lindsay Creek Watershed Assessment and TMDLs, page 56.

## Appendix 4: Rationale for Requirements Based on MS4 Discharges to Impaired Waters without an Applicable TMDL.

This appendix provides EPA’s rationale for the additional SWMP requirements for affected MS4 permittees discharging into impaired waters, pursuant to MS4GP Part 4.2.

### A. Coeur d’Alene Lake and Spokane River in Idaho

**Summary:** Continued monitoring of storm water discharges is necessary and appropriate to address impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Coeur d’Alene	Coeur d’Alene Lake	ID17010303PN001L_0L <i>Coeur d’Alene Lake</i>	Cadmium; Lead; Zinc	No TMDLs completed.
Coeur d’Alene	Spokane River	ID17010305PN004_04 Spokane R.-Coeur d’Alene Lake to Post Falls Dam  ID17010305PN003_04 Spokane R.- Post Falls Dam to ID/WA border	Cadmium; Lead; Total Phosphorus; Zinc	

**Discussion:** IDEQ’s 2012 *Integrated CWA Section 303(d)/Section 305(b) Report* (2012 Integrated Report), Appendix J [*Category 5 (CWA §303(d) list—waters of the state for which a TMDL is needed*] lists Coeur d’Alene Lake as impaired for cadmium, lead, and zinc.

The 2012 Integrated Report also lists the segments of the Spokane River in Idaho listed above as impaired for cadmium, lead, total phosphorus, and zinc.

Affected MS4 permittees discharging to these waterbodies include the City of Coeur d’Alene, City of Post Falls, Idaho Transportation Department District #1, and Post Falls Highway District.

No TMDLs have been established for the impairment pollutants in these water bodies.<sup>79</sup> Existing water quality information for Coeur d’Alene Lake shows that maintaining an oxygenated condition in the bottom waters minimizes the release of dissolved metals from the sediments into the overlying waters. The Coeur d’Alene Tribe and IDEQ collaboratively developed the 2009 *Coeur d’Alene Lake*

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<sup>79</sup> In 2000, DEQ and EPA completed a metals TMDL for the Coeur d’Alene River subbasin, including Coeur d’Alene Lake, and the segment of the Spokane River where the City’s MS4 outfalls are located. The Idaho Supreme Court subsequently ruled that the required rule making procedures were not followed in setting the TMDL, making it null and void. State legislation in 2003 clarified that for all other waters in Idaho, rule making procedures are not required for TMDLs. The legislation, however, kept the rule making requirement identified by the Idaho Supreme Court in place for a metals TMDL for the Coeur d’Alene River subbasin. To date, there is no EPA approved metals TMDL for the lake, for either State or Tribal areas. Because the State court invalidated the Coeur d’Alene River Basin TMDL under State law, there is no longer an EPA approved TMDL for the Lake or relevant section of the Spokane River. Accordingly, EPA is not required by 40 CFR122.44(d)(1)(vii)(B) to establish permit requirements that are consistent with the assumptions and requirements of the invalidated TMDL’s wasteload allocations

*Management Plan* (2009 LMP) to protect and improve lake water quality by limiting nutrient inputs that impair lake water quality conditions; excess nutrient loading subsequently influences the solubility of mining-related metals contamination in lake sediments. The 2009 LMP sets lake management goals, objectives, and strategies, including specific actions for water quality management of Coeur d’Alene Lake and its tributaries. The Tribe and IDEQ view the 2009 LMP as a functional equivalent to a nutrient TMDL, and using existing regulatory tools to address nutrient and sediment inputs to Coeur d’Alene Lake is consistent with the 2009 LMP.

The MS4GP requirements are consistent with the LMP’s management actions for public outreach and education and controlling erosion and sediment from construction activities and from roadway surfaces.<sup>80</sup>

EPA previously required the City of Coeur d’Alene and the Idaho Transportation Department District #1 to monitor select MS4 outfalls in acknowledgement of IDEQ’s interest in characterizing nutrients and metals in MS4 discharges to the Lake and to Spokane River to understand pollutant loading from urban sources. EPA also required the City of Post Falls to monitor their MS4 discharges into the Spokane River.

Data collected by the Cities and ITD District #1 thus far is insufficient to assess the effectiveness and adequacy of existing SWMP control measures. However, MS4 outfall monitoring locations are now established, and EPA believes that continued data collection is necessary to define pollutant loading from the MS4s.

New MS4 maps submitted by the Post Falls Highway District in compliance with the previously issued MS4 permit confirms the Post Falls Highway District is also an affected MS4 permittee, based on the identification of MS4 outfalls discharging into Spring Creek and other tributaries to the Spokane River.

