Fact Sheet

The U.S. Environmental Protection Agency (EPA) Proposes to Issue Three National Pollutant Discharge Elimination System (NPDES) Permits for Municipal Stormwater Discharges to Receiving Waters Located on Trust Lands within the 1873 survey area of the Puyallup Reservation Pursuant to Provisions of the Clean Water Act (CWA), 33 USC §1251 et seq to:

Facility	Permit Number
City of Tacoma	WAS026689
Pierce County	WAS026875
WSDOT	WAS026743

Public Comment Start Date: April 1st, 2021
Public Comment Expiration Date: May 15th, 2021

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EPA Proposes To Issue NPDES Permits

EPA Region 10 proposes to issue three (3) NPDES Permits authorizing the discharge of stormwater from all municipal separate storm sewer system (MS4) outfalls owned and/or operated by the entities listed above to receiving waters located on Trust Lands within the 1873 survey area of the Puyallup Reservation. 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 [December 8, 1999] and 81 FR 89320 [December 9, 2016]).

To ensure protection of water quality and human health, the Permits establish conditions, prohibitions, and management practices for discharges of stormwater. Specifically, the Permits require the implementation of a comprehensive stormwater management program (SWMP), which outlines the control measures to be used to reduce the discharge of pollutants from the MS4s to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the CWA.

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures;
- a map and descriptions of the regulated MS4 discharges to be covered under the Permits;
- an explanation of the conditions, prohibitions, and management practices for MS4 discharges; and,
- technical material supporting the terms and conditions of the Permits.

Puyallup Tribe of Indians Certification
EPA is requesting that the Puyallup Tribe of Indians (Tribe) provide final certifications of the permits under Section 401 of the Clean Water Act. Comments regarding the Tribe's intent to certify the permit should be directed to Char Naylor at 253-573-7851, char.naylor@puyalluptribe-nsn.gov, or

Puyallup Tribe, c/o Char Naylor, Environmental
3009 East Portland Avenue
Tacoma, WA 98404
253 573-7851

Public Comment and Opportunity for Public Hearing
Because of the COVID-19 virus, access to the Region 10 EPA building is limited. Therefore, we request that all comments on EPA's draft permits or requests for a public hearing be submitted via email to Misha Vakoc (vakoc.misha@epa.gov). If you are unable to submit comments via email, please call 206-553-6650.

Persons wishing to comment on, or request a Public Hearing for, the draft Permits for the MS4s listed above must do so by the expiration date of the Public Comment period. A request for a 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 submitted to EPA as described in the Public Comments Section of the attached Public Notice.

After the Public Notice expires, and all comments have been considered, EPA's Regional Director for the Water Division will make a final decision regarding permit issuance. If no substantive comments are received, the tentative conditions in the draft Permits will become final and the Permits will become effective upon issuance. If substantive comments are received, EPA will address the comments and issue the permit. The Permits will become effective no less than 30 days after the issuance date, unless an appeal is submitted to the Environmental Appeals Board within 30 days pursuant to 40 CFR 124.19.

Documents are Available for Review
The three draft Permits, fact sheet, and other information, are available on EPA's Region 10 website at: https://www.epa.gov/npdes-permits/stormwater-discharges-municipal-sources-idaho-and-washington. Because of the COVID-19 virus and limited building access we cannot make hard copies available for viewing at our offices.

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Acronyms

xQy	"x"-day, "y" year low flow
xBy	Biologically-based design flow intended to ensure an excursion frequency of less than once every "y" years, for a "x"-day average flow.
AKART	All known, available, and reasonable methods of prevention, control, and treatment
BMP	Best Management Practices
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGP	Construction General Permit (NPDES General Permit for Stormwater Discharges from Construction Activities in Indian Country in WA, Permit #WAR12I000)
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
GP	General Permit
HRM	Highway Runoff Manual
HUC	Hydrologic Unit Code
IDDE	Illicit Discharge Detection and Elimination
in	Inches
LA	Load Allocation
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer Systems
MSGP	Multi-Sector General Permit (NPDES General Permit for Stormwater Associated with Industrial Activities in Indian Country in WA, Permit #WAR05I000)
NCEI	National Centers for Environmental Information
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and maintenance
SR	State Route
2019 Manual	2019 Stormwater Management Manual for Western Washington
SWMP	Stormwater Management Program
TAS	Treatment as a State
TMDL	Total Maximum Daily Load
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
WAC	Washington Administrative Code
WLA	Wasteload allocation
WSDOT	Washington State Department of Transportation
WQS	Water Quality Standards

I. Background Information

A. General Information

This fact sheet provides information on the draft National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) Permits for the City of Tacoma (Tacoma) (Permit No. WAS026689), Pierce County (Pierce) (Permit No. WAS026875), and the Washington Department of Transportation (WSDOT) (Permit No. WAS026743). The U.S. Environmental Protection Agency (EPA) is including a description of the discharges and the terms and conditions of the permits for these facilities in one fact sheet because each of the Permittees are regulated MS4s that discharge stormwater to waters of the U.S. within the Puyallup Reservation that are subject to Federal and Tribal jurisdiction.

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 can accumulate on paved or impervious surfaces. Uncontrolled pollutants and flow associated with stormwater discharges from urban areas contribute to water quality impairment.

The Clean Water Act (CWA) Section 402(p), 33 U.S.C. § 1342(p), and the NPDES stormwater regulations establish permit requirements for discharges from certain regulated MS4s. Section 402(p)(3)(B) of the CWA, 33 U.S.C. §1342(p)(3)(B), requires any NPDES permit for MS4 discharges to:

> *(1) effectively prohibit non-precipitation related flows from entering the MS4, and*
>
> *(2) require controls necessary to reduce pollutants in municipal stormwater discharges to the maximum extent practicable (MEP), including management practices, control techniques, and system design and engineering methods, and/or other such provisions determined to be appropriate by the NPDES permitting authority.*

MS4s, in general, include any publicly owned conveyance or system of conveyances used for collecting and conveying stormwater and which discharges to waters of the United States. MS4s are designed for conveying stormwater only, and are not part of a combined sewer system, nor part of a publicly owned treatment works. Such systems include roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and/or storm drains.

In 1990, EPA developed the first phase of stormwater regulations, Phase I, as directed by the CWA. This regulation requires NPDES permit coverage for stormwater discharges from medium and large MS4s in Urbanized Areas as defined by the 1990 Decennial Census conducted by the Bureau of the Census. Pierce, Tacoma, and WSDOT are considered "medium" MS4s under the Phase I stormwater regulations. A medium MS4 is any MS4 located within an incorporated place, or located in a county with unincorporated urbanized areas, with populations greater than 100,000 but less than 250,000 according to the 1990 Decennial Census by the Bureau of the Census.[1]

[1] EPA, 1990 and 40 CFR §122.26(b)

B. Clean Water Act Authority

EPA is the NPDES permitting authority in the State of Washington for federal facilities and facilities discharging to Tribal waters. Therefore, EPA administers the NPDES program on Trust Lands within the 1873 survey area of the Puyallup Reservation (Permit Area).[2] The Puyallup Tribe was granted Treatment as a State (TAS) by EPA under Section 518(e) of the CWA, 33 U.S.C. § 1377(e), to carry out the Water Quality Standards (WQS) Program under Section 303 of the CWA, 33 U.S.C. § 1313, on trust lands within the Permit Area, which includes the mainstem Puyallup River channel (below the mean high water mark). In October 1994, EPA approved the Puyallup Tribe's WQS (Puyallup WQS),[3] which apply to the trust lands within the Permit Area.

Washington State Department of Ecology (Ecology) is the permitting authority for MS4 discharges to State waters.[4] Ecology reissued its "Phase I Municipal Stormwater General Permit" (Ecology Phase I GP) on July 1, 2019. The Ecology Phase I GP regulates Phase I MS4s discharging to State waters, including the portions of the Pierce County and City of Tacoma MS4s. In addition, Ecology reissued its "Washington State Department of Transportation National Pollutant Discharge Elimination System and State Waste Discharge Municipal Stormwater General Permit" (Ecology WSDOT GP) on March 6, 2019 that regulates MS4s owned or operated by WSDOT discharging to State waters.

Although EPA is issuing an individual Permit to each entity, there are times when the entities are collectively referred to as "the Permittees" within this Fact Sheet. Unless the Fact Sheet specifically identifies an entity (e.g. Tacoma, or Pierce, or WSDOT), the term "Permittee" applies individually to each entity receiving a Permit. If the group is referenced collectively, they are referred to as "the Permittees," but this terminology does not mean that they are being issued a joint permit.

II. Facility Information

Each Permittee owns and/or operates a regulated MS4 that discharges to both State and Tribal waters. EPA is only authorizing discharges to Tribal waters. This Fact Sheet only discusses discharges from portions of the Permittees' MS4s discharging within the Permit Area. More detail for each MS4 is provided in Appendix A.

Tacoma: EPA received a complete NPDES permit application from Tacoma on August 17, 2010, which included a description of the number of known MS4 outfalls that discharge to the receiving waters subject to the Permit. See Maps A-1 through A-3 in Appendix A. Discharges within the Permit Area from Tacoma's MS4 drain from four (4) main drainage areas into three (3) receiving waters. Tacoma owns and/or operates thirteen (13) outfalls discharging to the following receiving waters:

- Puyallup River: The MS4 discharges through two (2) outfalls that drain from the Lower Puyallup Watershed, the first drains from a mostly industrial area and the second drains from a mostly residential area.
- Blair Waterway: The MS4 discharges through one (1) outfall that drains from the tide flats of the Blair Waterway Watershed, a predominantly industrial area; and,

[2] Puyallup Tribe, 1988; and EPA, Ecology and Puyallup Tribe, 1997
[3] EPA, 1994
[4] Washington State and EPA, 2018

- Hylebos Waterway: The MS4 discharges through ten (10) outfalls that drain from the Northeast Tacoma Watershed, a mostly residential area;

Pierce: EPA received a complete NPDES permit application from Pierce on July 2, 2013, which included a description of the number of known MS4 outfalls that discharge to the receiving waters subject to the Permit. See Map A-4 in Appendix A. Discharges within the Permit Area from Pierce's MS4 drain to two (2) receiving waters. Pierce owns and/or operates 4 outfalls discharging to the following receiving waters:

- Puyallup River, three (3) outfalls
- Unnamed channel south of the Puyallup River, one (1) outfall

WSDOT: EPA received a complete NPDES permit application from WSDOT on December 18, 2012, and subsequently amended on August 28, 2015, which included a description of the number of known MS4 outfalls that discharge to the receiving waters subject to the Permit. Discharges within the Permit Area from WSDOT's MS4 drain from State Route 167 (SR 167) and discharge to the Puyallup River. See Map A-5 in Appendix A. WSDOT owns/operates an additional outfall which discharges to the Puyallup River and drains the Interstate 5 (I-5) bridge where it crosses the Puyallup River.

