Fact Sheet

NPDES Permit Number:	IDS028053
Date:	November 2, 2018
Public Comment Period Expiration Date:	December 3, 2018
Technical Contact:	Misha Vakoc (206) 553-6650 or (800) 424-4372 vakoc.misha@epa.gov

The U.S. Environmental Protection Agency (EPA) Proposes to Re-Issue a National Pollutant Discharge Elimination System (NPDES) Permit for Stormwater Discharges To:

City of Pocatello, City of Chubbuck, Bannock County, Idaho Transportation Department-District #5, and Idaho State University

The EPA Region 10 proposes to reissue a NPDES permit authorizing the discharge of stormwater from all municipal separate storm sewer system (MS4) outfalls owned and/or operated by the entities listed above. These entities are referred to collectively in this document as "the Permittees." Permit requirements are based on Section 402(p) of the Clean Water Act (CWA), 33 U.S.C. § 1342(p), and EPA regulations for permitting municipal stormwater discharges (40 CFR §§ 122.26, 122.30-35, and 123.35; see also 64 FR 68722 [Dec. 8, 1999] and 81 FR 89320 [Dec. 9, 2016].

The Permit requires the continued implementation of a cooperative, comprehensive stormwater management program (SWMP), and outlines the control measures to be used by the Permittees to reduce pollutants in their stormwater discharges to the maximum extent practicable (MEP), protect water quality, and satisfy the appropriate water quality requirements of the CWA. Annual reporting is required to reflect the status of the SWMP implementation.

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures;
- descriptions of the regulated MS4 discharges to be covered under the Permit; and
- explanation of the control measures and other Permit terms and conditions.

The EPA requests public comment on all aspects of the Permit.

State CWA Section 401 Certification

Upon the EPA's request, the Idaho Department of Environmental Quality (IDEQ) has provided a draft certification of the permit for this facility under Section 401 of the CWA, 33 U.S.C. § 1341. Comments regarding the certification should be directed to:

Idaho Department of Environmental Quality
ATTN: Lynn Van Every, Water Quality Manager
444 Hospital Way, #300
Pocatello, ID 83201

Public Comment and Opportunity for Public Hearing

Persons wishing to comment on, or request a Public Hearing for, the draft Permit must do so in writing by the expiration date of the public comment period. A request for Public Hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. All comments and requests for Public Hearings must be in writing and should be submitted to the EPA as described in the Public Comments Section of the attached Public Notice.

After the comment period ends, and all comments have been considered, the EPA's Regional Director for the Office of Water and Watersheds will make a final decision regarding permit issuance. If the EPA receives no comments, the tentative conditions in the draft permit will become final. If comments are submitted, the EPA will prepare a response to comments document and, if necessary, will make changes to the draft Permit. After making any necessary changes, the EPA will issue the Permit with a response to comments document, unless issuance of a new draft Permit is warranted pursuant to 40 CFR § 122.14. The Permit will become effective no earlier than thirty (30) days after the issuance date, unless the permit is appealed to the Environmental Appeals Board within 30 days pursuant to 40 CFR § 124.19.

Documents Available for Review

The draft Permit, and other information is available on the EPA Region 10 website at: https://www.epa.gov/npdes-permits/stormwater-discharges-municipal-sources-idaho-and-washington OR https://www.epa.gov/npdes-permits/idaho-npdes-permits. The draft Permit and related materials can be reviewed in person by contacting the EPA Region 10 Operations Office in Boise or in Region 10's Regional Office in Seattle, between 8:30 a.m. and 4:00 p.m. (Mountain Time), Monday through Friday:

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

U.S. Environmental Protection Agency, Region 10
Office of Water and Watersheds
1200 Sixth Avenue, Suite 155, OWW-191
Seattle, Washington 98101
(800) 424-4372, and request x-0523

For questions regarding the Permit or Fact Sheet, contact Misha Vakoc at the phone number or E-mail listed above. Services for persons with disabilities are available by contacting Audrey Washington at (206) 553-0523.

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Acronyms

ACM	Alternative Control Measure
BMP	Best Management Practice
CFR	Code of Federal Regulations
CGP	Construction General Permit, i.e., the most current version of the *NPDES General Permit for Stormwater Discharges from Construction Activities in Idaho*
CWA	Clean Water Act
CZARA	Coastal Zone Act Reauthorization Amendments
EFH	Essential Fish Habitat
ESA	Endangered Species Act
EPA	United States Environmental Protection Agency, Region 10
FR	Federal Register
GI	Green Infrastructure
GSI	Green Stormwater Infrastructure
IDAPA	Idaho Administrative Procedures Act
IDEQ	Idaho Department of Environmental Quality
ISU	Idaho State University
ITD5	Idaho Transportation Department – District #5
LA	Load Allocation
LID	Low Impact Development
mg/L	Milligrams per Liter
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
OWW	EPA Office of Water and Watersheds
PUA	Pocatello, ID Urbanized Area
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
US	United States
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
WLA	Wasteload Allocation
WQS	Water Quality Standards

1 Introduction

Stormwater is the surface runoff that results from rain and snow melt. Urban development alters the land's natural infiltration and human activity generates a host of pollutants that can accumulate on paved surfaces. Uncontrolled stormwater discharges from urban areas can negatively impact water quality. The National Pollutant Discharge Elimination System (NPDES) regulations establish permit requirements for discharges from certain municipal separate storm sewer systems (MS4s) located in Census-defined Urbanized Areas. Appendix 3 of this Fact Sheet details the types of pollutants typically found in urban stormwater, and explains the regulatory background for the MS4 permit program.

The U.S. Environmental Protection Agency (EPA) is reissuing the Permit authorizing stormwater discharges from the regulated small MS4s located in the Pocatello Urbanized Area (PUA) owned and/or operated by the City of Pocatello; City of Chubbuck; Bannock County; Idaho Transportation Department - District #5 (ITD5); and Idaho State University (ISU). This Fact Sheet explains the rationale for the proposed Permit terms and conditions for these MS4 discharges.

1.1 Permittees, New Applicant, and Permit History

In accordance with Clean Water Act (CWA) Section 402(p), 33 U.S.C. § 1342(p), and federal regulations at 40 CFR § 122.32, the Permit is being reissued on a system-wide basis for the MS4 owned and/or operated by the operators listed below that are located within the boundaries of the PUA as defined by the Year 2000 and Year 2010 Decennial Census. See Appendix 3 for maps of the PUA.

Operator	Physical Address
City of Pocatello	911 North 7th Avenue Pocatello, ID 83201
City of Chubbuck	5160 Yellowstone Avenue Chubbuck, ID 83202
Bannock County	5500 South 5th Avenue Pocatello, ID 83204
Idaho Transportation Department-District 5	5151 South 5th Avenue Pocatello, ID 83204
Idaho State University	921 South 8th Avenue, Stop 8106 Pocatello, ID 83209-8137

The EPA issued NPDES Permit #IDS028053 for discharges from the Pocatello, Chubbuck, Bannock County, and ITD5 MS4s in November 2006; the Permit expired in December 2011.

In October 2006, ISU submitted a permit application for its regulated small MS4 discharges, and requested to be included as a co-Permittee with the other PUA regulated MS4s subject to NPDES Permit #IDS028053. At that time, the EPA did not

modify the Permit to include ISU. This Permit reissuance will be the first time ISU will be covered by an MS4 NPDES permit.

On June 15, 2011, the Permittees and ISU submitted a timely and complete joint application for the renewal of NPDES Permit #IDS028053. Pursuant to 40 CFR § 122.6, the permit was administratively extended upon the expiration date of the permit. Therefore, with the exception of ISU who is a new permittee, the permit remains in effect until a new permit is reissued. Pocatello, Chubbuck, Bannock County, and ITD5 continue to implement their stormwater management program activities and submit Annual Reports in compliance with the administratively extended Permit.

In the administratively extended Permit, the EPA referred to the group as "Co-Permittees," a term defined in the federal regulations as "*a permittee to a NPDES permit that is only responsible for Permit conditions relating to the discharge for which it is the operator."* The EPA recognizes the ongoing cooperative working relationship among the six entities, but collectively refers to the group in the current draft Permit and this Fact Sheet as "Permittees."

In 2016 and 2017, the EPA was working on a general permit that would cover all Phase II regulated MS4s in Idaho. During this period of time, the EPA received comments from the Permittees and other stakeholders on two versions of the draft general permit. The EPA has decided to issue individual permits instead of a general permit. However, the information received, in conjunction with the permit renewal application and Annual Reports, has been used to inform the current draft Permit. All of these materials are available as part of the Administrative Record.

1.2 Idaho NPDES Program Authorization

On June 5, 2018, the EPA approved Idaho's application to administer and enforce the Idaho Pollutant Discharge Elimination System (IPDES) program. IDEQ will be taking the IPDES program in phases over a four-year period in accordance with the Memorandum of Agreement (MOA) between IDEQ and the EPA, and subject to EPA oversight and enforcement. IDEQ will obtain permitting authority for the stormwater phase on July 1, 2021. At that time, all documentation required by the permit will be sent to IDEQ rather than to the EPA and any decision under the permit stated to be made by the EPA or jointly between the EPA and IDEQ will be made solely by IDEQ. Permittees will be notified by IDEQ when this transition occurs.

1.3 Description of Permittees' MS4s and Discharge Locations

- City of Pocatello: Pocatello's MS4 drains approximately 90 square miles, which consists of a "minor system" of approximately 71 linear miles of storm drain pipe and a "major system" of approximately 240 miles of paved streets that convey storm water to designated collection points that discharge through approximately 181 outfalls to the Portneuf River and/or Pocatello Creek. Two storm water treatment wetlands and several detention ponds are also part of Pocatello's MS4.
- City of Chubbuck: Chubbuck's MS4 consists of several systems. The Yellowstone Avenue system consists of a 0.75 mile-long storm drain pipeline running from Interstate 86 on the south to its outfall into an irrigation drain canal near 5300 Yellowstone Avenue. The Hiline Canal system consists of several inlets that collect storm water from areas east of Hiline Canal and discharge directly to the canal. The

Paradise Acres system consists of several inlets in the Paradise Acres subdivision that discharge runoff to an irrigation drain canal. In addition, approximately 75 drywells are used to inject stormwater underground.

- Bannock County (County): The County's MS4 consists primarily of road drainage ditches that discharge directly to tributaries of the Portneuf River.
- Idaho Transportation Department – District 5: ITD5 does not maintain a constructed MS4. Runoff from the interstates is conveyed to the Portneuf River through the Pocatello and Chubbuck MS4s. Through an intergovernmental agreement, ITD5 maintains the MS4 on Garrett Way (US-30) in Pocatello.
- Idaho State University: ISU owns an estimated 1,200 acres; approximately 250 acres of which is developed land, with approximately seven miles of paved streets and approximately 10 acres of parking lots. ISU does not have a constructed storm drain system; however, the ISU property maintains at least 21 stormwater retention areas and seven stormwater filtration areas. Any stormwater runoff that is not contained within ISU property flows into Pocatello's MS4 at four different locations.

1.4 Stormwater Management Program Accomplishments[1]

Since 2006, the Permittees have successfully developed a wide variety of local outreach programs, regulatory requirements, assessment tools, and guidance materials through which they effectively manage pollutants in discharges from the MS4s in the PUA, including:

- Extensive intergovernmental coordination through a memorandum of understanding;
- Multifacted outreach and public participation activities using an array of traditional and social media outreach methods, K-12 outreach programs, and volunteer activities, focused on building comprehensive awareness of stormwater impacts;
- Ordinances, policies, protocols, and code enforcement processes to respond to illicit discharges into the MS4s;
- Current MS4 maps throughout the Permit Area that are used to inform the Permittees' asset management systems in support of MS4 maintenance activities;
- Ordinances that require the control of construction related sediment and erosion for all ground disturbing activities that disturb over ¼ acre of land or that disturb 10 cubic yards of soil, including guidance for those site operators that require compliance with the statewide *NPDES General Permit for Storm Water Discharges from Construction Activity*, #IDR120000 (Construction General Permit or CGP);
- Ordinances and other requirements for treatment and detention of post-construction runoff from pollutant generating impervious surfaces at new development and redevelopment projects that disturb over 5,000 square feet, as detailed in the *Portneuf Valley Stormwater Quality Design Manual*;
- Operation and maintenance practices that are protective of water quality;
- Demonstration projects in different settings throughout the Permit Area that validate the use of innovative stormwater management techniques like permeable pavements,

[1] See: Pocatello, et al. 2017.

infiltration planters, biofiltration swales, tree plantings, retention facilities, and similar treatment devices;

- Ongoing evaluation of street and catch basin cleaning practices to optimize effectiveness; and
- Monitoring of MS4 discharges and Portneuf River water quality.