**Conclusion:** In MS4GP Appendix F.1 , EPA requires the affected MS4 permittees discharging to Coeur d’Alene Lake (City of Coeur d’Alene and Idaho Transportation Department District #1) to continue the storm water monitoring data collection efforts begun under the prior MS4 permit term(s). Similarly, the affected MS4 permittees discharging to the Spokane River (City of Coeur d’Alene, Idaho Transportation District #1, City of Post Falls, and Post Falls Highway District) must continue the storm water monitoring data collection efforts begun under the prior MS4 permit term(s). EPA recommends that the affected MS4 permittees work collaboratively to collect data that meets the data quality objectives identified in the existing Quality Assurance Plans.

**B. Spokane River Downstream of the ID/WA border**

**Summary:** Additional SWMP control measures, and continued monitoring of storm water discharges, is necessary and appropriate to address PCB- impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Coeur d’Alene	Spokane River	<i>Spokane R.- downstream of the ID/WA border</i>	Polychlorinated Biphenyls (PCBs)	No TMDL completed.

<sup>80</sup> See: Tables C1 and C3 of the *Coeur d’Alene Lake Management Plan* (IDEQ & Coeur d’Alene Tribe, March 2009).

The Washington Department of Ecology's (Ecology) *2012 Water Quality Assessment Report* lists the Spokane River, downstream of the Idaho/Washington border, as not meeting the water quality standards for polychlorinated biphenyls (PCBs). Ecology's current water quality criterion for total PCBs is 170 picograms per liter (pg/L). In January 2015, Ecology proposed revisions to its water quality criteria established to protect human health; including a generally applicable narrative water quality criterion that "[a]ll waters shall maintain a level of water quality when entering downstream waters that provides for the attainment and maintenance of the water quality standards of those downstream waters, including the waters of another state." The waters of the Spokane Tribe are located downstream from the segments of the Spokane River that Ecology considers impaired. The Tribe's water quality criterion for total PCBs, approved by EPA in 2013, is 1.3 pg/L, more than two orders of magnitude lower than the current Washington criterion, and perhaps the lowest PCB criterion in the country.<sup>81</sup>

In response to a U.S District Court order and remand pertaining to the status of a TMDL to address the PCB impairment, (and in consultation with Ecology), EPA developed a plan (Plan) outlining significant regulatory and non-regulatory actions necessary to identify and address sources of PCB pollution in the Spokane River. EPA provides the context regarding PCB contamination in the River, and the recommendations for further control of PCB sources in order to attain both Ecology's and the Spokane Tribes' PCB water quality criteria. If the Spokane River remains impaired for PCBs after recommended actions are completed, the Plan requires Ecology to initiate a TMDL addressing PCB impairment by no later than July 15, 2028, and finalize that TMDL no later than July 1, 2030.

MSGP Appendix F.2 outlines additional requirements for affected MS4 permittees discharging to the Spokane River: City of Coeur d'Alene, City of Post Falls, Post Falls Highway District, and Idaho Transportation Department District #1. The SWMP activities and monitoring reflect EPA's recommended NPDES permit conditions for regulated MS4 discharges, and, when fully implemented, EPA expects these actions to contribute to the necessary PCB loading reductions into the Spokane River.<sup>82</sup>

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<sup>81</sup> See: *EPA's Plan for Addressing PCBs in the Spokane River, Defendants' Response to the Remand by the Court, Sierra Club, et al. v. McLerran, No. C11-1759-BJR (July 14, 2015)*, pages 3-5.

<sup>82</sup> See *EPA's Plan for Addressing PCBs in the Spokane River, Defendants' Response to the Remand by the Court, Sierra Club, et al. v. McLerran, No. C11-1759-BJR (July 14, 2015)* Appendix B pages. 5-8.

### C. Lower Boise River

**Summary:** Continued monitoring of storm water discharges is necessary and appropriate to address temperature-impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Boise/ Nampa	Boise River	ID17050114SW011a_06 <i>Boise R.-Diversion Dam to Veterans Memorial Pkwy</i>	Temperature	No TMDL completed.
		ID17050114SW005_06 <i>Boise R. Veterans Memorial Parkway to Star Bridge</i>		
		ID17050114SW005_06a <i>Boise R.-Star to Middleton</i>		
		ID17050114SW005_06b <i>Boise R.-Middleton to Indian Creek</i>		
		ID17050114SW001_06 – <i>Boise R.-Indian Creek to the mouth</i>		

**Discussion:** IDEQ’s 2012 Integrated Report, Appendix J, lists the segments of the Boise River listed above as impaired for temperature; no TMDLs are established.

Affected MS4 permittees discharging to these waterbodies include, but are not limited to, ACHD, Boise, Garden City, Drainage District #3, Idaho Transportation Department District #3, Boise State University, Nampa, Caldwell, Nampa Highway District, and Canyon Highway District.