Table 1. Facility Information

	Tacoma	Pierce	WSDOT
NPDES Permit #	WAS026689	WAS026875	WAS026743
Applicant	City of Tacoma	Pierce County	Washington State Department of Transportation
Type of Ownership	Municipality	County	State Agency
Physical Address	Tacoma Municipal Building Fourth Floor 747 Market St Tacoma, WA 98402	2702 S 42nd St, Ste 109 Tacoma, WA 98409	Olympic Region 5720 Capitol Blvd. Tumwater, WA 98501
Mailing Address	326 East D Street Tacoma, WA 98421	2702 S 42nd St, Ste 201 Tacoma, WA 98409	WSDOT Olympic Region PO Box 47440 Olympia, WA 98504
Facility Contact	Merita Trohimovich Principal Engineer 253.502.2103 mtrohimo@cityoftacoma.org	Maureen Meehan Water Quality Manager 253.798.6793 maureenmeehan@piercecountywa.gov	Jeff Sawyer Region Environmental Manager 360.570.6701 sawyerj@wsdot.wa.gov

III. Permit History

Upon EPA's request, the Permittees have submitted complete NPDES permit applications pursuant to 40 CFR 122.21. EPA received NPDES applications on the following dates:

Facility	Application Receipt Date
Tacoma	8/17/2010
Pierce	7/17/2013
WSDOT	9/3/2015

As described in Section II and Appendix A of this Fact Sheet, the Permittees own and operate MS4s that discharge to both Tribal and State waters. These Permit issuances will be the first time each of the Permittees will be covered by NPDES MS4 permits for discharges to Tribal waters within the Permit Area. Tacoma and Pierce are authorized to discharge stormwater to State waters under Ecology's Phase I GP (WAR044003 and WAR044002, respectively), and WSDOT is authorized to discharge stormwater to State waters under the Ecology WSDOT GP (WAR043000A).

Each of the Permittees have developed stormwater management programs (SWMPs) to meet the requirements of their respective Ecology MS4 permits. WSDOT has also developed the Highway Runoff Manual (HRM) to address stormwater impacts on water quality from state owned and operated transportation infrastructure.

IV. Receiving Water & Environment

A. Receiving Waters

EPA intends to issue the Permits authorizing stormwater discharges from the MS4s owned and/or operated by the Permittees to surface waters located in the Permit Area. These receiving waters include the Puyallup River from the mouth of the river to the boundary of the Permit Area, and segments of the Blair and Hylebos Waterways.

The Puyallup River is located in the Puyallup Subbasin (HUC 17110014). The Puyallup River drains into Commencement Bay and Puget Sound where Washington is a downstream state.

SR-167 borders the south side of the Puyallup River. I-5 is a major thoroughfare across the Puyallup River. WSDOT reports on its Traffic GeoPortal website that in 2019 the I-5 bridge had an annual average daily traffic volume of 210,000.[5]

The Blair and Hylebos Waterways are two of seven waterways located within the west side of the Commencement Bay tide flats.[6] Both waterways receive freshwater discharges before discharging to Commencement Bay. The waterways are surrounded by mostly industrial land uses, but do receive additional discharges from other land uses.

[5] WSDOT, 2020
[6] WSDOT, 2006

B. Designated Beneficial Uses

The Puyallup River from mouth to river mile 1.0 is listed as a Class B water and from river mile 1.0 to the up-river boundary of the Permit Area is listed as a Class A water in the Puyallup WQS.[7] No other waters or water body segments are listed in the Puyallup WQS.

The characteristic uses of Class A and B waters are:

Class A	**Class B**
Water supply (domestic, industrial, agricultural)	Water supply (industrial and agricultural)
Stock watering	Stock watering
Fish and shellfish	Fish and shellfish
Wildlife habitat	Wildlife habitat
Ceremonial and religious water use	--
Primary contact recreation	Secondary contact recreation
Commerce and navigation	Commerce and navigation

Blair and Hylebos Waterways do not have any specific classifications in the Puyallup WQS, however, all unclassified waters which are not tributaries to Class AA waters are classified Class A. Blair and Hylebos Waterways are not tributaries to Class AA waters, therefore, they are Class A waters.

All discharges to surface waters located within the Permit Area must also comply with any limitations that may be imposed by the Tribe as part of its water quality certification pursuant to CWA Section 401, 33 U.S.C. § 1341. Additionally, the permit conditions must meet the applicable water quality requirements of affected States, including downstream States. (40 CFR 122.4(d), 122.44(d)(4), see also CWA Section 401(a)(2)). Since the Puyallup River, Blair Waterway, and Hylebos Waterway are tributaries of Commencement Bay and the discharges to these waterbodies may affect the quality of waters in Commencement Bay, EPA must ensure that Washington WQS are met in Commencement Bay, the downstream Washington state waters. Therefore, the permit conditions must also assure compliance with the Washington WQS (40 CFR 122.4(d)). Washington Administrative Code (WAC)-173-201A-602 lists use designations for fresh waters and Part 612 for marine waters. Water quality standards for fresh and marine waters are found in WAC-173-201A-600 and 173-201A-210, respectively. The Puyallup WQS and Washington WQS list similar designated uses for the Puyallup River.

[7] Puyallup Tribe, 1994

Table 2. Designated Beneficial Uses of Downstream State Waters

Fresh Waters		Aquatic Life	Water Supply	Recreational	Miscellaneous
Puyallup River	from mouth to river mile 1.0	Rearing/Migration Only	Industrial, Agricultural, and Stock Water	Secondary Contact	Wildlife Habitat, Harvesting, Commerce/Navigation, Boating, Aesthetics
Marine Waters		**Aquatic Life**	**Shellfish Harvest**	**Recreational**	**Miscellaneous**
Commencement Bay	Inner	Good	No	Secondary Contact	Wildlife Habitat, Harvesting, Commerce/Navigation, Boating, Aesthetics
	Outer	Excellent	Yes	Primary Contact	

C. Water Quality Limited Waters

Any waterbody for which the water quality does not, and/or is not expected to meet applicable water quality standards is defined as a "water quality limited segment."

Section 303(d) of the CWA, 33 U.S.C. § 1313(d), requires states to develop a Total Maximum Daily Load (TMDL) management plan for water bodies determined to be water quality limited segments. A TMDL is a detailed analysis of the water body to determine its assimilative capacity. The assimilative capacity is the loading of a pollutant that a water body can assimilate while maintaining compliance with water quality standards. Once the assimilative capacity of the water body has been determined, the TMDL will allocate that capacity among point and non-point sources, taking into account natural background levels and a margin of safety. Allocations for non-point sources are known as "load allocations" (LAs). The allocations for point sources, known as "waste load allocations" (WLAs), are implemented through effluent limitations in NPDES permits, including MS4 permits.

Pursuant to 40 CFR 122.44(d)(1)(vii), NPDES permit terms and conditions for regulated stormwater discharges must be consistent with the assumptions and requirements of available WLAs in TMDLs.[8]

The Puyallup Tribe of Indians (Tribe) is the responsible authority to develop TMDLs within the Permit Area. To date, the Tribe has not developed TMDLs for the Permit Area, but instead has participated in 303(d) listing and TMDL efforts with Ecology for areas of the Puyallup River Watershed not subject to Puyallup WQS.

Ecology's current section 303(d) lists the Puyallup River, from Deer Creek to Clarks Creek as impaired for Temperature and Mercury.

In June 2011, Ecology published the *Puyallup River Watershed Fecal Coliform Total Maximum Daily Load Water Quality Improvement Report and Implementation Plan* (hereinafter referred to as the *2011 TMDL*) and EPA approved the *2011 TMDL* in September 2011. The *2011 TMDL* is a state TMDL and therefore has no effect on tribal land, but it does include WLAs for Ecology permittees. Since the WLAs are being implemented in Ecology's

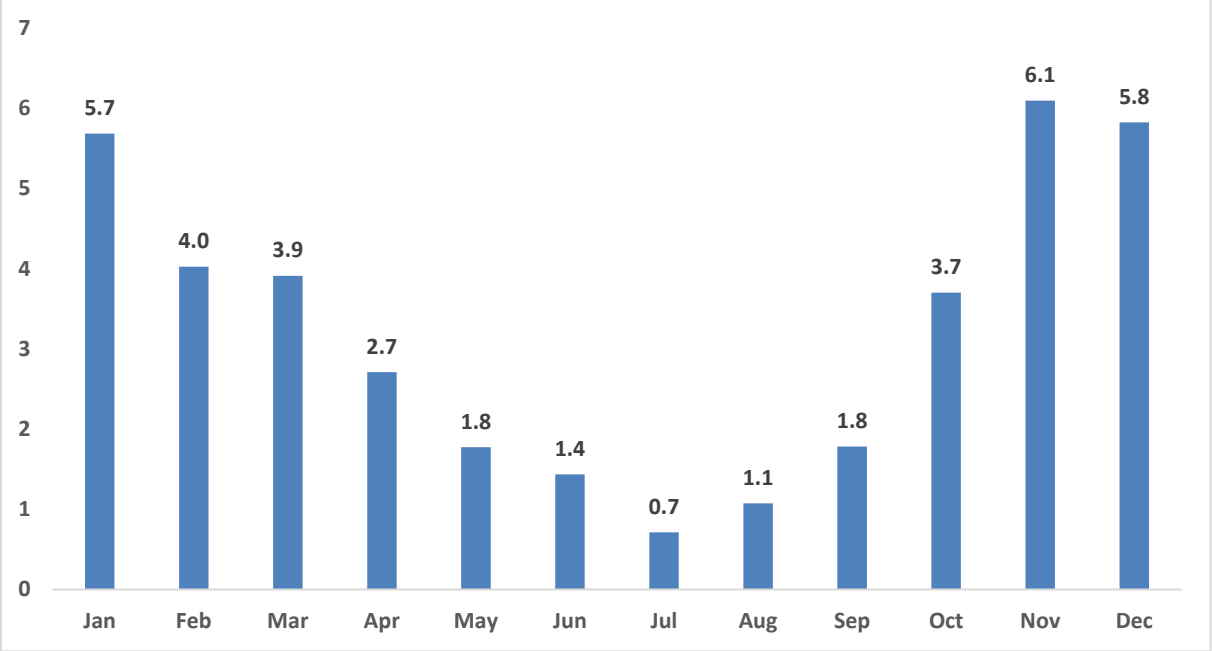
[8] EPA, 2002; and EPA, 2014

Phase I GP through implementation of best management practices (BMPs) as set out in the TMDL, EPA is requiring those same controls and as a result the terms and conditions of the Permits are consistent with the TMDL. The *2011 TMDL* includes WLAs for the MS4 discharges to state waters from Tacoma, Pierce, and WSDOT. The WLAs are established as the water quality standards of 100 cfu/100mL (geomean) and less than 10% of samples greater than 200 cfu/100mL. These WLAs are intended to be expressed as BMPs. The *2011 TMDL* states that source control BMPs, and BMPs reducing the volume of stormwater discharge or activities to reduce fecal coliform bacteria concentrations, should be considered in MS4 permits. In the Permits, EPA requires source control BMPs at all new development and redevelopment project sites meeting the same thresholds stated in Appendix 1- *Minimum Technical Requirements* of Ecology's Phase I GP. These source control BMP requirements are consistent with the WLAs given in the *2011 TMDL*.