1.5 Permit Development

The NPDES permitting authority must include terms and conditions in each successive MS4 permit that meet all of the requirements of 40 CFR § 122.34(a)(2) *"based on its evaluation of the current permit requirements, record of permittee compliance and program implementation progress, current water quality conditions, and other relevant information."* The permitting authority must consider adjustments in the form of modified permit requirements, where necessary, to reflect current water quality conditions, best management practices (BMP) effectiveness, and other current relevant information. The permitting authority cannot reissue the same permit conditions for subsequent five-year permit term(s) without considering whether more progress can or should be made in meeting water quality objectives (especially in areas where the receiving waters are not attaining the applicable water quality standards).[2]

For the PUA MS4 Permit, the EPA has considered a variety of information in order to develop the Permit terms and conditions, including but not limited to:

- NPDES Permit #IDS028053 as issued in 2006, and other EPA issued MS4 permits in Idaho;
- Permit renewal application submitted by the Permittees in 2011;
- Applicable total maximum daily loads (TMDLs) analyses and impaired waters listings by IDEQ for the Portneuf River;
- Annual Reports submitted by the Permittees as required by the prior Permit;
- Updated Urbanized Area maps and boundaries based on the Year 2010 Census;
- Input from stakeholders and the Permittees on the EPA's preliminary draft MS4 general permit(s), which were not issued;
- EPA guidance and national summary information regarding MS4 permits,[3] including:
  - *Compendium Part 1: Six Minimum Control Measure Provisions*, November 2016;
  - *Compendium Part 2: Post Construction Performance Standards*, November 2016;
  - *Compendium Part 3: Water Quality-Based Requirements*, April 2017;
  - *Summary of State Post Construction Stormwater Standards*, July 2016;
  - EPA's November 2014 Memo entitled *Revisions to the November 22, 2002 Memorandum "Establishing TMDL Wasteload Allocations (WLAs) for Stormwater Sources and NPDES Permit Requirements Based on Those WLAs*;" and the

[2] See 40 CFR §122.34(a), EPA 2016a and EPA 2016b.
[3] EPA documents listed here are available at https://www.epa.gov/npdes/stormwater-discharges-municipal-sources

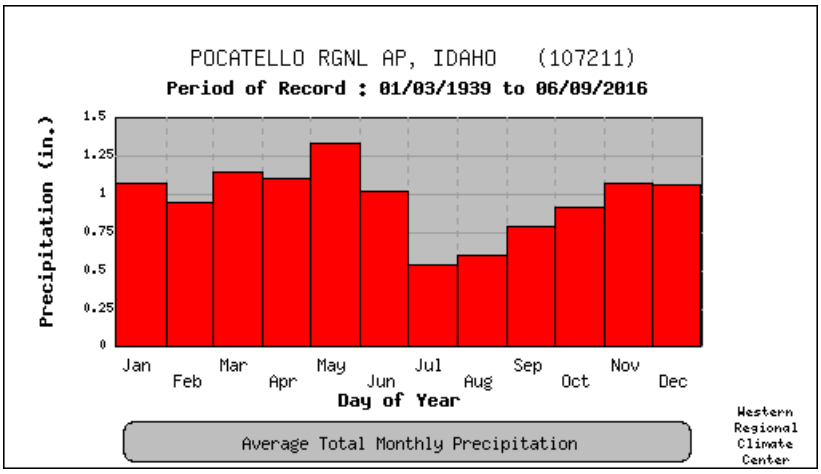
- *MS4 Permit Improvement Guide*, April 2010.

- Conclusions and recommendations from the National Research Council Report entitled *Urban Stormwater Management in the United States*, dated October 2008;
- Technical developments in the field of stormwater management, including recent research and information on effective and feasible methods for the onsite management and treatment of stormwater using practices commonly referred to as "low impact development" (LID), "green infrastructure" (GI) and/or "green stormwater infrastructure" (GSI) techniques.
- Other MS4 permits issued by the EPA for regulated MS4s in Washington, Puerto Rico, Massachusetts, and New Mexico, as well as MS4 permits issued by other state NPDES permitting authorities.

A partial list of references supporting the development of the PUA MS4 Permit is provided in Part 6 of this Fact Sheet; additional references are available in the Administrative Record for the Permit.

1.6 Average Annual Precipitation in the Pocatello Urbanized Area

The National Oceanic and Atmospheric Administration's (NOAA's) Western Regional Climate Center maintains historical climate information for various weather stations throughout the western United States. The Permit Area has an annual average precipitation of approximately 11.6 inches, and an annual average snowfall of 40.2 inches.



1.7 Receiving Waters

The EPA intends to reissue the Permit authorizing discharges from the MS4s owned and/or operated by the Permittees in the PUA to waters of the United States that include the Portneuf River and Pocatello Creek. All discharges to waters of the U.S. located in the Permit Area must also comply with any limitations that may be imposed by the State as part of its water quality certification pursuant to CWA Section 401, 33 U.S.C. § 1341. See also Section 3.7 of this Fact Sheet.

The Idaho Department of Environmental Quality (IDEQ) has classified the Portneuf River and Pocatello Creek as fresh water with the following designated uses:

Designated Beneficial Uses for Waters Receiving Regulated MS4 Discharges			
Urbanized Area or City	**Receiving Water**	**Citation from IDAPA**	**Designated Beneficial Uses***
Pocatello Urbanized Area	Portneuf River	58.01.02.150.10	Cold water aquatic life, salmonid spawning, and secondary contact recreation.
	Pocatello Creek	58.01.02.150.10	Undesignated; default use of cold water aquatic life and primary contact recreation.

**Note: All waters in Idaho must also be protected for industrial and agricultural water supply, wildlife habitats, and aesthetics.*

1.7.1 Antidegradation

IDEQ has completed an antidegradation review which is included in the draft 401 certification for this permit. See Appendix 1 of the Fact Sheet. The EPA has reviewed this antidegradation analysis and finds that it is consistent with the State's water quality standards and the State's antidegradation implementation procedures. Comments on the CWA Section 401 Certification, including the antidegradation review, can be submitted to IDEQ as set forth above (see State Certification on Page 1 of this Fact Sheet).

1.7.2 Water Quality and Total Maximum Daily Loads

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

IDEQ's 2014 *Integrated Section 303(d)/Section 305(b) Report* (2014 Integrated Report) contains the list of impaired water bodies in Idaho required by CWA Section 303(d).[4] The table below summarizes the status of waters receiving the MS4 discharges covered by the Permit, including the waterbody assessment units, or segments, that IDEQ considers impaired and the status of any applicable TMDL(s) for those segments.

[4] The IDEQ's 2014 Integrated Report is available online at: https://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx.

Status of Waters Receiving Regulated MS4 Discharges			
Upper Snake Basin			
Receiving Water	**Waterbody Assessment Unit**	**Impairment Pollutants**	**TMDL Status**
Portneuf River	ID17040208SK001_05 *Portneuf R.-Marsh Creek to American Falls Reservoir*	Total Nitrogen Oil and Grease Total Phosphorus *E. coli* Sedimentation/ Siltation Temperature	*Portneuf River TMDL* February 2001. Approved April 2001. *Portneuf River TMDL Revision and Addendum*[5] February 2010. Approved July 2010.
Pocatello Creek	ID17040208SK025_02 *South Fork Pocatello Creek - source to mouth*	Sedimentation/ Siltation	

The main stem Portneuf River in the Permit Area does not meet the Idaho water quality standards narrative criteria for *E. coli,* nutrients (total phosphorus), oil and grease, and sedimentation/siltation. In 2001, IDEQ developed a TMDL for the Portneuf River (Portneuf TMDL), which identified stormwater runoff-related WLAs for oil and grease, nitrogen and phosphorus and load allocations for bacteria and suspended sediment from urban stormwater. The Portneuf TMDL was approved by EPA on April 16, 2001. In 2010, IDEQ revised the Portneuf TMDL (*Portneuf TMDL Revision and Addendum)*, which EPA approved on July 29, 2010. The Portneuf TMDL Revision and Addendum refines the WLAs associated with NPDES-regulated MS4s discharging to the Portneuf River main stem for total phosphorus, and oil and grease. IDEQ also defined load reduction targets for suspended sediment and *E. coli*. Further discussion of these WLAs and load reduction targets are described in Appendix 5 of this Fact Sheet. Section 2.5. of this Fact Sheet describes how the Permittees have worked to comply with the objectives of the 2001 Portneuf TMDL.

NPDES permit terms and conditions for regulated stormwater discharges must be consistent with the assumptions and requirements of WLAs in TMDLs.[6] In general, the EPA's guidance recommends that the NPDES permitting authority use BMPs to implement applicable WLAs and load reduction targets in a MS4 permit. When using BMPs as narrative permit limitations to implement a WLA or load reduction target, the NPDES permit must include a monitoring mechanism to assess compliance. The NPDES permitting authority may require use of expanded or better-tailored BMPs in successive permit terms when prior monitoring demonstrates such controls are necessary to implement the WLA and protect water quality.[7]

To ensure that the permit is consistent with the assumptions of the WLAs and LAs in the

[5] TMDL documents are available on IDEQ's website at http://deq.idaho.gov/water-quality/surface-water/tmdls/table-of-sbas-tmdls/
[6] See: 40 C.F.R. §§ 122.34(c)(1) and 122.44(d)(1)(vii)(B).
[7] See: EPA 1996; EPA 2002; EPA 2014a; EPA 2014b; and EPA 2016b.

Portneuf TMDL, the Permit requires the Permittees to conduct at least two (2) pollutant reduction activities, and appropriate monitoring/assessment activities. The Permittees must develop and submit descriptions of their selected pollutant reduction and monitoring/assessment activities within 180 days of the Permit effective date. Upon EPA and IDEQ review, the EPA will revise the Permit to incorporate explicit reference to those specific activities. Additional discussion of the EPA's rationale for these provisions is provided in Section 2.5 of this Fact Sheet.

In the event that the EPA approves other TMDLs for the receiving waters listed above and those TMDL(s) contain WLA(s) for one or more regulated MS4s, the EPA may, after consultation with IDEQ, choose to modify the Permit to incorporate additional provisions if needed. Permit Part 8.1 addresses such a permit modification, consistent with the NPDES regulations at 40 CFR §§ 122.62, 122.64 and 124.5.

2 Basis for Permit Conditions

2.1 General Information

NPDES permits for regulated small MS4s must include terms and conditions to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements under the CWA. At a minimum, MS4 permit terms and conditions must satisfy the requirements set forth in the federal regulations at 40 CFR § 122.34(a) through (e).

MEP is the statutory standard that describes the level of pollutant reduction that MS4 operators must achieve. What constitutes MEP "should continually adapt to current (*water quality*) conditions and BMP effectiveness, and should strive to attain water quality standards."[8] Neither the CWA nor the stormwater regulations provide a precise definition of MEP, which provides for maximum flexibility in MS4 permitting.

The EPA has described the iterative process of imposing the MS4 standard, including what is necessary to reduce pollutants to the MEP, over consecutive permit terms as: (1) the NPDES permitting authority defining clear, specific, and measurable NPDES permit requirements; (2) the MS4 Permittees implementing the required actions as part of a comprehensive program; and (3) the NPDES permitting authority and MS4 Permittees evaluating the effectiveness of BMPs used to date, current water quality conditions, and other relevant information.[9]

All MS4 permits must include terms and conditions that are "clear, specific, and measurable," and consist of narrative, numeric, and/or other types of requirements. Examples include: implementation of specific tasks or practices; BMP design requirements; performance requirements; adaptive management requirements; schedules for implementation, maintenance, and/or frequency of actions.[10]

In order to comply with the MS4 standard during the Permit term, the EPA has defined the stormwater management (or SWMP) control measures and evaluation requirements that the Permittees must implement. The Permit describes these requirements in more

[8] EPA 1999, pages 68753-68734/
[9] EPA 2016 pages 89338.-89339; 40 CFR 122.34(a)(2)
[10] See 40 CFR 122.34(a).

detail than was previously required in the prior administratively extended Permit to ensure that the terms and conditions are "clear, specific, and measurable." To reduce the discharge of pollutants from the MS4s to the MEP, each Permittee must implement and enforce the control measures outlined in Permit Part 3 (*SWMP Control Measures*). To protect water quality, the Permittees must conduct monitoring and/or assessment activities targeted at reducing the impairment pollutants of concern in Permit Part 4 (*Special Conditions for Discharges to Impaired Waters*). Where a Permittee's MS4 discharge(s) may be contributing to an ongoing excursion above an applicable water quality standard, and a long-term solution is needed to address the MS4 contribution, the Permit establishes an adaptive management process in Permit Part 5 *(Required Response to Excursions of Idaho Water Quality Standards*). Evaluation and reporting requirements are outlined in Permit Part 6 (*Monitoring, Recordkeeping and Reporting*).

2.2 Discharges Authorized By The Permit

Permit Part 1.2 conditionally authorizes municipal stormwater discharges, and certain types of non-stormwater discharges, from the Permittees' MS4s within the Permit Area, provided that the Permittees comply with the Permit's terms and conditions. Where monitoring or other information shows that a pollutant in a Permittees' MS4 discharge is causing or contributing to an ongoing excursion above the applicable Idaho water quality standard, the Permittees must comply with the notification and other adaptive management requirements in Permit Part 5 (*Required Response to Excursions of Idaho Water Quality Standards*). See also Section 2.6 of this Fact Sheet.

The Permit outlines conditions and prohibitions related to snow disposal (Permit Part 2.2); stormwater discharges associated with industrial and construction activities (Permit Part 2.3); and discharges unrelated to precipitation events (i.e., "non-stormwater discharges;" Permit Part 2.4) that are similar to requirements in the administratively extended Permit.

The EPA acknowledges that, in some urban Idaho watersheds, non-stormwater sources (in the form of landscape irrigation, springs, rising ground waters, and/or groundwater infiltration) are routinely present during dry weather discharges from the MS4(s). The Permit requires Permittees to determine whether a detected dry weather MS4 discharge is an "allowable" discharge. Section 2.4.2 of this Fact Sheet discusses the related dry weather outfall screening requirements included as Permit Parts 3.2.5 and 3.2.6.

2.3 Permittee Responsibilities

Permit Part 2.5 outlines Permittee responsibilities. In general, each Permittee is independently responsible for Permit compliance related to their MS4 and associated discharges.

40 CFR § 122.33(b)(2)(iii) allow regulated MS4 entities to jointly apply as a group to obtain discharge authorization under an individual permit. Once a permit is issued to the group, each entity is responsible for compliance with the Permit's terms and conditions. A written agreement between the parties is required to clarify agreed-upon roles and responsibilities. In the 2011 permit renewal application, the Permittees submitted their detailed intergovernmental agreement for their respective roles and responsibilities.