**Conclusion:** In MSGP Appendix F.4, EPA requires affected MS4 permittees to monitor MS4 discharges for temperature. Temperature was previously included as a required parameter under the Boise/Garden City Area MS4 Permit, but is now a required parameter for all Affected MS4 Permittees that discharge to these impaired segments.

EPA is not requiring additional SWMP control measures to address temperature impairments at this time.

### D. Indian Creek

**Summary:** Monitoring of storm water discharges for temperature is necessary and appropriate to address impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Nampa	Indian Creek	ID17050114SW002_04 <i>Indian Creek - Sugar Ave. to Boise River</i>	Temperature; Cause Unknown (Nutrients Suspected)	No TMDL completed.
Nampa	Indian Creek	ID17050114SW003a_04 <i>Indian Creek - New York Canal to Sugar Avenue</i>	Temperature; Cause Unknown; (Nutrients suspected)	

**Discussion:** IDEQ’s 2012 Integrated Report, Appendix J lists these segments of Indian Creek as impaired for temperature; nutrients are suspected to also contribute to the impairment. No TMDLs have yet been established.

Affected MS4 permittees discharging to Indian Creek include Nampa, Caldwell, Nampa Highway District, and Canyon Highway District.

**Conclusion:** In MSGP Appendix F.4, EPA requires monitoring of storm water discharges for temperature and continued monitoring for total phosphorus.

EPA is not requiring additional SWMP control measures at this time. Implementation of the SWMP control measures in the MS4GP Part 3 will substantively reduce sediment loadings, which in turn will reduce phosphorus loading through the MS4. These measures include enforceable requirements for erosion and sediment control, and permanent storm water management controls for site development disturbing 5,000 square feet or more. In addition, proper operation and maintenance of roadway surfaces (including regular street sweeping) will enhance the management of sediment solids. These measures, combined with the enhanced illicit discharge assessment activities required to address the LBR Phosphorus TMDL are sufficient to address and assess the urban storm water contribution to the impairments to Indian Creek.

### E. Mill Slough

**Summary:** Monitoring of storm water discharges for temperature is necessary and appropriate to address impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Nampa	Mill Slough	ID17050114SW005_02 <i>Mill Slough and Phyllis Slough</i>	Temperature	No TMDL has been completed

**Discussion:** IDEQ's 2012 Integrated Report, Appendix J lists Mill Slough as impaired for temperature; no TMDLs have been established.

The affected MS4 permittee discharging to this waterbody is the City of Middleton.

**Conclusion:** In MSGP Appendix F.4, EPA requires monitoring of storm water discharges for temperature. EPA is not requiring additional SWMP control measures to address temperature impairments at this time. Implementation of the SWMP control measures in the MS4GP Part 3 is sufficient to address and assess the contribution of urban storm water to temperature impacts in the Mill Slough.

### F. Mason, Fifteenmile, Tenmile, and Fivemile Creeks

**Summary:** Continued monitoring of storm water discharges is necessary and appropriate to address impaired waters without an applicable TMDL. EPA adds chlorpyrifos and malathion to the list of pollutant parameters to be monitored.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Nampa	Mason Creek	ID17050114SW006_02 <i>Mason Creek - entire watershed</i>	Temperature; Chlorpyrifos; Malathion; Cause unknown (Nutrients suspected)	No TMDL completed.
Nampa	Fifteenmile Creek	ID17050114SW007_04- <i>Fifteenmile Creek - 4th order (Fivemile Creek to mouth)</i>	Chlorpyrifos;	

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Nampa	Tenmile Creek	ID17050114SW008_03- <i>Tenmile Creek - 3rd order below Blacks Creek Reservoir</i>	Chlorpyrifos; Cause Unknown (Nutrients suspected)	No TMDL completed.
Nampa	Fivemile Creek	ID17050114SW010_03- <i>Fivemile Creek - 3rd order tributaries</i>	Chlorpyrifos; Cause Unknown (Nutrients suspected)	

**Discussion:** IDEQ’s 2012 Integrated Report, Appendix J, lists Mason, Fifteenmile, Tenmile, and Fivemile Creeks as impaired for the agricultural pesticide chlorpyrifos; Mason Creek is also listed for temperature and malathion. Mason, Tenmile, and Fivemile Creeks are also suspected to be impaired for nutrients. No TMDLs for these pollutants in these waters have yet been established.

Affected MS4 permittees discharging to these waters include ACHD, Nampa, and Caldwell.

**Conclusion:** In MSGP Appendix F4, EPA requires monitoring of storm water discharges for temperature. EPA is not requiring additional SWMP control measures to address temperature, pesticides, or suspected nutrient impairments at this time. Implementation of the SWMP control measures in the MS4GP Part 3 are sufficient to address and assess the contribution of urban storm water to these impairments in Mason, Fifteenmile, Tenmile, and Fivemile Creeks.