D. Precipitation

The National Oceanic and Atmospheric Administration's (NOAA's) National Centers for Environmental Information (NCEI) website maintains historical climate information for various weather stations throughout the United States. The NCEI database has precipitation data from station GHCND:USW00024233 (Seattle Tacoma International Airport WA, US) for the period of record 1948 - 2019, summarized below.

Figure 1. Monthly Average Precipitation (in)



E. Flow Conditions

Critical low flows were calculated for the Puyallup River using the USGS Surface Water Toolbox and data from USGS station 12101500 from April 1, 1914 to March 31, 2019.

Table 3. Critical Flows in Puyallup River

Hydrologically Based Flows	Annual Flow (cfs)	Biologically Based Flows	Annual Flow (cfs)
1Q10	557	1B3	571
7Q10	743	4B3	768
30Q5	1,070	30B3	1,158
30Q10	939		
Harmonic Mean	2,417		
Source: USGS station 12101500 Puyallup River at Puyallup, WA. April 1, 1914 – March 31, 2019.			

The Puyallup River has an observed average stream flow of 3,323 cfs, a recorded minimum of 400 cfs and a recorded maximum of 53,400 cfs.

V. Basis for Permit Conditions

A. Federal Requirements

Permit conditions are based on Section 402(p)(3)(B) of the CWA, 33 U.S.C. § 1342(p)(3)(B), which requires an NPDES permit for MS4 discharges to:

1) Include a requirement to effectively prohibit non-stormwater from entering the MS4; and
2) Require controls to reduce pollutants in municipal stormwater discharges to the maximum extent practicable (MEP), including management practices, control techniques and system, design and engineering methods, and other such provisions determined appropriate for the control of pollutants.

MEP is the statutory standard that describes the level of pollutant reduction that MS4 operators must achieve. Neither the CWA nor the stormwater regulations provide a precise definition of MEP, which provides for maximum flexibility in MS4 permitting. Permit requirements for meeting the MS4 permit standard are continually adapted to current conditions and the effectiveness of the control measures with the goal of attaining water quality standards.[9]

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.[10]

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;

[9] EPA, 1990; EPA, 1996; and 40 CFR 122.26(d)
[10] EPA, 1990; EPA, 1996; EPA, 2016a; and 40 CFR 122.26(d)

performance requirements; adaptive management requirements; schedules for implementation, maintenance, and/or frequency of actions.[11]

In order to comply with the MS4 standard during the Permit term, EPA has defined the control measures and evaluation requirements that the Permittees must implement.

B. Tribal Requirements

On May 25, 1994 EPA found the Tribe eligible to be treated in a manner similar to a state (TAS) and authorized the Tribe to administer a water quality standards program pursuant to Clean Water Act Section 518(e), 33 U.S.C. § 1377(e). EPA approved the Tribe's WQS on October 31, 1994.

The Puyallup WQS define "all known, available, and reasonable methods of prevention, control, and treatment" (AKART), which represents the current methodology that can reasonably be required for preventing, controlling, or abating the pollutants associated with a discharge. The Puyallup WQS state that *The Stormwater Management Manual for the Puget Sound Basin* from 1992 (1992 Manual) may be used as a guideline, to the extent appropriate, for developing BMPs to apply AKART for stormwater discharges.[12]

C. State of Washington Requirements

As discussed in Section I.B of this Fact Sheet, the Permittees are authorized to discharge stormwater from their MS4s to state waters under general permits issued by Ecology. Therefore, EPA considered the permit requirements found in both the Ecology Phase I GP and the Ecology WSDOT GP.

NPDES permit conditions must also meet the applicable water quality requirements of affected States other than the State in which the discharge originates, which may include downstream States.[13] Therefore, the permit conditions must also ensure that Washington WQS are met.

The Washington WQS Chapter 173-201A, define AKART as, "represent(ing) the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with a discharge."[14] The Ecology Phase I GP and Ecology WSDOT GP define the mandatory SWMP activities that Ecology determined met the AKART standard for regulated medium and large MS4s. These Ecology issued permits also define the required corrective action response for medium and large MS4 operators when violations of the Washington WQS are discovered.

Ecology developed the 2012 Stormwater Management Manual for Western Washington as amended in December 2014, (2014 Manual) as a successive update to the 1992 Manual. The 2014 Manual provides technical guidance on measures to control the quantity and quality of stormwater runoff from construction, new development and redevelopment projects including low impact development (LID) requirements and performance standards. These measures are considered necessary to achieve compliance with Washington WQS and to contribute to the protection of the beneficial uses of the receiving waters. Stormwater

[11] EPA, 2010; EPA, 2014; and EPA, 2016a-c
[12] Puyallup Tribe, 1994
[13] 40 CFR §122.44(d)
[14] Washington WQS, Chapter 173-201A

management techniques applied in accordance with the 2014 Manual are presumed by Ecology to meet the technology-based treatment requirement of AKART; see RCW 90.52.040 and RCW 90.48.010.

Furthermore, in lieu of the 2014 Manual, the Permit allows the permittee to use an equivalent alternative which has previously been approved by Ecology as equivalent. EPA is using the 2014 Manual or equivalent alternative programs as a required permit condition to meet the AKART standard in Washington's water quality standards. This will ensure that the beneficial uses of the downstream waters of Washington are protected. In addition, since the Tribe's AKART standard is the same as Washington's standard, the permit condition will ensure that Tribal WQS are met.

Recently, Ecology has developed the 2019 Stormwater Management Manual for Western Washington (2019 Manual). At this time Ecology has not approved any programs as equivalent to the 2019 Manual. If Ecology approves programs as equivalent to the 2019 Manual prior to issuance of these permits, EPA will require the use of these programs to meet the minimum technical requirements in the permits.

The following programs are equivalent to the 2014 Manual:

Equivalent Programs for Runoff Controls
Tacoma Tacoma Municipal Code Chapter 12.08 Wastewater and Surface Water Management as effective on November 24, 2015. The "City of Tacoma Stormwater Management Manual 2016 Edition," as submitted to Ecology on December 7, 2015 in accordance with Tacoma's communication "City of Tacoma SWMM and Ordinance."
Pierce Pierce County Code Title 17A, as effective on December 5, 2015. Pierce County Code Title 17B, as effective on December 5, 2015. Pierce County Stormwater Management Manual and Site Development Manual as effective December 5, 2015. Pierce County Memorandum "Policy to Buy Into Regional Stormwater Ponds" as effective October 27, 2015
WSDOT 2014 Washington State Department of Transportation Highway Runoff Manual (2014 HRM)

D. Summary of the Basis of Permit Conditions

EPA has determined that BMPs, implemented and enforced through a comprehensive SWMP, are effective mechanisms for reducing the discharge of pollutants to the MEP and for complying with the water quality provisions of the CWA. The Permits require implementation of BMPs that the permittees are already implementing under the State

NPDES permits as the primary means to ensure stormwater discharges meet water quality standards.

In accordance with EPA policy and guidance, EPA is also proposing monitoring and other specifications to augment the SWMP activities set forth in the Permittees' NPDES permit applications. Further discussion of these requirements is contained below. Numeric water quality effluent limitations are not proposed at this time, however, if the Tribe includes numeric effluent limits as a condition of the Tribe's 401 certification EPA would include those limits pursuant to CWA Section 401(d), 33 U.S.C. § 1341(d).

As explained above, the AKART standard of the Tribe is similar to Washington's AKART standard. The Puyallup WQS state that the 1992 Manual should be used as a guideline when developing stormwater BMPs to ensure that the AKART standard is met. The 1992 Manual is a predecessor to the 2019 Manual. Ecology's Phase I GP and WSDOT GP require the use of the 2019 Manual. Ecology has determined that these permits meet AKART and MEP in Washington. Since Tribal waters are directly upstream of Washington waters and since the AKART standards are similar, EPA has determined that requiring the use of the 2019 Manual instead of the 1992 Manual will ensure that the Tribe's AKART standard is met. Further, if the Permittees implement the same SWMP in these Permits as they are implementing in the State NPDES permits, the Permits covering discharges to Tribal waters will meet the Tribe's AKART standard. In addition, EPA concludes that these provisions also constitute MEP for Tribal waters. EPA expects that the Permittees will implement essentially the same SWMP that they implement in Washington.

E. Discussion of Applicability

1. Permit Area (Permit Part 1.1)

The Permits only apply to discharges from MS4s to surface waters located on trust lands of the Puyallup Tribe of Indians within the 1873 Survey Area (Permit Area).

2. Authorized Discharges (Permit Part 1.2)

Permit Part 1.2 conditionally authorizes the discharge of municipal stormwater and certain types of non-stormwater discharges from the Permittee's MS4 within the Permit Area provided the Permittees comply with the terms and conditions of the Permits.