Permit Part 2.5.3 allows a Permittee (or Permittees) to implement one or more of the control measures by sharing responsibility with an outside entity other than another MS4

Permittee. The Permittee(s) must enter into a written agreement with the outside entity in order to minimize any uncertainty about the other entity's responsibilities to the Permittee. The Permittee(s) remains responsible for compliance with the Permit obligations in the event the outside entity fails to implement the control measure (or any component thereof).[11]

Permit Part 2.5.4 requires the Permittees to maintain adequate legal authority to implement and enforce the required stormwater management program (SWMP) control measures as allowed and authorized pursuant to applicable Idaho law.[12] Without adequate legal authority, or other mechanisms that allow control over what enters or discharges from the MS4, the Permittee(s) cannot perform vital stormwater management functions, such as conducting inspections, requiring installation and proper operation of pollutant control measures within its jurisdiction, and/or enforcing such requirements. The EPA recognizes that highway departments and other special purpose entities do not have formal ordinance authority under Idaho law. In such cases, the EPA expects the Permittees to control pollutants into and from the MS4 by using all relevant regulatory mechanisms available pursuant to applicable Idaho law.

Permit Part 2.5.5 requires each Permittee (or the Permittees as a group) to develop, and update as necessary, a written SWMP Document.[13] The SWMP Document summarizes the physical characteristics of the MS4 and describes how the Permittee conducts the required SWMP control measures within its jurisdiction. The EPA has provided a suggested format for the SWMP Document as an appendix to the Permit and notes that other MS4 Permittees have already developed such documents that can be used as examples.[14] The SWMP Document address three audiences and purposes:

1. General Public – The SWMP Document serves to inform and involve the public in implementation of the local stormwater management program;

2. EPA and IDEQ – The SWMP Document provides the permitting authority a single document to review to understand how the MS4 Permittees will implement its stormwater management program and comply with Permit requirements; and

3. Elected officials and local staff – The SWMP Document can potentially be used by the Permittees as an internal planning or briefing document.

The SWMP Document should also describe the Permittees' unique implementation issues such as cooperative or shared responsibilities with other entities.

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[11] See 40 CFR §122.35.

[12] See EPA 2010

[13] See 40 CFR §122.34(b) and discussion of the relationship between the SWMP and required permit terms and conditions in *EPA 2016b* at pages 89339-89341. 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 Permit.

[14] See, for example, SWMP plan documents authored by the City of Coeur d'Alene (http://www.cdaid.org/files/Engineering/Storm waterManagementPlan.pdf); City of Nampa (http://www.cityofnampa.us/DocumentCenter/View/1513); and Boise State University (http://www.partnersforcleanwater.org/media/182277/2014_boise_state_university_swmp.pdf). Other examples include the Cities of Bellevue, WA; Tacoma, WA; and/or available through the Permit's Administrative Record.

The requirement for the Permittees to develop a SWMP Document is an enforceable condition of the Permit. However, the contents of the SWMP Document are not directly enforceable as requirements of the Permit. As a result, the Permittees may create and subsequently revise the SWMP Document, as necessary, to describe how the stormwater management activities are implemented in compliance with the Permit. Therefore, updates to the SWMP Document may occur without EPA or IDEQ review and approval.

The first iteration of the MS4 Permittees' SWMP Document must be available to the EPA, IDEQ, and the public on a publicly available website (required by Permit Part 3.1.8) no later than the due date of the 1st Year Annual Report. If applicable, the SWMP Document must be updated to include any waterbody specific requirements pursuant to Permit Part 4 no later than the due date of the 2nd Year Annual Report. Finally, the SWMP Document must be updated to reflect the Permittees' current implementation of their control measures and submitted with the Permit Renewal Application, as required by Permit Part 8.2, no later than 180 days prior to the expiration date of the Permit.

Permit Part 2.5.5 requires the Permittees to track indicator statistics and information to document and report on SWMP implementation progress.

Permit Part 2.5.6 requires the Permittees to provide adequate financial support, staffing, equipment, and other support capabilities to implement the SWMP control measures and other Permit requirements. The Permittee(s) demonstrate compliance with this provision by fully implementing the requirements of the Permit. Permittees are not required to keep track of, or report, their implementation costs, though it might be appropriate and helpful for the Permittees to track their program investment in some manner. The Permit does not require specific staffing or funding levels, thus providing flexibility and incentive for Permittees to adopt the most efficient methods to comply with Permit requirements. The EPA encourages Permittees to establish stable funding sources for ongoing SWMP implementation, and enter cooperative working relationships with other regulated small MS4s. Technical resources, such as the *Water Finance Clearinghouse* developed by the EPA's Water Infrastructure and Resiliency Finance Center,[15] are available to help Permittees identify sustainable funding solutions. The EPA supports comprehensive long-term planning to identify investments in stormwater infrastructure and system management that complement other community development initiatives and promote economic vitality.

Permit Part 2.5.8 requires Permittees to extend their stormwater management control measures to all areas under their direct control when new areas served by the MS4 are annexed, or when areas previously served by the MS4 are transferred to another entity. Permittees must report changes in ownership or operational authority to the EPA and IDEQ through the SWMP Document and Annual Reports. Permittees are reminded to make associated revisions to MS4 system maps or other records as soon as possible.

2.3.1 Alternative Control Measure Requests

The Permit requires the implementation of stormwater management (or SWMP) control measures, or control measure components. Where Permittees must revise or update SWMP control measures, or control measure components, full implementation must be

[15] See: https://www.epa.gov/waterfinancecenter

accomplished no later than 180 days prior to the Permit expiration date. To provide implementation flexibility, the Permit allows the Permittee(s) the discretion to submit requests to implement one or more Alternative Control Measures (ACM). As outlined in Permit Part 2.6.1, the Permittee(s) may submit supplemental or individualized documents, plans, or programs that are deemed equivalent to a comparable SWMP control measure, or control measure component, in Permit Part 3, along with supporting rationale and information. Requests for ACM(s) must be submitted no later than 180 days after the Permit effective date to ensure that the EPA and IDEQ have adequate time to review the request(s).[16] Upon determining that the ACM request(s) is equivalent to a comparable Permit SWMP control measure, or control measure component, and results in a modification of the Permit terms and conditions, the EPA will provide opportunity for public comment and, if requested, a public hearing. The EPA will consider all comments received on the ACM and resulting change in permit terms and conditions before issuing a final agency decision.[17]

The opportunity for ACM(s) relative to any SWMP control measure, or control measure component, in Permit Part 3 offers the Permittee(s) maximum flexibility for SWMP implementation. For example, the Permittees may request the EPA and IDEQ to consider an alternative means of implementing a SWMP control measure as a whole (such as the Construction Site Runoff control measure specified by Part 3.3); or, the Permittees may request EPA consider an alternative SWMP *control measure component,* such as the specific requirement in Part 3.3.3 (*Construction Site Runoff Control Specifications*).

Pursuant to Permit Part 2.6.2, an ACM also includes the Permittee(s) individual or collective plans or programs to address discharges to impaired waters, as specified by Permit Part 4 (*Special Conditions for Discharges to Impaired Waters*). The opportunity to modify the Permit to incorporate specific monitoring/assessment and pollutant reduction activities offers flexibility for Permittee(s) to specify how they intend to make continued progress toward applicable TMDL targets for their watershed. A Permittee may work independently, or with others, to conduct reasonable, meaningful, and necessary actions that reduce pollutants from the MS4 and protect water quality.

2.4 SWMP Requirements

Permit Part 3 contains clear, specific, and measurable requirements to address the minimum control measures in 40 CFR § 122.34(a) and (b) that serve to reduce pollutants to the MEP. For each control measure, the EPA has outlined specific tasks, BMPs, design requirements, performance requirements, adaptive management requirements, schedules for implementation and maintenance, and/or frequency of actions. Each minimum control measure is comprised of actions and activities that the EPA refers to as SWMP *control measure components.*

The EPA considered the existing programs implemented by PUA Permittees and the application submitted by ISU as a permit applicant during development of the Permit terms and conditions.[18] The EPA has incrementally refined each SWMP control measure component to iteratively clarify the MS4 permit standard for the PUA Permittees and

[16] Pursuant to Permit Part 8.1, no provision is stayed until the modification process to recognize the ACM is complete.
[17] EPA 2016b.
[18] See 40 CFR § 122.34(a)(2).

establish expectations for the level of effort necessary to reduce pollutants in MS4 discharges.

The EPA recognizes that each regulated MS4 is unique and that each operator has different circumstances that guide their approach to stormwater management and pollutant control. To address these unique circumstances, the Permit allows implementation flexibility while setting consistent expectations through clear, specific, and measurable permit requirements.

2.4.1 Public Education, Outreach, and Involvement

Permit Part 3.1 addresses the required SWMP control measure for public education, outreach, and involvement requirements consistent with 40 CFR §§ 122.34(b)(1) and (b)(2). Public education, outreach, and involvement are essential parts of any plan to reduce stormwater pollutants because the daily activities of people contribute significantly to the types and sources of pollutants in urban settings. As citizens learn about the impacts of their actions on local water resources, they are more likely to change their behaviors.

The prior MS4 permit contained public education and involvement requirements. The Permittees continue to conduct an impressive range of successful and creative public education and involvement activities related to their local stormwater programs.[19] The EPA strongly encourages such cooperative and broad reaching outreach efforts, and intends to allow the Permittees to choose which public education and involvement activities to continue or initiate.

When scoping their intended activities, the EPA also recommends that MS4 Permittees consider the recommendations found in the EPA document *Promising Practices for Permit Applicants Seeking EPA-Issued Permits: Ways to Engage Neighboring Communities*. See also Section 3.1 of this Fact Sheet.

The Permit contains the following public education, outreach, and involvement SWMP control measure components:

- Permit Part 3.1.1 establishes a compliance deadline of one year from the Permit effective date for Permittees to begin, or update and continue, their public education, outreach, and involvement activities in the Permit Area. This provision also contains a requirement that the Permittee(s) must submit any ACM Request under this Section within 180 days of the effective date of the Permit.
- Permit Part 3.1.2 specifies requirements for the Public Education, Outreach and Involvement Program. To the extent allowable, pursuant to the authority granted the individual Permittees under Idaho law, the Permittees must work to educate and engage interested stakeholders in the development and implementation of the SWMP control measures.
- Permit Part 3.1.3 requires the Permittees to distribute and/or offer a minimum of eight educational messages to at least one of the four audiences listed in Part 3.1.4 during the Permit term.

[19] See: Pocatello et al, MS4 Annual Reports 2011 through 2017.

- Permit Part 3.1.4 identifies 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 topics for the Permittees to consider as its focus during the Permit term.
- Permit Part 3.1.5 requires Permittees to assess, or to participate in an effort to assess, the understanding and adoption of behaviors by the target audience(s). A vital, yet challenging, component of successful education programs is the assessment of whether the Permittees' efforts are achieving the goals of increasing public awareness and behavior change to improve water quality. The EPA recognizes and encourages the long-term nature of such assessment activities, and notes that there may be opportunities for Permittees to work together within the State, or with other organizations, on specific MS4 topics if they choose to do so.
- Permit Part 3.1.6 requires Permittees to maintain records of their education, outreach, and public involvement activities.
- Permit Part 3.1.7 requires Permittees to provide educational opportunities related to certain SWMP control measures at least twice during the Permit term. Permittees are encouraged to plan opportunities in a manner that the relative success of their educational efforts can be articulated as required by Permit Part 3.1.5.
- Permit Part 3.1.8 requires the Permittees to maintain and promote at least one publicly-accessible website to provide relevant SWMP information to the public. Relevant SWMP information includes the Permittee's SWMP Document, links to relevant public education material, and easily identifiable (and up to date) Permittee contact information such that members of the public may easily call or email to report spills or illicit discharges, and/or ask questions, etc. The Permittees currently have a central informational website, http://www.pocatello.us/se/se_stormwater.htm.

2.4.2 Illicit Discharge Detection and Elimination

Permit Part 3.2 contains requirements for the Permittees to address illicit discharges and spill response within their jurisdictions. At a minimum, the EPA requires the Permittees to maintain the ability to prohibit, detect, and eliminate illicit discharges from their MS4s.

The purpose of this SWMP control measure is to require the Permittees to provide ongoing surveillance and deterrence to prevent pollutant loadings caused by illicit discharges into the Permittee's MS4. Illicit discharges can enter the 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 discarded paint or used oil dumped directly into a drain). Both types of illicit discharge can contribute excessive pollutants into the MS4 and, as a result, can negatively affect water quality. Investigating for and eliminating such illicit discharges from entering the MS4 improves water quality.

Permittees are responsible for the quality of the discharges from their MS4 and, therefore, have an interest in locating and discontinuing any uncontrolled non-stormwater discharges into and from their MS4. To ensure that pollutants from non-stormwater discharges are adequately controlled, Permittees should continue to work

cooperatively and use their collective abilities to address illicit discharges in their jurisdictions.

The Illicit Discharge Detection and Elimination (IDDE) control measure components required by 40 CFR § 122.34(b)(3) direct Permittees to manage illicit discharges to the MS4 by:

- Maintaining a map of the MS4 showing the location of all outfalls and names of the receiving waters;
- Effectively prohibiting discharges of non-stormwater to the MS4 through the use of an ordinance or other regulatory mechanism, and provide for enforcement of that prohibition as needed;
- Implementing a program to detect and address non-stormwater 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
- Informing public employees, businesses, and the general public of the hazards associated with illicit discharges and improper disposal of waste, and publicize appropriate public reporting of illicit discharges when they occur.