### G. Snake River

**Summary:** Monitoring of storm water discharges is necessary and appropriate to address impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Lewiston	Snake River	ID17060103SL001_08- <i>Snake River - Asotin River (Idaho/Oregon border) to Lower Granite Dam pool</i>	Temperature	No TMDL completed.

**Discussion:** IDEQ’s 2012 Integrated Report, Appendix J, lists the portion of the Snake River cited above as impaired for temperature. No TMDL has been completed.

Regulated MS4s discharging to this portion of the Snake River includes, but is not limited to, the City of Lewiston, ITD District #2, and the U.S. Army Corps of Engineers. City of Lewiston, and potentially other regulated MS4s discharging to this portion of the Snake River, has not yet fully implemented a comprehensive Storm water Management Program in compliance with an applicable NPDES permit for MS4 discharges.

**Conclusion:** In MSGP Appendix F.6, EPA requires monitoring of storm water discharges into the impaired segment of the Snake River for temperature. EPA is not requiring additional SWMP control measures to address temperature impairments at this time. Implementation of the SWMP control measures in the MS4GP Part 3 is sufficient to address the contribution of urban storm water to this impairment.

## Appendix 5: Anti-backsliding

The MS4GP requires Permittees to control storm water discharges using BMPs to implement a comprehensive SWMP as the mechanism to achieve the required pollutant reductions.<sup>83</sup>

As previously described in Part III.C of this document, SWMP requirements in the MS4GP (when compared to EPA's previously issued MS4 permits in Idaho) reflects EPA's iterative decision making process of determining "*the controls necessary to reduce the discharge of pollutants from the MS4 to the MEP*" between NPDES permit terms. Accordingly, the MS4GP contains more prescriptive t BMPs/program actions as minimum control measures than EPA's previously issued Phase II MS4 permits in Idaho. The requirements of the MS4GP are comparable, but not exactly matched, to those found in the existing Phase I MS4 permit. EPA has determined that a Permittee's full implementation of the SWMP required by MS4GP Part 3 meets the MEP standard of CWA Section 402(p)(3)(B)(iii).

The following provisions of the existing Phase I MS4 Permit (#IDS027561) are not explicitly included in the MS4GP:

Part II.A.4- *Sub-watershed Planning*

Part II.B.2.c *Green Infrastructure/Low Impact Development (LID) Incentive Strategy and Pilot Projects,*

II.B.4.g; Storm Water Management

EPA previously included such provisions to address phosphorus and temperature impairments and applicable TMDLs for the Lower Boise River that existed at the time the Phase I MS4 Permit was reissued in late 2012.

In 2015, IDEQ finalized, and EPA approved, addendums to the applicable Sediment and Bacteria TMDLs, and finalized a TMDL for phosphorus that applies to the LBR and its tributaries. Based on the final WLAs for MS4 discharges into the LBR and its tributaries, EPA does not believe that sub-watershed planning, and associated LID pilot projects are necessary in order to reduce pollutants from the MS4.

Information resulting from these efforts is available to inform future SW management activities within the watershed, and elsewhere throughout the state of Idaho; however, these specific project activities are not necessary in order to meet the wet weather pollutant targets

Section 402(o) of the Clean Water Act and federal regulations at 40 CFR §122.44 (l) generally prohibit the renewal, reissuance or modification of an existing NPDES permit that contains effluent limits, permit conditions or standards that are less stringent than those established in the previous permit (i.e., anti-backsliding) but provides limited exceptions.

Section 402(o)(1) of the CWA states that a permit may not be reissued with less-stringent limits established based on Sections 301(b)(1)(C), 303(d) or 303(e) (i.e. water quality-based limits or limits established in accordance with State treatment standards) except in compliance with Section 303(d)(4). Section 402(o)(1) also prohibits backsliding on technology-based effluent limits

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<sup>83</sup> See 40 CFR § 122.44(k).

established using best professional judgment (i.e. based on Section 402(a)(1)(B)), but in this case, the effluent limits being revised are water quality-based effluent limits (WQBELs).

Section 303(d)(4) of the CWA states that, for water bodies where the water quality meets or exceeds the level necessary to support the water body's designated uses, WQBELs may be revised as long as the revision is consistent with the State's anti-degradation policy. Additionally, Section 402(o)(2) contains exceptions to the general prohibition on backsliding in 402(o)(1). According to the EPA NPDES Permit Writers' Manual (EPA-833-K-10-001) the 402(o)(2) exceptions are applicable to WQBELs (except for 402(o)(2)(B)(ii) and 402(o)(2)(D)) and are independent of the requirements of 303(d)(4). Therefore, WQBELs may be relaxed as long as either the 402(o)(2) exceptions or the requirements of 303(d)(4) are satisfied.

## **Appendix 6: Draft Certification from the State of Idaho**