Allowable non-stormwater discharges cannot be sources of pollution to waters of the United States. All other non-stormwater discharges must be prohibited by the Permittee. Non-stormwater discharges are unrelated to precipitation events and are often detected as dry-weather flows discharging from an MS4. The purpose of an MS4 is to convey stormwater and, in very limited circumstances, the MS4 may also convey non-stormwater discharges, therefore it is important to place conditions on the types of allowable non-stormwater discharges.

3. Discharges Threatening Water Quality (Permit Part 1.3)

The Permittee is not authorized to discharge municipal stormwater that will cause or contribute to an exceedance of water quality standards. By fulfilling the requirements and conditions of the Permit it is presumed that the Permittee is not causing or contributing to an exceedance of water quality standards. Any discharge through the Permittee's MS4 found to

threaten water quality requires the Permittee to implement an adaptive management response tailored to the specific pollutant(s) and impairment(s) discovered (See Permit Part 4). Permit Part 1.3, in combination with the procedures identified in Part 4, ensures that the Permittees will reduce the discharge of pollutants from the MS4 to the MEP.

4. Snow Disposal to Receiving Waters (Permit Part 1.4)

Snow disposal directly into waters of the United States, or directly to the MS4 is prohibited. Accumulated snow and melt water in urban areas may contain elevated levels of chloride and other salts, suspended sediment, turbidity, and metals associated with sediment and turbidity. Discharges of snow melt resulting from snow disposal sites and/or associated with the Permittee's snow management practices (such as street plowing, and/or application of traction material) are conditionally authorized, provided such snow management sites and practices are conducted in a manner that minimizes adverse water quality impacts in accordance with Permit Part 3.7 (*Municipal Operations & Maintenance*).

EPA recognizes that maintaining safe roads and highways for winter travel is a priority responsibility and requires the efficient removal of ice and snow from road surfaces. However, during the off season, EPA expects the Permittee to closely consider their current practices in comparison to the wide variety of available research on effective snow management BMPs that are shown to reduce pollutants from melting snow and ice into waters of the United States. EPA also expects that if the Permittee has with responsibility over streets, roads, highways, and parking lots to consider and evaluate using all reasonably practicable snow and ice management techniques that reduce pollutants discharged from the MS4.

5. Stormwater Discharges Associated with Industrial or Construction Activity (Permit Part 1.5)

Stormwater associated with industrial or construction activity (as defined in 40 CFR 122.26(b)(14) and (15)) may be discharged through the Permittee's MS4, only when such discharges are authorized by the appropriate NPDES General Permit for Stormwater Discharges from Construction Activities in Indian Country in WA, Permit #WAR12I000 (CGP) or the NPDES General Permit for Stormwater Associated with Industrial Activities in Indian Country in WA Permit #WAR05I000 (MSGP). There may be situations where industrial or construction activity occurs outside of the Permit Area and discharges through the Permittee's MS4. Stormwater associated with these industrial or construction activities may be discharged through the Permittee's MS4, only when such discharges are authorized by the appropriate Washington NPDES General Permit for Stormwater Discharges from Construction Activities or Washington NPDES General Permit for Stormwater Associated with Industrial Activities. To ensure regulated industrial and construction stormwater discharged into the MS4 is permitted, the Permittee should educate those site operators who discharge into the MS4 of the need to comply with the CWA and other applicable local ordinances.

F. Discussion of Permittee Responsibilities

1. Shared Implementation with Outside Entities (Permit Part 2.1)

The Permittee may elect to fulfill any of the requirements and conditions of the Permit through a joint agreement to share implementation with an outside entity. The Permittee remains responsible for compliance with the Permit in the event that the outside entity fails to implement any control measure. The Permittee is responsible for updating and maintaining any written agreement for shared implementation that is used to fulfill the requirements of the Permit. For any agreement, documentation must be submitted with the next Annual Report and referenced in the Permittee's SWMP Document.

2. Maintain Adequate Legal Authority (Permit Part 2.2)

Legal authority is an imperative part of implementing an effective stormwater management program. Legal authority will be used by the Permittee to detect, control, and eliminate illicit discharges and control stormwater discharges associated with construction, post construction, and industrial runoff and interconnected MS4s. Furthermore, using its legal authority, the Permittee can require and determine compliance with permit conditions, including prohibiting illicit discharges to the MS4. Properly using legal authority will result in successful elimination of illicit discharges to the MS4 as well as minimize the impacts to water quality and reduce discharges from construction and post-construction stormwater runoff to the MS4 (See 40 CFR 122.26(d)(2)).

EPA expects any existing legal authority that the Permittee currently has will be applied to the Permit Area defined in Part 1.1 of the Permit. If existing legal authority is not sufficient, the Permittee will have 30 months after the effective date of the Permit to adopt new ordinances or regulatory mechanisms.

3. Stormwater Management Program (Permit Part 2.3)

The Permittee must maintain written SWMP Document. Each Permittee submitted their SWMP Documents as part of their respective permit applications. The purpose of the SWMP Document is to inform the public of how the Permittee is reducing pollutants in stormwater discharges to the MEP in the Permit Area, document compliance with the Permit, and analyze work completed to date to plan future projects and goals that meet specific needs of the MS4. The Permittee will annually gather the appropriate information and generate relevant statistics that describe the implementation of the SWMP and make it publicly available on the Permittee's website in the Annual Report.

The requirement for the Permittee to maintain an up-to-date 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 Permittee may create and subsequently revise the SWMP Document, as necessary, to describe how the stormwater management activities are implemented in compliance with the Permit. The Permittee remains responsible, however, for including the required information found in *Table 4. Summary of SWMP Requirements* in their SWMP Document.

EPA recognizes that Tacoma, Pierce, and WSDOT have current SWMPs as required by their respective Ecology MS4 permits. These SWMPs must be updated as necessary to reflect the conditions of the respective EPA Permit and is to be submitted with each Annual Report.

Table 4. Summary of SWMP Requirements

Description	Draft Permit Section
General Requirements	
Shared Implementation Agreement	2.1.4.3
Legal Authorities	2.2
Interim Schedules of Implementation	2.3.1
Transfer of Ownership, Operational Authority, or Responsibility	2.3.4
Education and Outreach	
Program goals	3.1.1
Lessons learned	
Activities conducted	
Public Involvement / Participation	
Program goals	3.2.1
Activities conducted	
Illicit Discharge Detection and Elimination	
Program description	3.3
Program goals	3.3.1
Lessons learned	
Activities conducted	
New Development, Redevelopment, and Construction Site Runoff	
Program description	3.4.1
List of policies and procedures	
Structural Stormwater Controls	
Program description	3.5.1
Program goals	
Planning process	
Source Control for Existing Development	
Program description	3.6.1
Municipal Operations and Maintenance	
Program description	3.7.1
List of regulated and owned and/or operated facilities	
Maintenance schedules and date of most recent inspection for each facility	

The Permittee is required to report SWMP implementation costs each year. The resources necessary to implement a SWMP include funding, staff, equipment, etc. The Permit does not require specific staffing or funding levels, thus providing flexibility and incentive for the Permittee to adopt the most efficient methods to comply with the Permit requirements. The Permittee demonstrates compliance with this provision by fully implementing the requirements of the Permit. Furthermore, tracking implementation costs will assist the Permittee in applying for funding of the SWMP in subsequent years.

As the area of the Permittee's MS4 changes, due to additions, transfers, eliminations, or for any other reason, the Permittee becomes responsible for implementing the SWMP and meeting the conditions of the Permit within those new areas. EPA recognizes that all implementation will not occur immediately, therefore the Permittee must document and report annually, all additions and schedules for implementation within these new areas and has one year following the transfer, addition, or elimination to meet the requirements of the Permit in the new area.

G. Discussion of SWMP Control Measures

Permit Part 3 contains clear, specific, and measurable requirements to address the minimum SWMP control measures that serve to reduce pollutants to the MEP. For each SWMP control measure, EPA has outlined specific tasks, BMPs, design requirements, performance requirements, adaptive management requirements, schedules for implementation and maintenance, and/or frequency of actions. The provisions found in Part 3 of the Permit are developed to meet the standards of AKART and MEP.

1. Education and Outreach (Permit Part 3.1)

The Permittee must develop a public education and outreach program designed to affect behavior change in one of the listed target audiences on one of the listed stormwater related topics. Public education and outreach 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 Permittee is responsible for collecting appropriate data to evaluate the efficacy of their public education and outreach program and determining the level of behavior change being adopted. The public education and outreach program is expected to change over the Permit term as the Permittee learns from the activities it conducts. Public education and outreach programs must be summarized in each year's Annual Report and data collected must be reported with a description of how the data will impact future outreach activities.

2. Public Involvement/Participation (Permit Part 3.2)

Garnering public interest and support through involvement and participation activities can lead to greater behavior change impacts and more support in terms of funding for a SWMP. As the public becomes more aware of their impact on stormwater quality and quantity it is important that they have the opportunity to participate in SWMP activities and provide recommendations for improving the SWMP (See 40 CFR 122.26(d)(2)(iv)).

To promote public involvement/participation, all Annual Reports and the current SWMP Document must be available to the public on the Permittee's website.

Public participation activities are reported in each Annual Report and should be designed to complement the education and outreach program developed by the Permittee.

3. Illicit Discharge Detection and Elimination (Permit Part 3.3)

An illicit discharge is any non-stormwater discharge to an MS4 that does not meet one of the requirements found in Part 1.2, Part 3.3.3.3, or Part 3.3.3.4 of the Permit. The purpose of this SWMP control measure is to require the Permittee to provide ongoing surveillance and

deterrence to prevent pollutant loadings caused by illicit discharges into the Permittee's MS4 (See 40 CFR 122.26(d)(2)(B)). 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 MS4s 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. An illicit discharge detection and elimination (IDDE) program must be achieved through mapping, ordinances, detection, prioritization, elimination, and training. The Permittee will have until 180 days prior to the permit expiration date to update and/or implement an IDDE program within their MS4 jurisdiction.

Part 3.3.2: The Permittee must be aware of their MS4 conveyances, discharge points, and quality of infrastructure to adequately prevent, detect, and eliminate illicit discharges in the Permit Area. Mapping the MS4 will also assist the Permittee in ranking and prioritizing weak points of the MS4 more susceptible to illicit discharges than others. Furthermore, mapping drainage area and land use can be useful in anticipating types of illicit discharges that may occur for different areas of the MS4. The Permittee must update and complete their MS4 map, and submit it as part of the 1st year Annual Report and as part of the permit renewal application. Current maps must be provided to EPA as an Arc GIS compatible format.