Each of the Permittees has an established program to prohibit, detect, and respond to illicit discharges, as appropriate, within their jurisdiction. The EPA encourages the Permittees to continue working together to share expertise and knowledge to fully implement this SWMP control measure through the control measure components described below:

- Permit Part 3.2.1 establishes a compliance deadline of 180 days before the Permit expiration date for the Permittees to update their existing IDDE program activities, and/or to fully impose any new SWMP control measure components outlined in this Part. The EPA believes this timeframe is justified to allow Permittees adequate opportunity to adjust their existing programs, as necessary, and to ensure all the SWMP control measure components are sufficiently addressed in the Permit Area. This provision also coincides with the date by which any ACM Request(s) must be submitted.
- Permit Part 3.2.2 continues to require all Permittees to maintain a current MS4 map, along with a new requirement for the Permittees to provide an accompanying inventory of the features that comprise the MS4 system. The EPA has refined the content of the MS4 Map and Outfall Inventory and requires updated materials to be submitted as part of the Permit Renewal Application, pursuant to Permit Part 8.2. The purpose of the MS4 Map and Outfall Inventory is to record and verify MS4 outfall locations, including relevant descriptive system characteristics. The EPA expects each Permittee to know the locations and characteristics of all outfalls that it owns/operates through mapping their infrastructure and associated assets. Permittees are encouraged to couple the outfall inventory with other SWMP control measures, such as the operation and maintenance requirements in Permit Part 3.5, to help inform their inspection and/or maintenance prioritization.

  Additionally, Permit Part 3.2.2 requires the Permittees to identify and characterize any MS4 outfall(s) with ongoing dry weather flows as a result of irrigation return flows

and/or groundwater seepage. Knowing both the location and characteristics of such outfall(s) is an important data point in areas where the MS4 discharges to phosphorus- and/or nitrogen- impaired waters. The MS4 Map and Outfall Inventory can be collectively reassessed by the EPA, IDEQ, and the Permittees at the time of the Permit renewal to tailor future control measures in the next permit term in efforts to address potential non-stormwater discharges that may be contributing to the impairment.

- Permit Part 3.2.3 requires Permittees to prohibit non-stormwater discharges into the MS4 through enforcement of an ordinance or other legal mechanism to the extent allowable under Idaho state law. Part 3.2.3 identifies minimum prohibitions that the EPA expects Permittees to enforce within its jurisdiction. The EPA reviewed the local ordinances and regulatory mechanisms currently imposed by the Permittees and believes the existing ordinances/mechanisms can fully prohibit the flows listed in Part 3.2.3. The EPA clarifies that it is unnecessary for the ordinance/legal mechanism to cite all the individual prohibitions listed, provided that the Permittees' legal mechanism can be used to address such discharges if they are found discharging to the MS4. This provision provides a minimum expectation for the local ordinance/legal mechanism to prohibit the breadth of possible non-stormwater discharges that negatively impact water quality.
- Permit Part 3.2.4 describes the EPA's expectations for the Permittees' Illicit Discharge Complaint Reporting and Response Program. The Permittees must maintain and advertise a publicly accessible and available means to report illicit discharges. The Permittees must respond to reports within two (2) days and maintain records regarding actions taken. These programs can be promoted to the public in concert with the public education requirements in Permit Part 3.1. Staff assigned to handle calls should be trained in stormwater 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.
- Permit Part 3.2.5 requires the Permittees to conduct a dry weather analytical and field screening monitoring program to identify non-stormwater flows from MS4 outfalls during dry weather. Additionally, this program must emphasize screening activities to detect and identify illicit discharges and illegal connections, and to reinvestigate potentially problematic MS4 outfalls throughout the Permit Area. The EPA has added prescriptive requirements to (1) prioritize visual screening of at least 50 outfalls per year throughout the Permittee's jurisdiction (Permit Part 3.2.5.2); (2) use appropriate screening and monitoring protocols when flows are identified during dry weather (Permit Part 3.2.5.3.); and (3) ensure proper recordkeeping/documentation (Permit Part 3.2.5.4.).

  Data collected through the Permittees' regular screening of their outfalls during dry weather, and through the public reporting of illicit discharges and connections, can reveal important trends in the types of pollutants generated within and transported into the MS4. Permit Part 3.2.2.6. requires that the Permittees locate and map the occurrences of illicit discharges in order to target appropriate response actions over time. The EPA recommends that samples taken during dry weather screening be analyzed for pH, total chlorine, detergents, total copper, total phenols, fecal coliform

bacteria, and/or turbidity to assist in source identification.

Appropriate threshold limits for dry weather monitoring results are important to distinguish pollutant spikes from normal background conditions at a particular outfall. For example, through its Stormwater Investigation Manual, the Ada County Highway District established threshold levels that, 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 aid in determining what constitutes "normal" dry weather flows, and to distinguish between background conditions (uncontaminated ground water infiltration, for example) versus abnormal, non-stormwater flows that are prohibited by the Permit.

- Permit Part 3.2.6 requires mandatory follow-up actions for recurring illicit discharges (identified through complaint reports and/or the Permittees screening activities). Response activities must begin within 30 days of identifying elevated concentrations of screening parameters and action must be taken to eliminate problem discharges within 60 days. Specific timelines are included to direct timely initiation of actions to reduce or fully eliminate a known or newly identified problem.

  Due to the diverse nature and sources of water quality impacts in urban settings in Idaho, both the EPA and IDEQ are concerned about inputs of irrigation return flows and/or groundwater seepage through MS4s. Permit Part 3.2.6 requires Permittees to list identified MS4 outfall locations where irrigation return flows and/or groundwater seepage are present during dry weather (see also Permit Part 3.2.2.6.). This is a first, interim step towards an assessment of water quality impacts resulting from these specific non-stormwater discharges. For any MS4 outfall where ongoing dry weather discharges are identified by the Permittees as associated with irrigation return flows and/or groundwater seepage, the term "appropriate action" in Permit Part 3.2.6 means, at a minimum, documentation in the Annual Report of the MS4 outfall location, and the Permittees' determination of the source as either irrigation return flows or groundwater seepage. The EPA encourages the Permittees to take action to eliminate such flows if it is identified as a source of pollutants pursuant to Permit Part 2.4.5.2. At a minimum, a summary list of all such outfall locations must be submitted with the Permit Renewal Application. This information will be collectively reassessed by the EPA, IDEQ, and the Permittee(s) at the time of the permit renewal to tailor future control measures to appropriately address non-stormwater discharges that may be contributing excess nutrient loads to receiving waters.

  - Permit Part 3.2.7 requires the Permittees to respond to spills, and maintain appropriate spill prevention and response capabilities as appropriate within their jurisdiction. Through coordination with state and/or local agencies (under this provision, "agencies" refers to the organizations responsible for spill response), the goal is to provide maximum water quality protection at all times.
  - The EPA has included an explicit requirement directing the Permittee to notify the appropriate IDEQ regional office, Idaho State Communications Center, and/or the National Response Center, as specified by IDEQ in its comments submitted

on the EPA's 2017 draft MS4 General Permit.[20]

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- Permit Part 3.2.8 requires coordination with appropriate agencies to ensure the proper disposal of used oil and toxic materials by employees and the public. In concert with the education and outreach provisions in Permit Part 3.1, the PUA Permittees should consider continuing their successful outreach and public education efforts on proper recycling and disposal of used oil and household hazardous waste in their jurisdictions.
- Permit Part 3.2.9 requires the Permittees to appropriately train staff to respond to spills, complaints, and illicit discharges/connections to the MS4. Permittee staff can be the "eyes and ears" of the stormwater program if they are trained to identify illicit discharges and spills or evidence of illegal dumping.

2.4.3 Construction Site Stormwater Runoff Control

This SWMP control measure requires Permittees to control construction site runoff discharges into their MS4s. 40 CFR § 122.34(b)(4) requires Permittees 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 (1) or more acres. Additionally, construction activities disturbing less than one (1) acre are subject to this regulation if that activity is part of common plan of development or sale that exceeds one (1) acre. Other mandatory control measure components are 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.

Construction activities (such as clearing vegetation and excavating, moving, and compacting earth and rock) significantly change the land surface. The consequences of construction activities during rainfall events includes: reduced stormwater infiltration, increased runoff volume and intensity, and higher soil erosion rates. While sediment and other pollutants are readily mobilized by precipitation during land disturbance activity, such discharges can be effectively prevented through the use of reasonable and effective erosion and sedimentation controls. Examples include the use of construction sequencing and vegetative- or non-vegetative stabilization techniques.[21]

Local ordinances and requirements are key to ensuring that construction site operators use appropriate techniques to prevent pollutant discharges to the MS4s. Although discharges from all construction sites disturbing one or more acres in Idaho are independently subject to the *NPDES General Permit for Storm Water Discharges from Construction Activity*, #IDR120000 (Construction General Permit or CGP), it is appropriate for the MS4 operators to directly impose local construction site management requirements to prevent construction-related pollutants from entering the MS4s.

Permittees in the PUA currently have programs in place that meet or exceed the required construction runoff control measure components. Pocatello, Chubbuck and Bannock County each have adopted ordinances requiring erosion, sediment and waste

[20] IDEQ 2017.
[21] EPA 1999, pages 68758-68759; EPA 2009a, pages 7-3 through 7-26.

management controls for all ground disturbing activities that disturb over ¼ acre of land, and all Permittees have a means of conducting site plan review, inspection, and enforcement in support of their requirements for erosion and sediment control.

The following summarizes the control measure components under Permit Part 3.3. (*Construction Site Stormwater Runoff Control*):

- Permit Part 3.3.1 establishes a compliance deadline of 180 days before the Permit expiration date for Permittees to update their existing programs, if needed, or to impose any new or revised control components in the Permit Area. This provision also defines the date by which any ACM Request must be submitted.
- Permit Part 3.3.2 outlines the expected scope of the Permittees' legal mechanism to reduce and prevent runoff from construction sites in its jurisdiction that disturb one (1) acre or more.
- Permit Part 3.3.3 requires written specifications to define appropriate site level controls for construction activities within the Permittee's jurisdiction. The EPA clarifies that the type and extent of site-level erosion, sediment, and waste management controls will likely be different depending on site size and location. Therefore, the Permittees have the discretion to determine how best to control sediment and other pollutants in runoff from different sized construction sites.
- Permit Part 3.3.4 requires a preconstruction site plan review process to address construction site activity that will result in land disturbance of one (1) or more acres, and includes consideration of public input. This review can be conducted using a checklist or similar process to consider and address potential water quality impacts from the site activities.
- Permit Part 3.3.5 requires that the Permittees conduct prioritized construction site inspections and to enforce the applicable local requirements as needed. At a minimum, the Permittees must inspect and enforce their requirements at construction sites occurring in their jurisdictions that disturb one (1) or more acres.
- Permit Part 3.3.6 requires the Permittees to have a written enforcement response policy or plan to guide and prioritize their oversight, inspection, and enforcement efforts.
- Permit Part 3.3.7 requires the Permittees to provide proper training for construction staff conducting plan review and inspections.

2.4.4 Post-Construction Stormwater Management from New Development and Redevelopment

Permit Part 3.4 requires Permittees to continue to implement and enforce a program to control runoff from new development and redevelopment sites, including projects involving streets and roads.

Pursuant to 40 CFR § 122.34(b)(5), the prior MS4 Permit for the PUA required these controls at sites disturbing one (1) or more acres and at sites less than one (1) acre, which are part of a common plan of development or sale that exceeds one (1) acre. The Permittee(s) must address runoff from new development and redevelopment project sites using a locally appropriate combination of structural and/or non-structural BMP

requirements.[22] Further, the Permittee(s) must enforce the requirements using an ordinance or other regulatory mechanism, to the extent allowable under state or local law, and ensure the adequate long-term operation and maintenance of these BMPs.[23] The Permittees have been adequately implementing such requirements within their jurisdictions.

The Permit uses the term "permanent stormwater controls" instead of "post-construction stormwater management controls" to mean those controls that will treat or control pollutants in stormwater runoff from the development site on a permanent basis after construction is complete. This terminology is consistent with other MS4 permits issued by the EPA Region 10 since 2012.

- Permit Part 3.4.1 establishes a compliance deadline of 180 days before the Permit expiration date for Permittees to update their existing Post-Construction Stormwater Management control program, and, if needed, to impose any new SWMP control measure components in the Permit Area. This timeframe is justified to allow Permittees the flexibility to adjust their existing programs as necessary. This provision also defines the date by which any ACM Request(s) must be submitted.
- Permit Part 3.4.2 requires the Permittees to update their legal regulatory mechanism to incorporate an onsite stormwater retention standard, or require a treatment equivalent to the onsite retention standard, for new development and redevelopment sites. The purpose of this requirement is to prevent the creation of excess stormwater discharges, and pollutant loadings, from the impervious surfaces associated with urban development. Use of onsite stormwater management controls at such sites will reduce pollutants in regulated MS4 discharges to the MEP and proactively protect Idaho receiving waters by ensuring that water quality protections continue over the long term. Additional rationale for including the requirement for onsite retention of stormwater runoff from new development and redevelopment is provided in Appendix 4 of this Fact Sheet.

  The EPA believes the *Portneuf Valley Stormwater Quality Design Manual*, as currently adopted by the Cities of Pocatello and Chubbuck, meets the intention of requirement for onsite retention/treatment equivalent in Permit Part 3.4.2.

  Permit Part 3.4.2 also allows for alternative mitigation in situations where complete onsite retention of the target runoff volume is infeasible. The Permittees may apply an alternative standard if it is deemed to be equally protective, or more protective, of the onsite stormwater management design standard as articulated in the Permit. For example, alternative local compliance with the Permittees' calculated stormwater management design standard could take the form of off-site mitigation or payment in lieu programs. The Permittees could consider creating an inventory of appropriate alternative stormwater management techniques, and/or using planning mechanisms (such as completed sub-watershed plans or other appropriate means) to identify priority areas within sub-watersheds of their jurisdiction(s) where off-site mitigation,

[22] "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).
[23] See EPA 2012; EPA 2009; and 40 CFR §122.34(b)(5).

and/or public stormwater mitigation projects, could be implemented.