Part 3.3.3: Within 30 months from the effective date of the Permit, the Permittee must prohibit all illicit discharges into their MS4 through an ordinance or other regulatory mechanism. Applicable ordinances must allow for enforcement actions to be taken against illicit dischargers with escalation procedures clearly defined for repeat offenders. A summary of applicable ordinances including regulatory citation must be included in the SWMP Document pursuant to Part 2.2 of the Permit.

Part 3.3.4: The Permittee must have an IDDE program described in their SWMP Document that outlines procedures for; locating priority areas, field assessment, and characterizing, tracing and eliminating the illicit discharges.

A set of procedures for locating priority areas within the Permittee's MS4 based on areas more susceptible to illicit discharges will assist mandatory field screening activities. Priority procedures will be based on public complaints of illicit discharges, historic illicit discharge areas, and areas more susceptible to spills due to the nature of land use. The list of priority areas will be continuously updated over the Permit term, and is expected to change.

The Permittee must conduct dry weather field screening activities to identify outfall locations, identify previously unknown outfalls, and detect illicit discharges of all MS4 outfalls in the Permit Area at least 180 days prior to the permit expiration date. The order and frequency of dry weather screening will be determined by the priority procedures discussed above.

For those illicit discharges discovered during dry weather field screening activities or reported by the public, the Permittee must have a set of procedures designed to characterize the discharge. Determining the nature and threat of the illicit discharge will assist the Permittee in their response of eliminating the discharge. Effectively characterizing an illicit discharge is necessary when determining how quickly a response is needed. Environmental and human health threats and emergencies must be responded to immediately. Otherwise the Permittee has seven days to respond to other illicit discharges. Response means referring to the

appropriate agency the location and nature of the discharge or limiting the impact and extent of the discharge and eliminating the discharge.

The Permittee must have a set of procedures for tracing the source of an illicit discharge. Failure to trace the source of the discharge will result in more illicit discharges and impacts on surface water quality in the future.

Ultimately, the Permittee must utilize their IDDE program to eliminate illicit discharges. The Permittee has 21 days from the time of discovering an illicit discharge to determine its source, nature, volume, and responsible party. Within six months, the Permittee must take actions towards eliminating an illicit discharge. Any actions taken to eliminate an illicit discharge will be reported in the subsequent Annual Report.

Part 3.3.5: Providing a means for the public to report spills and illicit discharges will allow the Permittee to better implement their IDDE program. It is not possible for the Permittee to be immediately aware of every spill and illicit discharge occurring in their MS4. A public that is aware of the dangers of spills and illicit discharges and of how to properly report them will assist the Permittee in investigating and mitigating the negative impacts on water quality of these discharges. The Permittee must meet this requirement by publicizing and maintaining a telephone hotline or other local means during regular business hours.

Part 3.3.6: Field staff will be the Permittee's main resource when implementing a successful IDDE program, therefore, responsible staff must be adequately trained to carry out the program. Staff capable of recognizing illicit discharges and how to carry out the procedures necessary to identify and eliminate the source will greatly increase the efficiency of the IDDE program.

Part 3.3.7: The Permit requires the Permittee to keep adequate records of their IDDE program including; current maps, staff trained, training provided, calls received and follow up actions taken, dry weather screening done, and elimination efforts. These records must be reported in each Annual Report.

4. New Development, Redevelopment, and Construction Site Runoff (Permit Part 3.4)

The Phase I stormwater regulations, at 40 CFR 122.26(d)(iv)(A)(2) and (d)(2)(iv)(D), establish separate requirements for:

- Construction site runoff– focused on preventing and abating pollution, such as soil erosion and sedimentation that occurs during the period of construction, and
- Post-construction site runoff – focused on longer-term pollution prevention and abatement, such as increased runoff from the creation of impervious surfaces.

For ease of reference, these two requirements have been combined in the Permit.

Uncontrolled runoff from newly developed and redeveloped areas negatively affects receiving water bodies. Pavement and other impervious surfaces prevent infiltration and the resulting runoff increases in both volume and velocity, which in turn causes the erosion of stream banks and scouring of stream beds. Fine sediments and pollutants from automobiles and landscape pesticides and fertilizers entering streams damage salmon spawning areas and other

aquatic habitat. Research shows lethal effects of roadway runoff on Coho salmon.[15] Traditional stormwater management practices employ engineered, end-of-pipe practices, or extended detention, which typically control only peak flow rates and total suspended solids concentrations. Such conventional practices fail to address the widespread and cumulative hydrologic modifications within a watershed that increase stormwater volumes and runoff rates, and cause excessive erosion and stream channel degradation. Traditional practices also fail to adequately treat for pollutants such as nutrients, pathogens, and metals.

At the watershed scale, retaining native vegetation and minimizing the impervious surface footprint of any development projects are cost effective ways to reduce total storm flows.

To protect water quality to the MEP, new development, redevelopment, [16] and construction sites within the Permit Area must be planned, designed, and constructed in a manner that minimizes the negative impact of urbanization by mimicking natural hydrology as outlined in the Permit.

Part 3.4.2: The Permittee must provide adequate direction and oversight to regulated construction and industrial activities within the Permit Area. This requires the Permittee to ensure that all regulated construction activities[17] and all regulated industrial activities[18] obtain coverage under an applicable EPA or Washington NPDES General Permit for stormwater discharges from construction or industrial activity.

Part 3.4.3: To ensure construction and post-construction activities are in compliance with the requirements of the CGP and the Permit, the Permittee must have adequate legal authority. If the Permittee does not have an appropriate regulatory mechanism to require runoff control on construction and post-construction sites, it must adopt such a mechanism within 30 months after the effective dates of the Permit. Any regulatory mechanism must meet the site size thresholds and other requirements found in the most recent version of the corresponding documents referenced in Appendix C of the Permit. These programs have been found to be equivalent to the 2014 Manual. No programs have yet been found equivalent to the 2019 Manual.

The Permittee must use enforcement mechanisms to control runoff from new development, redevelopment, and construction site projects. The Permit requires that the enforceable mechanism include: site planning requirements, BMP selection criteria, BMP design criteria, BMP infeasibility criteria, LID competing needs criteria, and BMP limitations.

Furthermore, enforcement procedures must include the ability to inspect sites and enforce maintenance standards set forth in the 2014 Manual or approved alternative program.

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[15] Feist et al, 2011 and 2017; McIntyre et al, 2012, 2015, and 2016; Scholz et al, 2011 and Spromberg et al, 2011 and 2016

[16] *Redevelopment*¸ for the purposes of this permit, on a site that is already substantially develop (i.e., has 35% or more of existing hard surface coverage), means the creation or addition of hard surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of hard surface that is not part of a routine maintenance activity; and land disturbing activities.

[17] *Regulated Construction Activities* include clearing, grading, or excavation that results in a land disturbance of greater than or equal to one acre, or that disturbs less than one acre if part of a larger common plan of development or sale. Any stormwater discharge from regulated construction activity requires a separate NPDES permit. See 40 CFR §122.26(b)(x) and 40 CFR §122.26(b)(15) for the two regulatory definitions of stormwater associated with construction sites.

[18] *Regulated Industrial Activities*, as used in the draft permit, include the categories of industrial activity described at 40 CFR §122.26(b)(14)(i)-(ix) and (xi). Any stormwater discharge from regulated industrial activity into the MS4 requires a separate NPDES permit.

Part 3.4.4: The Permit requires site plan review, inspection and corrective action throughout all phases of construction and post-construction projects. Inspecting these activities prior to, during, and upon completion will ensure proper sediment and erosion control and proper installation and maintenance of BMPs necessary to protect water quality. Any non-compliance discovered during this process must be tracked and followed up with an enforcement strategy.

Part 3.4.5: Both office and field staff will be the Permittee's main resources to control new development, redevelopment and construction runoff, therefore, responsible staff must be adequately trained to carry out the program. Staff must be adequately trained to review site plans, inspect sites at different stages of completion, and to enforce against non-compliance. The Permit requires staff training to be updated as the runoff control program evolves.

Part 3.4.6: The Permittee must keep adequate records including: corrective actions taken, number of site plans reviewed, inspections conducted, results of inspections, follow-up actions conducted, enforcement actions or referrals to other departments or agencies, staff trained, training provided, and BMPs used at project sites. Keeping adequate records will allow the Permittee to keep track of repeat offenders and better prepare for future reviews and inspections.

5. Structural Stormwater Controls (Permit Part 3.5)

Structural controls used to control and treat stormwater runoff are as important as non-structural controls. Structural controls include permanent facilities and BMPs such as: retention basins, detention basins, infiltration devices, etc. These controls are necessary to address watershed hydrology and pollutant discharges. Structural stormwater controls are more efficiently used in areas where impacts of stormwater are understood and BMPs can be selected and designed to treat those impacts (See 40 CFR 122.26(d)(iv)(A)).

Part 3.5.2: The structural stormwater controls program relies on proper project planning. The planning process must incorporate geographic scale, issues and regulations addressed, steps, characterization information considered, budget, public involvement, and a prioritization process including criteria for selection of structural controls. Through planning and a long-term approach towards implementation of this program the Permittee must choose, install, and maintain structural controls designed to help prevent and/or reduce specific and local stormwater impacts to receiving waters to the MEP.

Part 3.5.3: The Permittee must implement a structural stormwater controls program that considers new projects, property acquisition, retrofitting, and high cost maintenance. By considering new structural stormwater controls in the Permit Area the Permittee will be able to address impacts not adequately controlled by other Permit requirements.

The Permittee should also consider other structural stormwater controls including: habitat acquisition, reforestation, floodplain reconnection projects, capital projects related to a basin or watershed plan, and other projects not required by Part 3 of the Permit.

The structural stormwater controls program must be designed to prevent or reduce the discharge of pollutants (or prevent or reduce the impact of pollutants) from the MS4. Culvert replacement and channel restoration projects do not prevent nor reduce the discharge of

pollutants from the MS4,[19] therefore the structural stormwater control program plan cannot consider in-stream culvert replacement or channel restoration projects.

Part 3.5.4: In each Annual Report, the Permittee must provide a list of planned structural control projects within the Permit Area scheduled for the entirety of the Permit term. By incorporating long-term planning, the Permittee will better estimate funding costs, involve the public, and begin installing structural stormwater controls as soon as possible.

6. Source Control for Existing Development (Permit Part 3.6)

The source control program for Phase I permittees is described in 40 CFR 122.26(d)(2)(iv)(A). The Permit requirements for source control follow those of Ecology's Phase I permit at Part S5.C.8. Source control consists of both structural and operational BMPs for pollution generating sites and for operations and maintenance procedures.

Part 3.6.2: An ordinance or enforceable mechanism is required to ensure pollution generating sources that are connected to the Permittee's MS4 apply appropriate source control BMPs. The Permittee is provided 30 months to develop and/or update an adequate ordinance or regulatory mechanism that meets the requirements of this Part.

Part 3.6.3: For Western Washington, adequate source control BMPs are found in Volume IV of the 2014 Manual or the most recent version of the documents found in Appendix C of the Permit. The Permittee must first utilize operational BMPs for source control, then utilize structural source control BMPs if illicit discharges and/or violations of surface water standards are not prevented by operational BMPs. The Permittee may implement source controls in any manner as long as they have legal authority to enforce those controls.

Part 3.6.4: The Permittee must identify pollution generating sources within their jurisdiction. Much like the IDDE program, this requirement is designed to assist the Permittee in prioritizing the implementation of source control BMPs at sites causing greater impacts to surface water quality. The Permittee must consider commercial and industrial businesses, public complaints, multifamily properties, mobile or home-based businesses, existing and planned BMPs, and land use when developing its inventory of pollution generating sites.

Part 3.6.5: Inspection of known pollution generating sources is necessary to ensure proper installation, use, and maintenance of source control BMPs. All sites on the Permittee's inventory list must be supplied with source control requirements for their potential pollution generating activities. EPA requires the Permittee to annually inspect 20% of all sites listed in their source control inventory. The Permittee is given discretion when conducting follow up compliance inspections and when prioritizing inspections. Although the Permittee is not required to inspect 100% of all sites by the end of the permit term, all sites that are identified through legitimate complaints must be inspected by the Permittee for source control compliance.

Part 3.6.6: An escalating enforcement procedure is necessary when requiring compliance with the source control program. Records of inspections and follow up actions will assist the Permittee when prioritizing site inspections and assessing water quality impacts.

Part 3.6.7: When source controls alone are not enough to reduce pollutants to the MEP and meet AKART, the Permittee must consider additional controls and measures. The Permittee

[19] Ecology, 2007.

must begin implementing the structural stormwater program, found in Part 3.5 of the Permit, in areas of existing development when violations of standards or illicit discharges are not eliminated via source controls.

Part 3.6.8: The Permittee must implement source controls over pesticide, herbicide, and fertilizer application in tandem with their operations and maintenance program as required by Part 3.7 of the Permit. These source controls must consider any application of pesticides, herbicides, and fertilizers in the Permittee's MS4, whether conducted by the Permittee or another entity.

Part 3.6.9: Staff must be adequately trained to implement the source control program. An understanding of source control, applicable BMPs, and how the Permittee's local ordinances or regulatory mechanisms implements these measures is critical when conducting site inspections and determining compliance. Properly trained staff will bring pollution generating sources into compliance and reduce impacts to water quality to the MEP.

Part 3.6.10: The Permittee must keep records of all source control inspections, follow up actions taken, and enforcement actions taken. When circumstances beyond the Permittee's control prevent an inspection from occurring, the circumstances must be documented. EPA expects new, and changes to existing, pollution generating sources will constantly occur within the Permittee's jurisdiction. Therefore, the Permittee must update their source control inventory annually.

7. Municipal Operations & Maintenance (Permit Part 3.7)

In addition to business, commercial, industrial, and construction activities, municipal operations also generate pollution conveyed by stormwater. Municipal operations are carried out daily by employees thereby compounding the importance of good housekeeping techniques in daily operations. Existing O&M programs typically focus on maintenance of facilities in relation to operation and flood control. The Permit requires that water quality and pollution prevention are incorporated into the Permittee's O&M program. An O&M program is designed to control impacts from stormwater runoff from Permittee owned and/or operated and regulated maintenance sites and activities. An O&M program considers maintenance standards, inspection, best maintenance practices, stormwater pollution prevention plans, and training of employees (See 40 CFR122.26(d)(2)(A)(3)).

Part 3.7.2: The Permit requires the Permittee to establish maintenance standards based on the 2014 Manual or the most recent version of those documents found in Appendix C of the permit. The purpose of a maintenance standard is to determine if maintenance of a stormwater facility is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standard between inspections is not a permit violation.

Part 3.7.3: The Permittee must have an ordinance or regulatory mechanism able to enforce maintenance requirements of regulated facilities. Regulated facilities include permanent stormwater treatment and flow control BMPs and catch basins regulated by the Permittee. The Permittee has 30 months to update and make effective an ordinance or regulatory mechanism which meets the maintenance standards described in Part 3.7.2 of the Permit.

Part 3.7.4: It is expected that there will be stormwater facilities not owned or operated by the Permittee that discharge to the Permittee's MS4. As part of the O&M program, the Permittee

must inspect these regulated stormwater facilities. The Permittee's program must be designed to annually inspect all regulated facilities, however, they may be allowed to reduce the inspection frequency in the same manner described below. Furthermore, it is not required for the Permittee to inspect facilities for which they cannot legally gain access to, as long as the Permittee has made an effort to legally gain access to those facilities.

The frequency of inspections for a facility may be reduced if records exhibit the facility has continually met its maintenance standard. This provision comes directly from the Ecology Phase I and Ecology WSDOT General Permits and is intended to allow an easy and flexible transition for the permittee to include the Permit Area in its existing operations and maintenance program. The Permittee must, at a minimum, inspect a facility once during the permit term, even when following a reduced inspection frequency.

For facilities regulated by the Permittee, compliance will be evaluated upon an annual 80% completion rate.

Additionally, regulated facilities are not limited to stormwater flow control and treatment BMPs. Regulated facilities also include catch basins that are not owned or operated by the Permittee, but are within the Permittee's jurisdiction. The Permittee must require regulated facilities to clean catch basins that are out of compliance with the maintenance standard.

Part 3.7.5: The Permittee's O&M programs must be designed to annually inspect all owned and/or operated permanent stormwater facilities. The frequency of inspections for a facility may be reduced if records exhibit the facility has continually met its maintenance standard. This provision comes directly from the Ecology Phase I and Ecology WSDOT General Permits and is intended to allow an easy and flexible transition for the permittee to include the Permit Area in its existing operations and maintenance program. The Permittee must, at a minimum, inspect a facility once during the permit term, even when following a reduced inspection frequency.

Major storm events can overload and potentially damage permanent stormwater facilities. As part of the O&M program, the Permittee must spot check facilities other than catch basins after a major storm event. If the spot check indicates the facility is damaged, the Permit requires appropriate repairs and maintenance be completed. A quick visual inspection while driving past a facility is not considered a spot check. A trained staff person must visit the facility and gather enough information to conclusively determine whether the facility has been damaged or has not been damaged. A major storm event in the Puget Sound area is a 24-hour, 10-year storm event.[20] The amount of precipitation considered a 10-year storm event is expected to change over time and must be calculated using available and accurate data at the time of occurrence.

Annual inspection of 95% of all facilities will constitute compliance with these inspection requirements.

Part 3.7.6: The Permittee must include their individually owned and/or operated catch basins in their O&M program. MS4s have significantly more catch basins than other permanent stormwater facilities and therefore the inspection frequency is less for catch basins than other permanent stormwater facilities. As determined by the maintenance standard, the Permittee must clean catch basins and use the existing Ecology requirements, replicated in Appendix D

[20] Ecology, 2007

of the permit, when disposing decant water and solids. EPA recognizes that the Ecology permits require meeting the inspection requirement for catch basins annually instead of by the end of the permit term. It is appropriate to require a less stringent inspection frequency in this case to allow the Permittee adequate time to bring the Permit Area into their existing O&M program.

The Permittee will be considered in compliance with this Part upon conducting a minimum of 95% of required inspections by the end of the Permit term.

Part 3.7.7: In addition to permanent stormwater facilities and catch basins, the Permit requires the Permittee to include maintenance practices for lands owned and/or maintained by the Permittee. This part of the Permit lists activities that the Permittee is required to conduct in a manner protective of water quality. These activities can be harmful to water quality if not conducted in an appropriate manner due to the high potential for runoff of suspended solids, trash, toxic chemicals, organic materials, and other pollutants.

The phrase, *lands owned or maintained by the Permittee* includes, but is not limited to: parking lots, streets, roads, highways, buildings, parks, open space, road right-of-way, maintenance yards, and stormwater treatment and flow control BMPs/facilities.

Part 3.7.8: The Permit requires implementation of a stormwater pollution prevention plan (SWPPP) for locations in the Permit Area where heavy equipment or other materials are stored. The SWPPP must be designed for sites not regulated by another NPDES permit and include non-structural and structural BMPs. A well designed SWPPP will reduce pollutants in runoff. Through the use of a generic SWPPP template, the Permittee will be able to quickly and effectively manage storage yards and/or heavy equipment facilities as activities and equipment change or are added.

Part 3.7.9: Proper and consistent training of staff in the importance of the O&M program is extremely vital when implementing an effective program because often the O&M program applies to many staff from many departments that may not normally communicate with each other. As the program advances and changes, training must be updated and provided.

Part 3.7.10: Recording inspections, maintenance, repairs, and the reasons preventing any of these actions from occurring will assist the Permittee in planning future and follow-up activities and in establishing compliance with Permit conditions.

The Permittee is required to report when circumstances beyond their control prevent a maintenance activity from occuring. Circumstances beyond the Permittee's control include, but are not limited to: denial or delay of access by property owners; denial or delay of necessary permit approvals; and unexpected reallocations of maintenance staff or resources to perform emergency work.

H. Discussion of the Adaptive Management Response Requirement

A necessary component of meeting the AKART and MEP standards is responding to water quality violations caused or contributed to by discharges from the MS4. The quantity and quality of pollutants entering an MS4 constantly change with changes in municipal operations, land uses, business and industry, rainfall, illicit discharges, construction, post-construction, and other activities. The Permittee is required to manage these changes when they cause violations in water quality standards with an adaptive management response

program. An effective adaptive management response program will notify EPA of the violation(s), identify the cause of the water quality violation, draft potential responses to remove the cause of the violation, and ultimately terminate the cause, leading to the MS4 not causing or contributing to the violation of water quality.