- Permit Part 3.4.3 requires the Permittees to maintain written specifications for the permanent stormwater controls allowed by the Permittees at development sites within their jurisdiction. These specifications must be utilized at sites disturbing at least one (1) acre or more.
- Permit Part 3.4.4 requires Permittees to review and approve site plans for permanent stormwater controls at sites resulting from land disturbance of one (1) or more acres. 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 Permittees must have the authority to withhold approvals when it determines that the controls at a specific site are not designed to meet established standards for permanent stormwater control.
- Permit Part 3.4.5 outlines the requirement for the Permittees to inspect and enforce their requirements for permanent stormwater controls at sites resulting from land disturbance of one (1) or more acres. Inspection of permanent control measures is key to ensuring water quality protection over the long term. Without periodic inspection or maintenance, the permanent controls can instead become pollutant sources, rather than a means of prevention. An effective local inspection process, combined with appropriate enforcement if necessary, ensures that onsite controls are built according to approved plans and specifications, and use proper materials and installation techniques. The EPA expects the Permittees to prioritize their inspection and enforcement to include any new permanent stormwater controls installed after the Permit effective date.
- Permit Part 3.4.6 requires the Permittees to ensure the long-term operation and maintenance (O&M) of permanent stormwater controls through the use of a database inventory to track and manage the operational condition of permanent stormwater controls within its jurisdiction. This database inventory can take the form of a computerized maintenance management system or asset management system that allows for the electronic logging of O&M tasks. Ongoing O&M is necessary to ensure that the BMPs will perform as designed over time. Inadequate maintenance of existing stormwater management controls is a primary shortcoming for most local stormwater management 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 and/or pose safety problems.[24] The Permittees must track those permanent controls that are known to them, or for which they accept ownership, beginning no later than the Permit effective date.
- Permit Part 3.4.7 requires the Permittees to ensure that their staff are sufficiently trained and/or qualified to review site plans for permanent stormwater controls, and/or for inspecting the installation and operation of permanent stormwater controls.

2.4.5 Pollution Prevention and Good Housekeeping for MS4 Operations

As noted above, O&M is an integral part of any SWMP and, when coupled with good

[24] NRC 2008; Shaver, et al 2007.

housekeeping and pollution prevention principles, reduces the risk of water quality problems from MS4 discharges. The minimum requirements for this control measure are set forth in 40 CFR § 122.34(b)(6). The administratively extended MS4 permit for the PUA required the implementation of an O&M program "intended to prevent or reduce pollutant runoff from municipal operations;" to develop an employee training program; and to prepare site-specific stormwater pollution prevention plans (SWPPPs) at the Permittees' own maintenance buildings and similar facilities.

Permit Part 3.5 requires the Permittees to properly operate and maintain their MS4s, actively manage runoff from Permittee-owned and/or operated facilities, and conduct their municipal activities to prevent or reduce the discharge of pollutants from the MS4.

The Permittees must continue to focus on maintenance of their MS4s to protect water quality. Due to the diverse nature of the Permittees' MS4 facilities, which include not only the streets and parking lots, but also stormwater ponds, underground pipes, drainage ditches, etc., ensuring appropriate inspection and maintenance schedules are in place for each type of infrastructure/facility is both relevant and necessary. O&M procedures should include some manner or protocol for testing and safely disposing of waste materials and any associated decant water collected from catch basins or other MS4 infrastructure.

Individual SWMP control measure components under the Pollution Prevention/Good Housekeeping control measure in Part 3.5 are reasonable, practicable, and consistent with other MS4 permits issued by the EPA Region 10 since 2012. The specific requirements are summarized below:

- Permit Part 3.5.1 establishes a compliance deadline of 180 days before the Permit expiration date for Permittees to update their existing runoff control program(s), and/or to impose any new program components, in the Permit Area. The 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 in the Permit Area. This provision also defines the date by which any ACM Request(s) must be submitted.
- Permit Part 3.5.2 outlines requirements for the inspection of all of the Permittees catch basins and inlets within the MS4 service area at least once every five years and requires appropriate cleaning and/or maintenance activities based on the findings of those inspections. Permittees in the PUA have been evaluating their catch basin cleaning practices for several years and have substantial data to inform the frequency of their catch basin maintenance activities.[25]

  Because roads and streets function as an integral part of the drainage conveyance systems within the PUA and other Urbanized Areas of Idaho, the EPA has included explicit provisions for appropriate stormwater management through O&M activities for roads, streets, highways and parking lots.
- Permit Part 3.5.3 requires Permittees to review and update their O&M procedures for streets, roads, highways, and parking lots that are owned, operated, and/or maintained by the Permittees to ensure procedures continue to be protective of water

[25] Pocatello, et al. 2017.

quality and reduce the discharge of pollutants through the MS4. Permit Part 3.5.3.3 further requires that Permittees consider using water conservation measures for all landscaped areas associated with streets, roads, highways, and parking lots to prevent landscape irrigation water from discharging through the MS4. Excessive landscape watering can contain fertilizers and other compounds that, when discharged through the MS4 can increase nitrogen and phosphorus loading to impaired waters. Landscape irrigation can be considered an allowable non-stormwater discharge only when it is not a source of pollution under the Idaho WQS. See Permit Part 2.4.

- Permit Part 3.5.4 requires Permittees with street, roads, and highway 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 from discharging to the MS4 or into any receiving water. Permittees without street maintenance responsibilities do not have an obligation to comply with this provision. An inventory of all such street materials must be maintained. No later than 180 days prior to the Permit expiration date, as part of the Permit Renewal Application required by Permit Part 8.2, the Permittees must assess their Material Storage Locations for water quality impacts, and must describe any structural or non-structural improvements made by the Permittees to prevent runoff from discharging to the MS4 or directly to a receiving water. The EPA notes that Permittees in the PUA have been evaluating their street maintenance activities in compliance with their prior MS4 Permit, and have substantial information to inform their actions in compliance with this requirement.
- Permit Part 3.5.5 requires Permittees with street, road, highway, and parking lot responsibilities to document the adequacy of their sweeping activities through a sweeping management plan. Permittees without street maintenance responsibilities do not have an obligation to comply with this provision. The EPA notes that Permittees in the PUA have been evaluating their street sweeping activities in compliance with their prior MS4 Permit, and have substantial information to inform their compliance with this requirement.
- Permit Part 3.5.6 requires the Permittees to review and update their O&M procedures for a variety of other typical municipal activities to ensure procedures protect water quality and reduce the discharge of pollutants through the MS4.
- Permit Part 3.5.7 requires Permittees to ensure that their staff, and others operating in public areas owned and/or operated by the Permittees, are appropriately handling and/or using pesticides, herbicides, and fertilizers within the Permit Area. This provision is consistent with the *NPDES General Permit for Discharges from The Application of Pesticides, for the State of Idaho*, NPDES Permit No. IDG870000.
- Permit Part 3.5.8 requires Permittees to manage onsite materials at their maintenance yards and to prevent pollutants in runoff through use of 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 3.5.9 requires Permittees to work cooperatively to reduce litter in their jurisdictions to prevent the conveyance of trash and other material through the MS4.

- Permit Part 3.5.10 requires the Permittees to ensure that all staff responsible for the stormwater infrastructure management and O&M activities are trained and/or otherwise qualified to conduct such activities with attention to prevent potential water quality impacts.

2.5 Requirements for Discharges to Water Quality-Impaired Receiving Waters

Consistent with 40 CFR § 122.34(c), Permit Part 4 requires the Permittees to define and conduct quantitative monitoring/assessment and pollutant reduction activities to address the pollutants of concern in MS4 discharges, consistent with the WLAs and pollutant reduction targets for MS4 discharges in the Portneuf TMDL. For the purposes of the Permit, the phrase "pollutant(s) of concern" means any pollutant identified by IDEQ or EPA as a cause of impairment of any waterbody that receives MS4 discharges authorized under the Permit.

Additional discussion of the TMDL is provided in Appendix 5 of this Fact Sheet.

The EPA has included requirements in Permit Part 4 for Permittees to submit, within 180 days of the Permit effective date, a written description of at least two pollutant reduction activities, and a specific monitoring/assessment plan, to be conducted during the remainder of the Permit term. The EPA, in consultation with IDEQ, will review the submitted materials, and the EPA will modify the Permit to incorporate the pollutant reduction activities and monitoring/assessment plan.

During the prior Permit term, and as discussed in Fact Sheet Section 1.8.1., the Permittees complied with the pollutant reduction goals of the 2001 Portneuf TMDL that were established in the administratively extended Permit. The Permittees updated their Stormwater Master Plan(s) or comprehensive plans to accommodate for future investments in water quality improvements. They conducted extensive education, outreach and public involvement activities through numerous demonstration project(s) and the Permittees installed and evaluated various innovative stormwater management BMPs, such as the Lander Street Permeable Pavement Installation; the Sacajawea Park Stormwater Treatment Wetland; and the Chubbuck City Hall Sidewalk replacement highlighting permeable pavement installation.

The administratively extended Permit also required the Permittees to conduct stormwater discharge monitoring at four outfall locations, and to collect water quality samples of the Portneuf River at locations upstream and downstream of the Pocatello city boundaries. Through the Annual Reports, the Permittees reported that the stormwater outfall discharge monitoring effort provides only marginally useful information: "*In general, trend lines indicate that the constituents of concern vary significantly in amounts from year to year and at each of the outfalls. It is difficult to extrapolate much from the data given the number and range of uncontrolled variables (e.g. size of storm event during sampling, when sampling occurred during the storm event, frequency and size of previous storm events, sampling season, frequency and location of road material application and/or sweeping prior to storm event, etc.).*"[26]

In late 2016, the Permittees conferred with IDEQ regarding more appropriate monitoring provisions for the PUA MS4 discharges. and submitted recommendations to the EPA,

[26] Pocatello, et al, 2017 Annual Report.

stating that 1) stormwater BMPs in the PUA should generally focus on controlling sediment because all of the other impairment pollutants of concern generally adsorb onto the sediment; and 2) assessing BMP effectiveness during the next Permit term should entail continued instream water quality sampling for representative parameters such as turbidity and flow at locations upstream and downstream of the Pocatello city boundaries.[27]

The EPA believes it is appropriate to allow the Permittees the opportunity to recommend pollutant reduction and monitoring/assessment activities needed to address the receiving water impairments. The process will allow Permittees the flexibility to define what and how they will address impairments, consistent with the goals of the 2010 Portneuf TMDL Revision and Addendum and the goals of the local watershed advisory groups. Through the Permit modification process, this approach also provides information and transparency about the Permittees' selected actions to interested members of the public.

2.6 Requirements for Excursions above the Idaho Water Quality Standards

Permit Part 5 sets forth requirements for Permittees to report and address excursions above the Idaho WQS as directed by Permit Part 2.1. The EPA has outlined an adaptive management approach for use when there are ongoing discharges from the MS4 that cause or contribute to excursions above the applicable Idaho WQS and are not being addressed by other SWMP control measure requirements.

Permit Part 5 also provides Permittees with the opportunity to use adaptive management principles to scope corrective action steps to address ongoing, prolific pollutant source(s). Where such solutions may involve structural controls, require capital expenditures, and/or that necessitate long term planning and implementation schedules, Permit Part 5 provides opportunity for the Permittee(s) to define and articulate such long-range investment plans.

The EPA supports robust, long-term planning for stormwater management by MS4 communities and recognizes that the most successful stormwater planning uses multi-benefit approaches to solve stormwater pollution control challenges. It also recognizes that for a plan to be more affordable, communities need to make financial investments over a time horizon of sufficient length to allow for cost efficiencies through working with other municipal programs.[28]

Any Permittee that submits information pursuant to Permit Part 5 will be prompted to report on their incremental progress towards their identified milestones in both their Annual Report, and as part of a complete Permit Renewal Application.

2.7 Monitoring, Recordkeeping and Reporting Requirements

Consistent with 40 CFR § 122.34(d), Permit Part 6 requires that the Permittees evaluate program compliance, keep records, and submit Annual Reports. Furthermore, Section 308 of the CWA, federal regulation 40 CFR § 122.44(i), and subsequent EPA guidance requires monitoring to determine compliance with terms and conditions of a NPDES permit.

[27] Email correspondence dated 10/17/2016 from Pocatello (H. Sanger).
[28] EPA 2016g.

2.7.1 Compliance Evaluation

Permit Part 6.1 requires the Permittees to assess their compliance with the Permit requirements annually and to document the evaluation through the submittal of an Annual Report. Although the regulations allow less than annual monitoring in a second term MS4 permit, the EPA has instead provided a concise "fillable PDF" Annual Report format for MS4 Permittees to use during the Permit term. The five-year permit term will coincide with the EPA's national transition to online reporting for MS4 permits; this transition is expected to be accomplished no later than December 2020.[29] To maintain reporting continuity during this transition, the EPA believes it appropriate to retain annual reporting in the Permit. Once primacy for the NPDES stormwater permit program is transferred to IDEQ, the Permittees may negotiate different reporting frequencies in the subsequent MS4 permit, pursuant to 40 CFR § 122.34(d)(3).

2.7.2 Monitoring and/or Assessment Activities

Permit Part 6.2. requires the Permittees to evaluate the effectiveness of their SWMPs at protecting water quality by quantifying their stormwater pollutant reductions. Implementing monitoring and assessment activities allows the Permittees to evaluate the effectiveness of stormwater management actions, helps determine whether pollutant reduction goals are met, and to justify budgets that support stormwater programs. While many MS4 program goals are output-based (e.g. number of stormwater treatment practices installed, number of educational brochures distributed), which can be useful from a program accounting standpoint, such measurements often cannot be used to quantify changes in water quality resulting from MS4 program activities.[30]

Permit Part 6.2. requires the Permittees to submit a monitoring/assessment plan that supports the terms and conditions of Permit Part 3 and meets the quality assurance objectives at Permit Part 6.2.6 no later than 180 days after the Permit effective date. Standard NPDES permit conditions are included in Part 6.2 related to representative sampling, additional monitoring, and use of sufficiently sensitive testing methods. Permit Part 6.2.5 summarizes the basic components of any wet weather stormwater discharge monitoring.