VI. Monitoring Requirements

A. Basis for Effluent Monitoring

Section 308 of the CWA, 33 U.S.C. §1318, and 40 CFR 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather effluent and surface water data to determine if additional effluent limitations are required and/or to monitor effluent impacts on receiving water quality.

The Permittee is responsible for conducting the monitoring and for reporting results on DMRs or on the application for renewal, as appropriate, to EPA.

B. Stormwater Discharge Monitoring

Monitoring frequencies are based on the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. The Permittee has the option of taking more frequent samples than are required under the Permit. These samples must be used for averaging if they are conducted using EPA-approved test methods (generally found in 40 CFR 136) or as specified in the Permit.

The stormwater discharge monitoring program as required in Part 5.1 and Appendix B of the Permit are modeled after Ecology's stormwater discharge monitoring program as proposed in Appendix 9 of Ecology's Phase I general permit. Each Permittee is familiar with this monitoring program and has two years to begin full implementation of monitoring at the outfall specified in Part 5.1.1 of the Permit. The size and nature of stormwater discharges from the newly constructed I-5 HOV outfall (WSDOT) and the Cleveland Way Pump Station (Tacoma) warrant discharge monitoring.

VII. Other Permit Conditions

A. Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high, and adverse human health or environmental effects of its programs, policies, and activities." 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, 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, EPA Region 10 conducted a screening analysis to determine whether this Permit action could affect overburdened communities. EPA used a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify permits for which enhanced outreach may be warranted.

Based on this screening, the MS4s described by this Fact Sheet are located within or near a Census block group that is potentially overburdened.

Regardless of whether a facility is located near a potentially overburdened community, EPA encourages Permittees to review (and to consider adopting, where appropriate) Promising Practices for Permit Applicants Seeking EPA-Issued Permits: Ways To Engage Neighboring Communities (see https://www.federalregister.gov/articles/2013/05/09/2013-10945/epa-activities-to-promote-environmental-justice-in-the-permit-application-process#p-104). Examples of promising practices include: thinking ahead about community's characteristics and the effects of the permit on the community, engaging the right community leaders, providing progress or status reports, inviting members of the community for tours of the facility, providing informational materials translated into different languages, setting up a hotline for community members to voice concerns or request information, follow up, etc.

The Permit includes provisions that address outreach and public involvement with overburdened communities within the Permit Area; see Permit Parts 3.1 and 3.2

For more information, please visit http://www.epa.gov/compliance/ej/plan-ej/ and Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.

B. Standard Permit Provisions

Sections 6, 7, 8 and portions of Section 5 of the Permit contain standard regulatory language that must be included in all NPDES permits. The standard regulatory language covers requirements such as monitoring, recording, and reporting requirements, compliance responsibilities, and other general requirements.

VIII. Other Legal Requirements

A. Endangered Species Act

The Endangered Species Act Section 7(a)(2) requires federal agencies to consult with the National Oceanic and Atmospheric Administration (NOAA) Fisheries (NMFS) and the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species and/or their designated critical habitat. EPA has analyzed the discharges proposed to be authorized by the three draft Permits in a Biological Evaluation. EPA will send the BE to NMFS and USFWS and request their concurrence of the agency's determinations of effects. This Fact Sheet and the draft Permits will also be sent to NMFS and the USFWS for review during the public comment period.

B. Essential Fish Habitat

Essential Fish Habitat (EFH) is the waters and substrate (sediments, etc.) necessary for fish to spawn, breed, feed, or grow to maturity. The Magnuson-Stevens Fishery Conservation and

Management Act (January 21, 1999) requires EPA to consult with NMFS when a proposed discharge has the potential to adversely affect EFH (i.e., reduce quality and/or quantity of EFH). A review of the Essential Fish Habitat documents shows that there are EFH present for the following species: Groundfish, Pink Salmon, Coho Salmon, and Chinook Salmon.

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

EPA will provide NMFS with copies of the draft Permits and Fact Sheet during the public notice period. Any comments received from NMFS regarding EFH will be considered prior to issuance of the Permits.

C. Tribal Certification

Section 401 of the CWA, 33 U.S.C. § 1341, requires EPA to seek certification from the Tribe before issuing a final permit. As a result of the certification, the Tribe 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. Since the Permittees discharge to Puyallup Tribal waters and the Tribe has been approved for TAS from EPA for purposes of the Clean Water Act, the Tribe is the certifying authority.

EPA had preliminary discussions with the Tribe regarding the 401 certification during development of the draft permit. EPA is sending a request for final 401 certification to the Tribe.

D. Antidegradation

The Tribe will complete an antidegradation review as part of the 401 certification for this Permit. EPA will review this antidegradation analysis and make a determination whether it is consistent with the Tribe's WQS and the Tribe's antidegradation implementation procedures. Comments on the 401 certification including the antidegradation review can be submitted to the Tribe as set forth above (see Puyallup Tribe of Indians Certification on Page 2 of this Fact Sheet).

E. Permit Expiration

The Permit will expire five years from the effective date.

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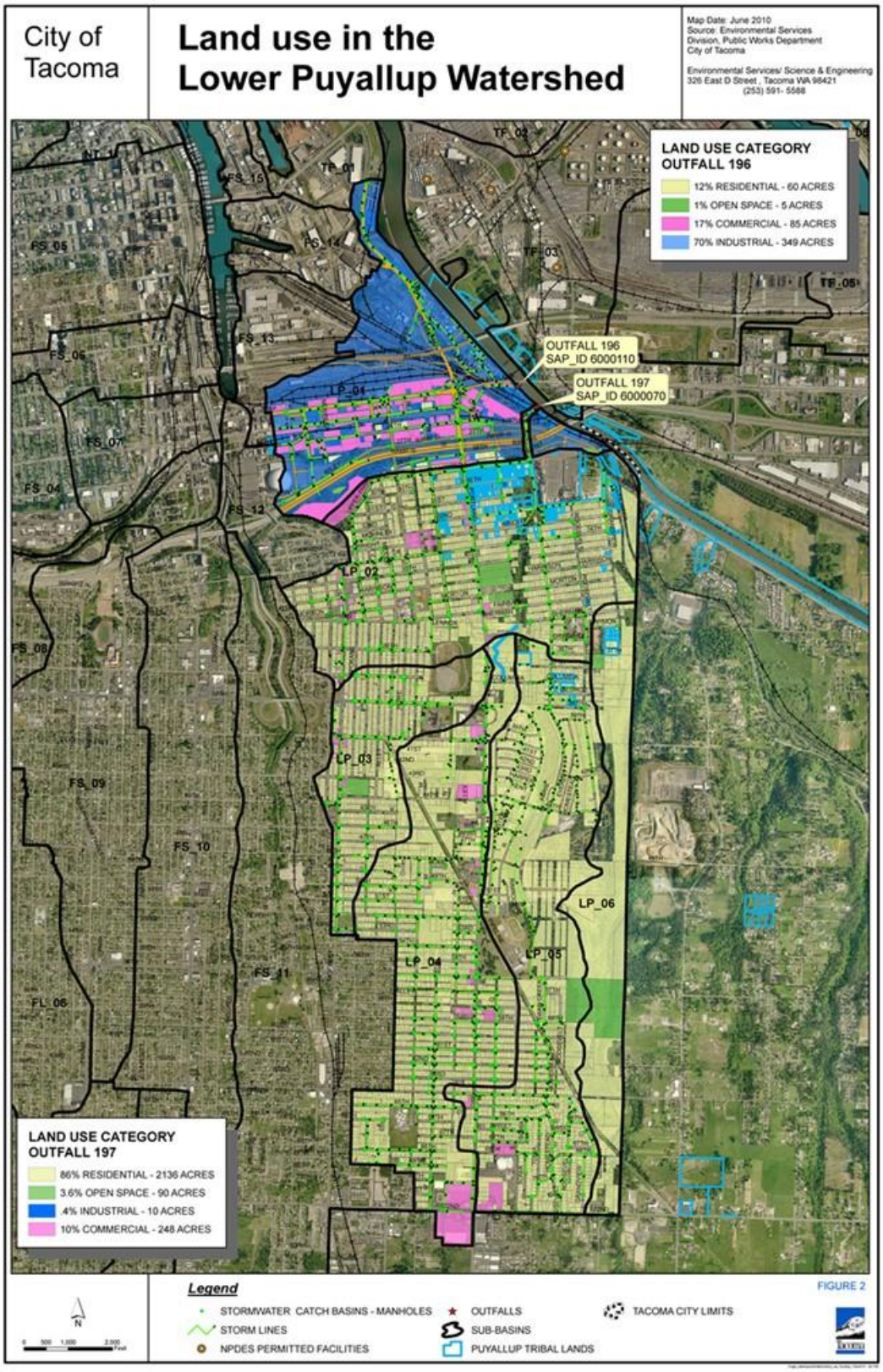
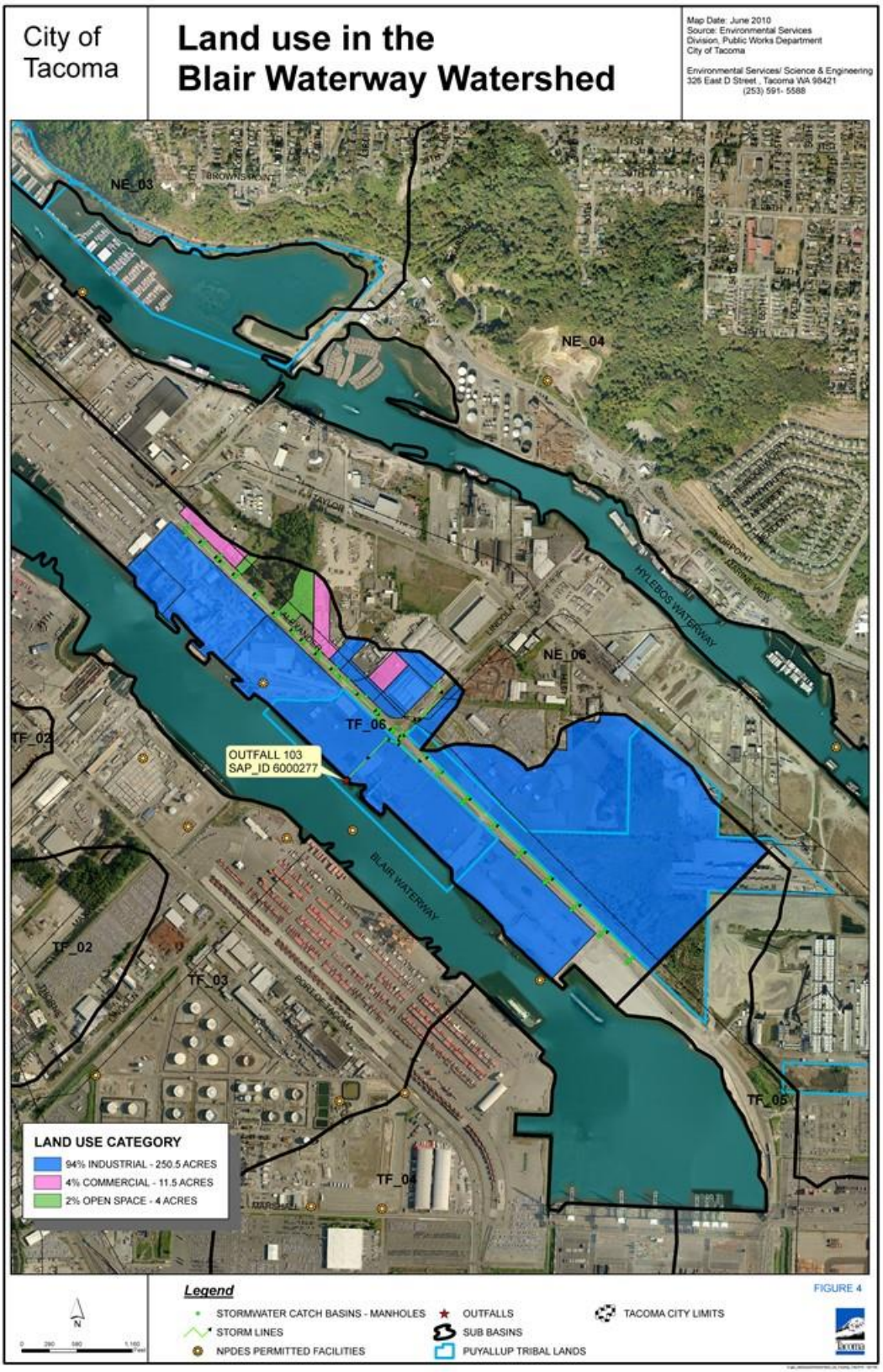
Appendix A. Facility Information

The following maps were submitted as part of each Permittees' application. The Permittee must update their maps as required by the Permit. It is expected that the number of known outfalls will change as the Permittee's MS4 is mapped and updated.

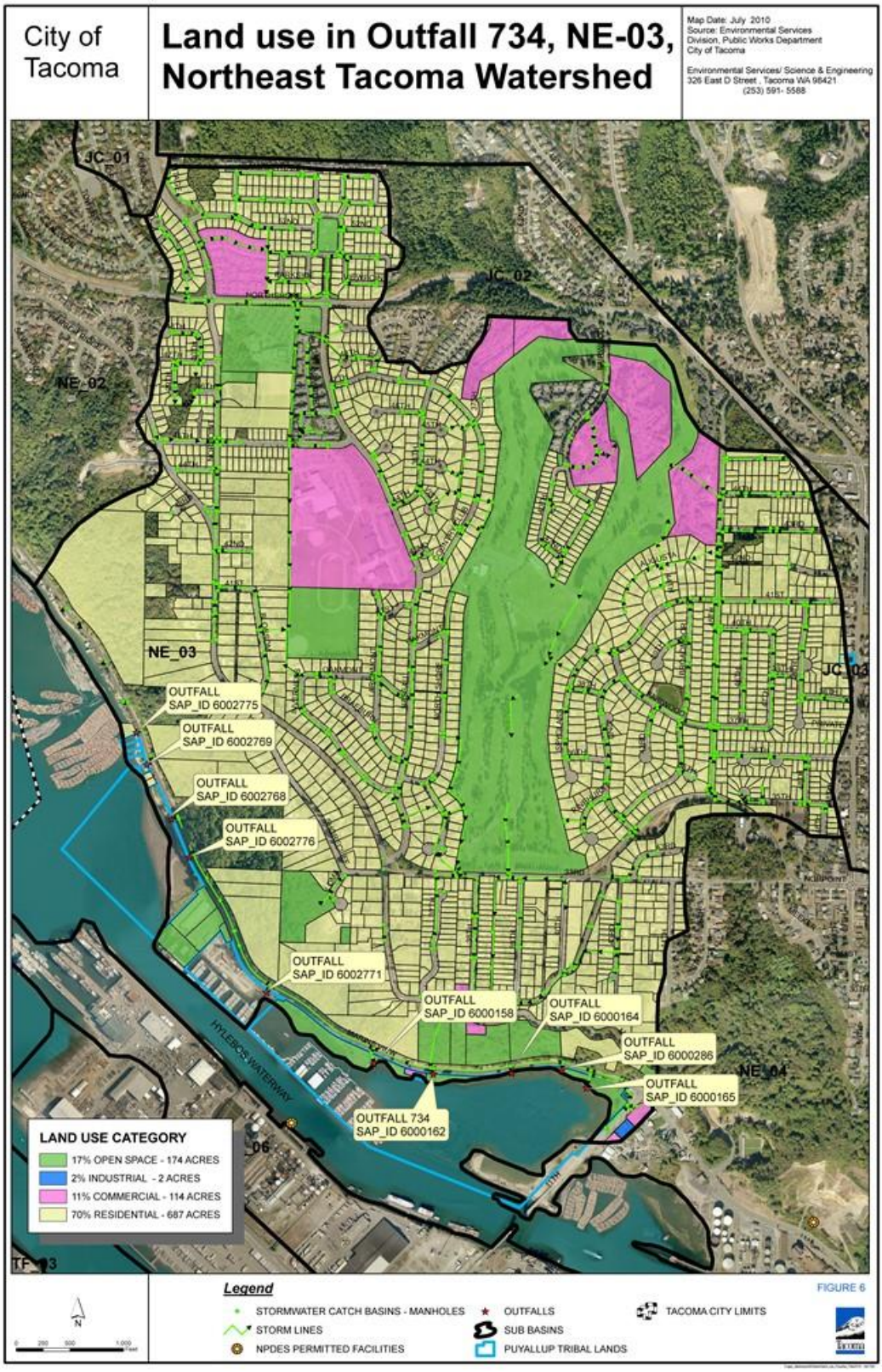
A-1: City of Tacoma Lower Puyallup Watershed



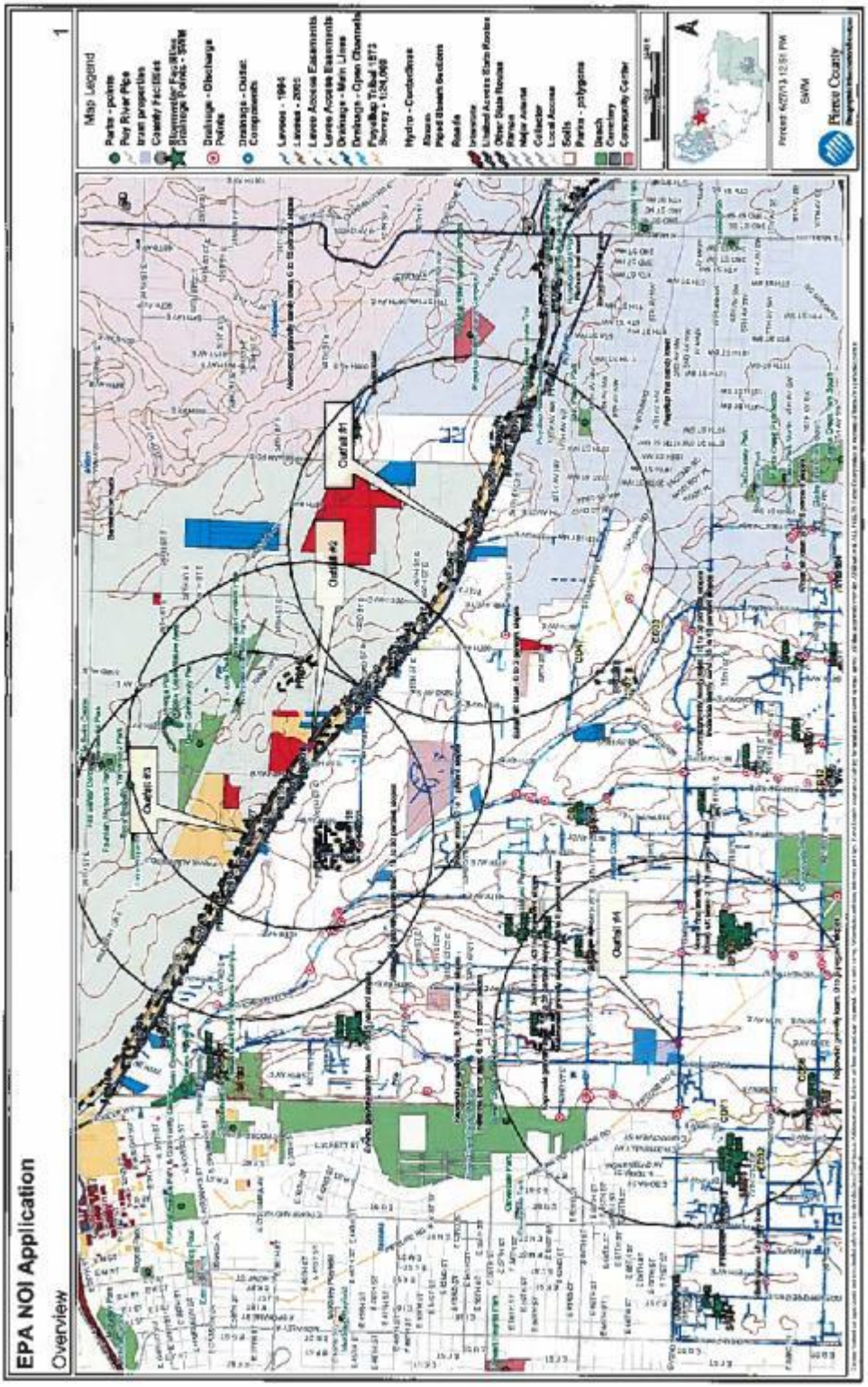
A-2: City of Tacoma Blair Waterway Watershed



A-3: City of Tacoma Northeast Tacoma Watershed



A-4: Pierce County MS4



A-4: Washington State Department of Transportation MS4