As discussed in Section 2.5. of this Fact Sheet, the administratively extended Permit required the PUA Permittees to conduct stormwater discharge sampling from four outfalls and water quality monitoring in Portneuf River. Given the limited sample set, the resulting data was marginally useful for assessing overall SWMP effectiveness and, in late 2016, the Permittees submitted their recommendation that they be allowed to continue only the water quality monitoring during the next Permit term.

As a result, the EPA considered several options for how MS4 Permittees might monitor and/or assess compliance with Permit requirements given the general difficulty and overall expense associated with MS4 discharge monitoring. Options included:

- Require Permittees to continue any stormwater discharge monitoring in the same manner as was directed by the prior MS4 permit(s).

[29] See EPA 2015c.
[30] CWP 2009.

- Authorize Permittees, at their discretion, to propose methods of collecting relevant data that supports the assessment of their stormwater management activities. This option requires Permittees in the watershed to establish specific metrics to measure stormwater quality improvements over time and provides maximum flexibility to the MS4 Permittee, and IDEQ, to establish appropriate assessment methods for the individual receiving waterbody.
- Eliminate all MS4 outfall sampling requirements for regulated small MS4s discharging into impaired waters and require quantitative programmatic assessments of SWMP implementation to be conducted by the Permittee(s). This option increases focus on the effectiveness of the Permittees' on-the-ground implementation of the SWMP control measures, yet provides little direct information about receiving water quality or the relative pollutant contribution from MS4 outfalls in the PUA.

The EPA is proposing a requirement that Permittee(s) collect objective data that can be used to evaluate the relative success of SWMP control measures and can be used to assess whether MS4 discharges cause or contribute to violations of Idaho WQS. By including general guidelines for what constitutes monitoring/assessment activities, the EPA recognizes that the PUA MS4 Permit, and other MS4 permits in Idaho, should not impose a "one size fits all" monitoring and assessment approach. The guidelines at Permit Part 6.2. provide the Permittees the flexibility to develop and implement monitoring/assessment activities that are appropriate for their MS4 facility.

The EPA will modify the Permit to incorporate appropriate reference to the Permittees' intended plan pursuant to federal regulations at 40 CFR § 122.62. MS4 stakeholders around the country have found that relevant watershed-level questions must drive a Permittee's monitoring and assessment choices. Because water quality benefits will only be realized over the long-term, it is important for MS4 Permittees to invest their time and energy into long-term implementation mechanisms that are linked to appropriate monitoring and assessment actions. Monitoring and assessment data contributes to new knowledge, and resulting data should then be made broadly available.[31]

The EPA envisions that there are many possible options Permittees may consider to monitor/assess reductions in pollutant loading from their MS4(s) as a result of implementing their SWMP control measures. For example, Permittees may choose to continue to monitor stormwater discharges from the existing selected MS4 outfall monitoring locations. Alternatively, Permittees may revise their monitoring/assessment activities to better match their current goals and objectives in efforts to increase reductions in pollutant loadings from their MS4 and to improve their overall stormwater management. Examples of monitoring/assessment activities may include:

- Conducting biological or macroinvertebrate sampling, instream monitoring, or other means to assess certain parameters or watershed outcomes.
- Focused efforts to influence human behavior through outreach and educational efforts.
- Working collaboratively with other entities within a watershed or across the state to accomplish the SWMP goals.

[31] Stein 2013; EPA 2016g; NRC 2008.

2.7.3 Recordkeeping and Reporting

Permit Part 6.3 requires the Permittees to keep all records associated with the Permit for a period of at least five years, and submit such records only when requested by the EPA. The Permittee(s) must ensure that SWMP materials are available to the public, and they may charge a reasonable fee for copies and/or require a member of the public to provide advance notice of their request. As previously noted, Permit Part 3.1 requires the Permittees to provide their SWMP Document(s) to the public electronically via one or more dedicated websites.

Permit Part 6.4 describes the overall reporting requirements, including and the schedule and required content for the Annual Reports, the final monitoring/assessment reports, and the pollutant reduction activity reports. At a minimum, Permittees must submit Annual Reports of progress to both the EPA and IDEQ using the recommended Annual Report format provided in the Permit Appendix no later than 60 days after the close of relevant reporting period. The Annual Report format will prompt the Permittees for appropriate information according to compliance dates specified in the final Permit.

No later than December 21, 2020, all NPDES reports submitted in compliance with an applicable permit must be submitted electronically through the EPA's national electronic reporting system. However, the MS4 Permit program is one of the last types of NPDES permits to be accommodated by this new system.[32] Until the electronic system is available, the Permittees must submit signed versions of their Annual Reports to the EPA and IDEQ addresses provided in the Permit.

2.8 Standard Permit Conditions

Permit Parts 7 and 8 contain standard regulatory language that must be included in all NPDES permits. The standard regulatory language addresses compliance responsibilities and other general requirements. Although certain provisions may not strictly apply to MS4 facilities (for example, the upset or bypass provisions), it is mandatory that each of the standard provisions be included in a NPDES permit. Such provisions were previously included in the prior MS4 permit. The EPA notes that if a particular provision in Permit Parts 7 or 8 does not apply to the Permittees MS4 discharges or facilities, the Permittees do not need to comply with that provision.

2.8.1 Duty to Reapply

In accordance with 40 CFR §122.46(a), NPDES permits are in effect for a fixed term not to exceed five (5) years. Permit Part 8.2 requires any MS4 Permittee, intending to continue its operational control and management of MS4 discharges after the Permit expiration date, to submit an application no later than 180 days before the Permit expiration date.

Because there are no NPDES application forms for the MS4 permit program, Permit Part 8.2.1 describes the expected content of a complete Permit Renewal Application. The deadline for the Permit Renewal Application (180 days before the Permit expiration date) corresponds to the Permit's implementation/compliance dates; therefore, as part of any request for continued permit coverage, the Permittees must submit the attachments listed in Permit Part 8.2.1 to demonstrate how they have complied with the current

[32] EPA 2015c.

Permit requirements.

All MS4 Permittees are expected to submit a 5th Year Annual Report by the Permit expiration date, using the format provided in Appendix B of the Permit. In the event that a new permit is not issued on or before the Permit expiration date, any Permittee that has submitted a Permit Renewal Application in accordance with Part 8.2, may be authorized to continue discharging under an administrative extension of the Permit. If the Permittee(s) are granted an administrative extension, they must continue to adhere to the terms and conditions of the Permit, which includes submitting Annual Report(s) by the anniversary of the Permit expiration date until coverage under a reissued or replacement Permit is available.

3 Other Legal Requirements

3.1 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 https://www.epa.gov/environmentaljustice/learn-about-environmental-justice

As part of the permit development process, the EPA Region 10 conducted a screening analysis to determine whether the Permit action could affect overburdened communities. The EPA uses 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.

Based on this screening, the PUA is identified as an area where potentially overburdened communities reside. In order to ensure that individuals in this area are able to participate meaningfully in the NPDES permit process, the EPA will work to ensure that interested stakeholders in these areas, and throughout the state, are informed and able to provide their input on appropriate local stormwater management activities.

The EPA encourages all MS4 Permittees to review (and to consider adopting, where appropriate) *Promising Practices for Permit Applicants Seeking EPA-Issued Permits: Ways To Engage Neighboring Communities* as described in the EPA document available at https://www.federalregister.gov/articles/2013/05/09/2013-10945/epa-activities-to-promote-environmental-justice-in-the-permit-application-process#p-104.

3.2 Endangered Species Act

The Endangered Species Act (ESA) Section 7(a)(2) 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.

There are no listed endangered or threatened species under either NOAA Fisheries and USFWS within the Permit Area. Therefore, the EPA has determined that issuance of the Permit for regulated MS4 discharges in the PUA will have *no effect* on any threatened or endangered species.

3.3 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 the 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. Based on the location of the PUA, EPA has determined that the issuance of the Permit will not affect any EFH species in the vicinity of the MS4 discharges; therefore, consultation is not required for this action.

3.4 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 any 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 NPDES permit.

The EPA has determined that the reduction of pollutants in runoff through compliance with a MS4 discharge permit will not result in the disturbance of any site listed or eligible for listing in the National Historic Register. Therefore, the EPA believes that the actions associated with the Permit are also in compliance with the terms and conditions of the National Historic Preservation Act.

Pursuant to Permit Part 8.10, Permittees are reminded that they must comply with applicable state, Tribal and local laws, including those concerning protection of historic properties. If any permitted entity engages in any activity which meets all of the following criteria, then they must consult with and obtain approval from the State Historic Preservation Office prior to initiating the activity:

- The permitted entity is conducting the activity in order to facilitate compliance with the MS4 Permit;
- The activity includes excavation and/or construction; and
- The activity disturbs previously undisturbed land.

Examples of actions that may meet the above criteria include, but are not limited to: retention/detention basin construction; storm drain line construction; infiltration basin construction; dredging; and stabilization projects (*e.g*., retaining walls, gabions). The requirement to submit information on plans for future earth disturbing is not intended for activities such as maintenance and private development construction projects.

3.5 National Environmental Policy Act 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, NHPA, 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.

The EPA has not promulgated effluent limitation guidelines or new source performance standards specific to MS4 discharges. Therefore, MS4 permits are not subject the NEPA.

Idaho is not located in the U.S. coastal zone, so CZARA does not apply to the issuance of the Permit. In addition, the Permit will not authorize the construction of any water resources facility or the impoundment of any waterbody. No regulated small MS4s are located in areas with Wild and Scenic River designations. Therefore, the EPA determines that the Fish and Wildlife Coordination Act, 16 USC § 661 et seq., and the Wild and Scenic Rivers Act, 16 USC § 470 et seq., does not apply to the issuance of the Permit.

3.6 Permit Dates

The Permit will expire five years from the Permit effective date. As proposed, the Permit assumes an effective date of December 31, 2018. Compliance dates for SWMP control measure implementation, Annual Report submittals, etc., are tentatively identified in the Permit (in the upfront *Schedule* and in pertinent text) based on the final Permit's effective date.

During discussions Idaho stakeholders in late 2016 and early 2017 regarding preliminary draft MS4 documents, the EPA was reminded to remain cognizant of local government budget planning cycles (based on a fiscal year calendar October – September) when establishing implementation deadlines in the Permit. In response, the EPA previously considered calculating MS4 Permit compliance dates assuming an effective date of October 1.

3.7 State Certification of the Draft Permit

Section 401 of the CWA required the EPA to seek State certification before issuing a final permit. As a result of the certification, the State may require more stringent permit conditions or additional monitoring requirements to ensure that the permit complies with water quality standards, or treatment standards established pursuant to any State law or regulation. A copy of the draft 401 certification is provided in Appendix 1 of this Fact Sheet.

4 References Used in this Permitting Decision

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

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APPENDIX 1 – CORRESPONDENCE FROM IDEQ REGARDING CWA §401 CERTIFICATION

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

444 Hospital Way #300 • Pocatello, ID 83201 • (208) 236-6160
www.deq.idaho.gov

C. L. "Butch" Otter, Governor
John H. Tippets, Director

October 22, 2018

Michael Lidgard, Manager
NPDES Permits Unit
US Environmental Protection Agency, Region 10
1200 Sixth Avenue, Suite 155 (OWW-191)
Seattle, WA 98101-3123

RE: Draft §401 Water Quality Certification for City of Pocatello, City of Chubbuck, Bannock County, Idaho Transportation Department District #5 and Idaho State University, (Pocatello Urbanized Area) permit # IDS-028053

Dear Mr. Lidgard,

The State of Idaho Department of Environmental Quality (DEQ) received a preliminary draft NPDES permit for the Pocatello Urbanized Area dated August 29, 2018. After review of the draft permit and fact sheet, DEQ submits the enclosed draft §401 water quality certification which includes a narrative description of our antidegradation review for this permit and conditions necessary to meet these rules. After the public comment period ends, DEQ will address any comments, review the proposed final permit and issue a final certification decision.

Please direct any questions to Lynn Van Every at 208.236.6160 or lynn.vanevery@deq.idaho.gov.

Sincerely,

Bruce C. Olenick for
Regional Administrator
Pocatello Regional Office

Enclosure

C: Loren Moore, DEQ State Office
Misha Vakoc, EPA Region 10, Seattle

Idaho Department of Environmental Quality

Draft §401 Water Quality Certification

October 22, 2018

NPDES Permit Number: City of Pocatello, City of Chubbuck, Bannock County, Idaho Transportation Department District #5 and Idaho State University, (Pocatello Urbanized Area) permit # IDS-028053.

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

Based upon its review of the above-referenced draft Permit and associated Fact Sheet, received from EPA on August 29, 2018, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the discharge will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

Antidegradation Review

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

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).

- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

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

Pollutants of Concern

The primary (common) pollutants of concern associated with stormwater or urban runoff from the Pocatello Urbanized Area are sediment, nutrients (nitrogen and phosphorus), heat, chlorides, metals, petroleum hydrocarbons, microbial pollution, and organic chemicals (pesticides, herbicides, and industrial). Compliance with Idaho Water Quality Standards is presumed if permittees are complying with all terms and conditions of this municipal separate storm sewer system (MS4) permit.

Receiving Water Body Level of Protection

The Pocatello Urbanized Area discharges to the Portneuf River and Pocatello Creek within the Portneuf Subbasin assessment units (AU) ID17040208SK001_05 (Portneuf River - Marsh Creek to American Falls Reservoir); ID17040208SK024_03 (lower Pocatello Creek); ID17040208SK024_03a (middle Pocatello Creek – Fks to Outback Driving Range); and ID17040208SK025_02 (South Fork Pocatello Creek – source to mouth). The Portneuf River AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning and secondary contact recreation. The Pocatello Creek AUs have the following presumed beneficial uses: cold water aquatic life and contact recreation. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

Based on IDEQ's 2014 Integrated Report, the Portneuf River is not fully supporting its assessed aquatic life use. Causes of impairement include sediment, nitrogen, phosporus, oil and grease, dissolved oxygen, temperature and physical substrate habitat alterations. The contact recreation beneficial use for the Portneuf River is also impaired for *E.* coli. The Pocatello Creek assessment units identified above are also impaired for sediment and so do not fully support their presumed aquatic life use; DEQ has sufficient data to show contact recreation impairment of the Pocatello Cr. AU's and intends to recommend listing of these AU's in the 2018 Integrated Report. DEQ must provide an appropriate level of protection for the contact recreation use using information available at this time (IDAPA 58.01.02.052.05.c). DEQ will provide Tier I protection for the aquatic life and contact recreation beneficial uses.

Protection and Maintenance of Existing Uses (Tier I Protection)

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

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a TMDL must be prepared for those pollutants causing impairment. A central purpose of TMDLs is to establish wasteload allocations for point source discharges, which are set at levels to restore the water body to a condition that meets applicable water quality criteria. Discharge permits must contain limitations that are consistent with wasteload allocations in the approved TMDL. A permit with terms and conditions consistent with TMDL wasteload allocations will provide the level of water quality necessary to support existing and designated uses and therefore satisfies Tier I antidegradation requirements.

The EPA-approved *Portneuf River TMDL: Water Body Assessment and Total Maximum Daily Load* (1999) and the *Portneuf River TMDL Revision and Addendum* (2010) established wasteload allocations for sediment, phosphorus, oil and grease and bacteria in the Portneuf River and Pocatello Creek. The wasteload allocations are designed to ensure these waters will achieve the water quality necessary to support existing and designated beneficial uses and comply with the applicable numeric and narrative criteria. The terms and conditions contained in the Pocatello Urbanized Area permit reasonably assure compliance with these wasteload allocations.

In general, the permit contains clear, specific and measureable provisions for the continued implementation of specific controls, management practices, control techniques, and system design and engineering methods to achieve the requirements of the permit. The provisions in this MS4 permit are at least as stringent as those established in the previous individual MS4 permit issued in 2006 for the City of Pocatello, Chubbuck, Bannock County and Idaho Transportation District #5, thus addressing anti-backsliding. Idaho State University has joined this permit as a co-permittee for the first time. The permittees will continue to implement their existing storm water management program (SWMP) within their jurisdiction. In addition, specific terms and conditions of the permit aimed at providing a Tier I level of protection and compliance with the existing Portneuf River TMDLs include:

- a prohibition on snow disposal directly to surface water;
- specific prohibited non-stormwater discharges;
- a requirement to develop/revise the stormwater management plan that includes five control measures:
    - public education and outreach,
    - illicit discharge detection and elimination,

    - construction site stormwater runoff control,
    - post-construction stormwater management for new development and redevelopment,
    - pollution prevention/good housekeeping for MS4 operations;
- monitoring of pollutants removed by BMPs (in part, two constructed wetlands since 1996) in conjunction with their required maintenance;
- a Monitoring/Assessment Plan and at least two (2) Pollutant Reduction Activities addressing expectations in the Portneuf River TMDL; and
- the stipulation that if either EPA or DEQ determine that this MS4 causes or contributes to an excursion above the water quality standards, the permittee must take a series of actions to remedy the situation.

The terms and conditions, monitoring and assessment practices, BMP requirements, and associated requirements contained in this MS4 permit, coupled with the conditions in this certification provide reasonable assurance of compliance with the narrative and numeric criteria in the WQS. In addition, this MS4 permit provides reasonable assurance that discharges will comply with the applicable wasteload allocations in the Portneuf River TMDLs. Therefore, DEQ has determined this MS4 permit will protect and maintain existing and designated beneficial uses in the Portneuf River and Pocatello Creek and is in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

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

Best Management Practices

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

Reporting of Discharges Containing Hazardous Materials or Deleterious Material

All spills of hazardous material, deleterious material or petroleum products which may impact waters (ground and surface) of the state shall be immediately reported. Call 911 if immediate assistance is required to control, contain or clean up the spill. If no assistance is needed in cleaning up the spill, contact the appropriate DEQ regional office in Table 2 during normal working hours or Idaho State Communications Center after normal working hours. If the spilled volume is above federal reportable quantities, contact the National Response Center.

For immediate assistance: Call 911

National Response Center: (800) 424-8802

Idaho State Communications Center: (800) 632-8000

Other Conditions

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

Right to Appeal Final Certification

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

Questions or comments regarding the actions taken in this certification should be directed to Lynn Van Every, Pocatello Regional Office, at (208) 236-6160 or via email at lynn.vanevery@deq.idaho.gov.

DRAFT

Bruce Olenick
RegionalAdministrator
Pocatello Regional Office

APPENDIX 2 – STATUTORY AND REGULATORY OVERVIEW

Pollutants Typically Found in Urban Runoff

Stormwater 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 accumulate on paved or impervious surfaces. Uncontrolled pollutants and flow associated with stormwater discharges from urban areas can negatively affect water quality. Contaminants enter stormwater from a variety of sources in the urban landscape. Urban stormwater is often a contributing factor where there is a water quality standard impairment in a particular waterbody. Stormwater 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;
- Organic chemicals (pesticides, herbicides, and industrial); and
- Temperature.[33]

An increase in impervious surface cover will increase the amount of runoff. Effects of runoff generally takes one of two forms. First, an increase in the type and quantity of pollutants in stormwater runoff, where these pollutants become suspended in runoff and are carried to receiving waters, and can impair the aquatic life uses of these waters. The second kind of runoff effect occurs by increasing the quantity of water delivered to the waterbody as a result of storms. Increased impervious surface area (such as, parking lots, driveways, and rooftops) interrupts the natural process of gradual percolation of water through vegetation and soil, and the water that would percolate under natural conditions may instead be discharged through the MS4. The effects of this alteration include streambank scouring and downstream flooding, which can affect aquatic life and damage property.[34]

Statutory and Regulatory Background for the MS4 Permit Program

The federal Clean Water Act (CWA) Section 402(p), 33 U.S.C. § 1342(p) and the National Pollutant Discharge Elimination System (NPDES) stormwater regulations establish permit requirements for regulated MS4 discharges. Section 402(p)(3)(B) of the CWA, 33 U.S.C. §1342(p)(3)(B) requires any NPDES permit for MS4 discharges to effectively prohibit non-precipitation related flows from entering the MS4, and require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including management practices, control techniques, and system design and engineering methods, and such other provisions determined to be appropriate by the NPDES permitting authority.

Definitions of relevant terms, such as "*municipal separate storm sewer*," and "*small MS4*," are found at 40 CFR §122.26(b). In general, a *municipal separate storm sewer* includes any publicly -owned conveyance or system of conveyances that discharges to waters of the United States, is

[33] Shaver, Horner, et al. 2007; EPA 1990; EPA 1999a and EPA 1999b.
[34] USGS and EPA, 2015, page 61.

designed or used for collecting and conveying stormwater, is not a combined sewer, and is not part of a publicly owned treatment works. A *municipal separate storm sewer system*, or MS4, includes roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man- made channels, and/or storm drains.[35]

In 1990, EPA developed the first phase of federal stormwater regulations as directed by the CWA. The "Phase I" regulations established NPDES permit application and related requirements for discharges from large MS4s and medium MS4s. The Phase I regulation identified the large- and medium MS4s nationally based on the 1990 Census population. Based on the 1990 Census in Idaho, the Phase I stormwater regulations automatically designated MS4 operators discharging within the boundaries of Garden City and Boise as medium MS4s.[36]

In 1999, EPA developed the "Phase II" stormwater regulations, and designated additional small MS4s as needing NPDES permits. Regulated small MS4s include any MS4 discharge not already covered by Phase I that is located (partially or wholly) within an Urbanized Area (UA) as defined by the latest decennial Census. Regulated small MS4s in Idaho are located in Census-defined UAs of Coeur d'Alene; Lewiston; Nampa; Boise; Pocatello; and Idaho Falls. The Phase II regulation also defines regulated small MS4s as those systems with a UA that serve military bases or other properties owned by the United States; colleges and universities; large hospital or prison complexes; and highway systems.[37] In Idaho, public entities own and/or operate regulated small MS4s in UAs, include cities and counties; local highway districts; ITD; and state or community colleges and universities.

The Phase II regulation includes authority for EPA (or states that administer the NPDES program as the permitting authority) to require NPDES permits for other unregulated stormwater discharges by a designation process.[38]

Permits for MS4 discharges must include terms and conditions 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.[39] The MS4 permittee must control pollutants in their MS4 discharges to the MEP by addressing the six "minimum control measures," i.e., public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site runoff control, post construction runoff control, and pollution prevention and good housekeeping. The operator may seek NPDES permit coverage under an available general permit, or the operator may apply for an individual permit.[40]

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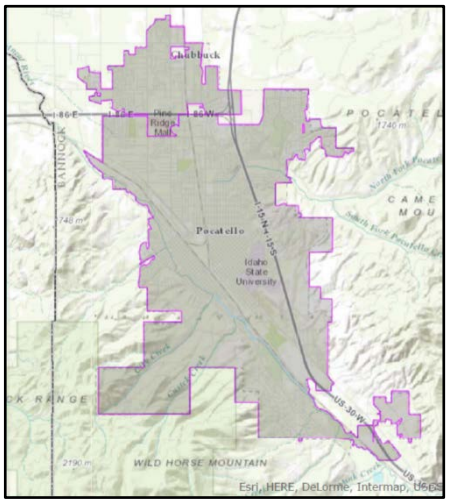
[35] *See*: 40 CFR §122.26(b); 122.32(a); and EPA 1990.
[36] In December 2000, EPA issued a single individual NPDES permit (#IDS027561) for the Phase I MS4 discharges owned/operated by six co-permittees operating in Garden City and Boise, ID; EPA reissued Permit #IDS027561 effective January 2013 -January 2018.
[37] *See*: 40 CFR §§ 122.26(b)(16) and 122.30 through 37; and EPA 1999. U.S. Census maps for the 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/.
[38] *See:* 40 CFR § 122.26(a)(9)(i)(C) and (D)
[39] *See*: CWA Section 402(p)(3); 40 CFR §122.34(a); EPA 2016a and 2016b. EPA now refers to this phrase as the *MS4 permit standard*.
[40] *See:* 40 CFR § 122.34(b) and additional discussion in Section III of this Fact Sheet.

APPENDIX 3 – PERMIT AREA MAPS: POCATELLO URBANIZED AREA

Figure3.A: City Boundaries for the City of Pocatello and City of Chubbuck



Pocatello UA Maps	**Census 2000**	http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua70426/ua70426_01.pdf
	Census 2010	http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua70426_pocatello_id/

Figure 3.B: City and Year 2000 UA Boundaries for the Pocatello Urbanized Area

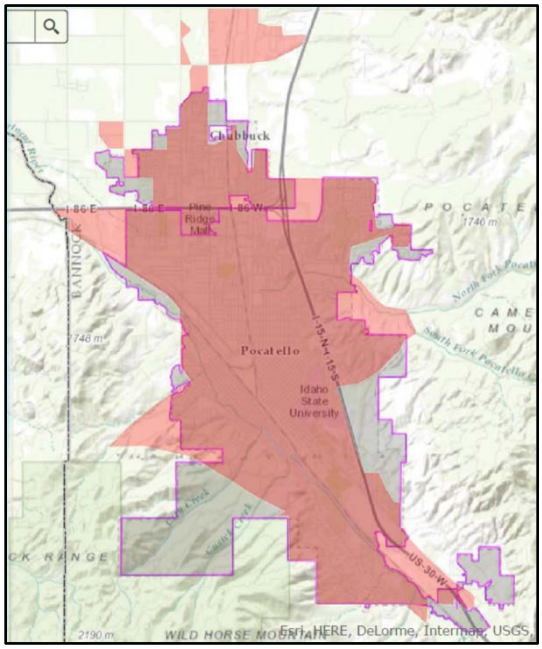
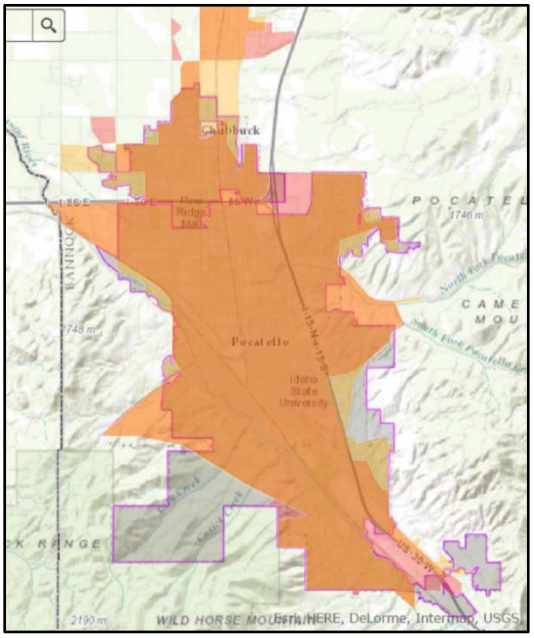


Figure 3.C: Combined City, Year 2000 UA, and Year 2010 UA Boundaries for the Pocatello Urbanized Area



APPENDIX 4 – RATIONALE FOR THE ONSITE STORMWATER RETENTION STANDARD OR TREATMENT EQUIVALENT IN PERMIT PART 3.4

The requirements in Permit Part 3.4 will improve upon the site design specifications, guidelines, and other policy documents that are currently required by MS4 Permittee jurisdictions in Idaho. The purpose of requiring an onsite stormwater design standard in this and other Idaho MS4 permits is to reduce pollutants in regulated MS4 discharges to the MEP, and improve upon the protection of water quality in Urbanized Areas of Idaho by helping to maintain or restore stable hydrology in adjacent receiving waters.

The EPA believes the *Portneuf Valley Stormwater Quality Design Manual* currently adopted by Pocatello and Chubbuck, meets the intention of the Permit Part 3.4.2. The following discussion provides additional background on EPA's rationale for including this requirement being necessary to meet the MS4 permit standard for Idaho.

It is well understood nationally that uncontrolled runoff from new development and redeveloped areas negatively affects receiving water bodies.[41] Pavement and other impervious surfaces in urban settings prevent infiltration of precipitation, and the resulting runoff increases both in 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 waterbodies, and can damage fish spawning areas and other aquatic habitat. Where traditional stormwater management practices typically employ engineered, end-of-pipe practices, (that tend to control only peak flow rates and total suspended solids concentrations), such conventional practices typically fail to address widespread and cumulative hydrologic modifications within a watershed that increase runoff volumes and rates, causing excessive erosion and stream channel degradation. Traditional practices also fail to treat runoff for nutrients, pathogens, and metals pollutants typically found in urban settings.[42]

Permanent stormwater control measures that involve prevention- such as product substitution, 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 and redevelopment. In particular, site-level stormwater control measures that harvest, infiltrate, and evapotranspire stormwater runoff are critical to reducing the volume and pollutant loading associated with smaller storms.[43]

"Green Infrastructure" (GI) or "green stormwater infrastructure" (GSI), are terms used to describe the type of permanent stormwater management techniques that are cost-effective, sustainable, and environmentally friendly. Such techniques, including site level "Low Impact Development" (LID) practices, at new development or redevelopment projects involve both stormwater management and land development strategies emphasizing conservation and integration of natural features with small scale engineered hydrologic controls to more closely

[41] EPA 1983; EPA 1999.
[42] Shaver, et al., 2007. Holz, 2008; and Horner, 2008.
[43] NRC 2008.

mimic predevelopment hydrologic function. A comprehensive approach to long-term stormwater management using GI/GSI, and LID seeks to:

- Preserve, protect and enhance natural landscape features, such as undisturbed forests, meadows, wetlands, and other undisturbed areas that provide natural stormwater 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 stormwater 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.[44]

Since 2008, the EPA has encouraged MS4 jurisdictions to employ a volume-based approach to stormwater management at new development and redevelopment sites. This approach includes requirements for the design, construction, and maintenance of permanent stormwater practices that manage rainfall onsite, to generally prevent the off-site discharge of precipitation from all rainfall events below a certain size. The EPA considers a volume-based stormwater management approach to be appropriate in this and other MS4 permits in Idaho because such techniques are widely acknowledged as a means of preventing pollutants from entering the receiving water; further, such techniques directly address the need to maintain and, where necessary, restore predevelopment hydrology for duration, rate, and volume of stormwater flows.

Many GSI/LID strategies involve bioretention, or infiltrating runoff through soil. Bioretention practices include use of porous pavements, green roofs, bioswales, and rain gardens. Various studies confirm the effectiveness of GSI/LID practices to reduce contaminants, restore hydrology, and protect the health of aquatic species. Research and on-the-ground experience suggests that all LID practices can perform effectively in a wide variety of geographic areas as long as procedures for proper design, implementation, and maintenance are established and followed.[45]

Many MS4 Permittees in Idaho currently require onsite retention and infiltration practices at development sites in their jurisdictions, and integrate aspects of a GSI/LID approach for such new development and redevelopment sites. Based on evidence that such GSI/LID approaches are indeed practicable for use in Idaho communities, the EPA is now requiring such site design approaches in this and other MS4 permits in Idaho to better address post-construction stormwater discharges.

The Permit requires the Permittees to use local ordinances or regulatory mechanisms to require the volume of water from storms $\leq$ 95th percentile event to be managed entirely onsite, and not

[44] See: American Rivers 2013; EPA 2006*;* EPA 1999*,* at pages 68725 – 68728 and 68759; EPA 2008; and EPA 2009.
[45] For example, see Ahiablame, et al, 2012; Spromberg, J.A. et al. 2016; and McIntyre, J.K, et al. 2016; and other references in the Administrative Record.

discharged to surface waters, in order to fully protect Idaho receiving waters. The *95th percentile rainfall event* is the rainfall event that is greater than 95% of all rainfall events over a period of record (typically using a minimum 30-year period of record). In general, this calculation excludes extremely small rain events that are ≤0.1 of an inch of rainfall or less (because such small rainfall events typically do not result in any measurable runoff due to absorption, interception, and evaporation by permeable, impermeable, and vegetated surfaces).[46]

The EPA has previously calculated example target design storm volumes, as illustrated below. Using available 24-hour precipitation data through 2012 from the National Oceanic and Atmospheric Administration, the EPA analyzed the average rainfall depth occurring in the Idaho MS4 Permit Areas. See Table A below. In the Urbanized Areas of Idaho, approximately 95% of all storms result in rainfall volumes of approximately 0.82 inches or less, ranging between 0.57 inches to 0.82 inches.

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

Urbanized Area/ Permit Area	Rainfall Depth (in) 95th	NOAA Station Location; Period of Record
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*
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*

The EPA recommends the 95th percentile storm volume be calculated for the Pocatello Urban Area at the start of the Permit term and revisited at the time of permit renewal so that a consistent standard is applied for the duration of the Permit term.

Including a stormwater design standard for onsite stormwater retention in this and other MS4 Permits, expressed as a calculated runoff volume, serves to acknowledge the predicted, incremental increase in storm event volumes in Pocatello and other areas of Idaho. The EPA believes such a design standard is preferable to using a single, static statewide rainfall amount

[46] See: Hirschman and Kosco, 2008.

(e.g, “0.6 inches total rain”), or a volume calculated from a statistical storm frequency return interval using historic rainfall data.

The EPA has evaluated the potential extreme storm event return interval for 24-hour storm events in each of the MS4 Permit Areas in Idaho.[47] The evaluation reflects estimated changes in rainfall patterns over 30-year averages, centered around the years 2035 and 2060, as compared to historical or present-day conditions. Under all evaluated scenarios, the predicted trends in Idaho MS4 Permit Areas show a general increase in ambient temperatures throughout the calendar year, and increased storm magnitude for all return frequencies (i.e., the 5 year, 10 year, …, and 100 year events). The evaluation also suggests significantly decreased summer precipitation statewide, balanced by increased precipitation during other seasons. Expressing the stormwater design standard for onsite storm water retention in Permit Part 3.4 as a calculated runoff volume therefore defines a practicable and feasible performance standard for permanent stormwater control at new development and redevelopment that will protect Idaho water quality over the long term.

[47] EPA Region 10’s analysis of the extreme storm event return interval for the Idaho MS4 Permit Areas is available as part of the Administrative Record. EPA used a risk assessment application designed to help water utilities in adapting to extreme weather events through a better understanding of current and long-term weather conditions; it is available online at https://www.epa.gov/crwu/build-resilience-your-utility.

APPENDIX 5 – RATIONALE SUPPORTING REQUIREMENTS IN PERMIT PART 4 TO COMPLY WITH THE APPLICABLE TOTAL MAXIMUM DAILY LOAD (TMDL)

Summary: Consistent with the WLAs established in the EPA-approved Portneuf River TMDL, continued monitoring/assessment of potential pollutant loading from MS4 discharges, combined with targeted pollutant reduction activities, are necessary and appropriate to reduce pollutants in MS4 discharges to the Portneuf River.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Pocatello	Portneuf River	ID17040208SK001_05 *Portneuf R.-Marsh Creek to American Falls Reservoir*	Total Nitrogen Oil and Grease Total Phosphorus *E. coli* Sedimentation/Siltation	*Portneuf River TMDL*, February 2001. *Portneuf River TMDL Revision and Addendum* February 2010. Approved July 2010. [48]
	Pocatello Creek	ID17040208SK025_02 *South Fork Pocatello Creek - source to mouth*	Sedimentation/ Siltation	

Discussion: The MS4s owned and/or operated by City of Pocatello; City of Chubbuck; Bannock County; Idaho State University, and Idaho Transportation Department District #5 discharge directly or indirectly to the Portneuf River in the Permit Area.

The main stem Portneuf River in 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. In 2001, IDEQ completed a TMDL for the Portneuf River (Portneuf TMDL), which identified stormwater runoff-related WLAs for oil and grease (38 tons/year), nitrogen (5.1 tons/year) and phosphorus (1.3 tons/year) and load allocations (LAs) for bacteria (50 cfu/100mL) and suspended sediment (50 mg/L and 80 mg/L, low- and high-flow conditions, respectively) from urban stormwater. The Portneuf TMDL was approved by EPA on April 16, 2001. Two TMDL Implementation Plans, namely, the *Supplement to the Final TMDL Plan for the Portneuf River – Section 4.0 Management Actions and Implementation* (dated February 2001) and the *Portneuf River TMDL Implementation Plan* (dated July 2003) were prepared by entities known to contribute pollutants to the Portneuf River, including Pocatello, Chubbuck, the County, and ITD. These TMDL implementation plans identified the types of activities for these entities would conduct to control urban stormwater discharges; such as: creating a hotline or other mechanism to allow citizens to report water quality problems; evaluating structural BMP design requirements through demonstration project(s); ensuring all public construction projects comply with the statewide Construction General Permit and local requirements for erosion, sediment and onsite materials control. To ensure that the [administratively extended] Permit was consistent with the assumptions of the WLAs and LAs in the Portneuf TMDL, and associated implementation plans, the EPA included these activities in the Permit, and added requirements to inventory industrial facilities discharging stormwater within the Permit Area; update Stormwater Master Plan(s) or comprehensive plans to accommodate future water quality investments; and monitor both municipal storm water discharges and Portneuf River surface

[48] Note: All Portneuf River TMDL documents discussed in this Appendix are available online at: http://www.deq.idaho.gov/water-quality/surface-water/tmdls/table-of-sbas-tmdls/portneuf-river-subbasin.aspx

water quality.

In 2010, IDEQ revised the Portneuf TMDL (*Portneuf TMDL Revision and Addendum)*, which EPA approved on July 29, 2010. The Portneuf TMDL Revision and Addendum refines the WLAs associated with NPDES-regulated MS4s discharging to Portneuf River main stem for total phosphorus, and oil and grease. IDEQ also defined load reduction targets for suspended sediment and *E. coli*.[49]

Specifically, the Portneuf TMDL Revision and Addendum 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 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 corresponding TSS and TP targets to estimate storm water target loads/load allocations. According to the TMDL, the 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.[50]

The 2001 Portneuf TMDL established an oil and grease WLA target of 5 mg/L; this target remains the same in the 2010 Portneuf TMDL Revision and Addendum. 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, The Permittees should consider continuing to use BMPs to minimize oil and grease loading to the River.[51] 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 Permit term.

The 2001 Portneuf TMDL established a load reduction target for *E.coli* of 126 organisms/100 mL, corresponding with water quality criteria for secondary contact recreation; this target remains the same in the 2010 Portneuf TMDL Revision and Addendum.[52]

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:

"S*ubstantial progress towards the reduction of current pollutant loads is expected to*

[49] See *Portneuf River TMDL Revision and Addendum*: *http://deq.idaho.gov/media/464542_water_data_reports_surface_water_tmdls_portneuf_river_portneuf_river_revision_addendum_final.pdf*
[50] See *Portneuf TMDL Revision and Addendum*, Table 5.4-page 110, and Table 5.8-page 118.
[51] See *Portneuf TMDL Revision and Addendum*, page 129-131.

[52] See *Portneuf TMDL Revision and Addendum*, pages 95-96.

> *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.*" [53]

The TMDL also 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.

Finally, the TMDL 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 PUA (near First Street and at Day Street-Sacajawea Park, respectively).[54] The EPA encourages the Permittees, collectively, to pursue both structural and treatment practices within the PUA. Based on the data collected during the previous MS4 permit term, the EPA recommends that the MS4 Permittees consider locating future structural treatment devices in drainage areas leading to the Halliday and Lander Street outfalls.[55]

Conclusion: To ensure that the conditions in the permit are consistent with the assumptions of the WLAs and LAs in the Portneuf TMDL Revision and Addendum, in Permit Part 4, the EPA requires the Permittees to revise or continue the storm water monitoring/assessment efforts begun under the prior Permit term. In addition, Permit Part 4 requires the Permittees to submit descriptions of at least two (2) pollutant reduction activities designed to target and control discharges of total nitrogen; oil and grease; total phosphorus; *E. coli;* and/or Sedimentation/Siltation. Such activities may augment existing control measures, or may involve new actions, as deemed appropriate by the Permittee(s).

The EPA determines that continued implementation of the comprehensive SWMP control measures by City of Pocatello, City of Chubbuck, Bannock County, Idaho Transportation Department District #5, and Idaho State University (as directed in Permit Part 3) is fully consistent with the Portneuf TMDL Revision and Addendum. These measures include specifications and enforcement of erosion and sediment controls, as well as permanent storm water management controls, for site development disturbing 1 acre or more. In addition, proper operation and maintenance of the MS4 (including regular sweeping of roadway surfaces) will continue to appropriately prevent the discharge of sediment solids from the MS4s into the impaired segments of the Portneuf River.

Permit Part 4 requires the Permittee(s) to submit new or updated Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the Permit no later than 180 days from the Permit effective date. The EPA will review and consider modifying relevant portions of Permit Part 4 to incorporate reference to the Permittees' pollutant monitoring/assessment and pollutant reduction activities.

[53] See *Portneuf TMDL Revision and Addendum*, page 154.
[54] See *Portneuf TMDL Revision and Addendum*, Page 87.
[55] See *Portneuf TMDL Revision and Addendum*, Page 92.