APPENDIX 2 – Total Maximum Daily Load (TMDL) Requirements

Additional permit requirements are based on applicable TMDLs in accordance with Special Condition S7 *Compliance with Total Maximum Daily Load Requirements.*

Index

WRIA 1 - Nooksack River Watershed Bacteria 2
WRIA 5 - Stillaguamish River 3
WRIA 7 - Snohomish River Tributaries 5
WRIA 8 - North Creek 7
WRIA 8 - Swamp Creek 9
WRIA 8 - Bear-Evans Watershed 11
WRIA 8 - Cottage Lake 12
WRIA 8 - Issaquah Creek Basin 12
WRIA 8 - Little Bear Creek 13
WRIA 10 - Puyallup Watershed 15
WRIA 10 - Clarks Creek (Fecal Coliform) 17
WRIA 10 - South Prairie Creek 18
WRIA 11 - Nisqually River 19
WRIA 13 - Henderson Inlet Watershed 20
WRIA 15 - Sinclair-Dyes Inlet 22
WRIA 22 - Grays Harbor/Chehalis Watershed 25

Name of TMDL	**Nooksack River Watershed Bacteria TMDL**
Document(s) for TMDL	*Nooksack River Watershed Bacteria Total Maximum Daily Load*, June 2000. Ecology Publication No. 00-10-036~~ EPA approval date: 8-Aug. 2000~~ Nooksack River Watershed Bacteria Total Maximum Daily Load Detailed Implementation Plan, January 2002. Ecology Publication No. 01-10-060 http://www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html
Location of Original 303(d) Listings	WA-01-1010, WA-01-1012, WA-01-1014, WA-01-1015, WA-01-1016, WA-01-1110, WA-01-1111, WA-01-1115, WA-01-1116, WA-01-1117, WA-01-1118, WA-01-1119, WA-01-1120, WA-01-1125, AR42TO, BX84LO, UZ70KA, LLPL
Area Where TMDL Requirements Apply	TMDL coverage includes areas served by an MS4 draining to the Nooksack River and its tributaries, Fishtrap Creek, Bertrand Creek, Double Ditch drain, Duffner Ditch, Bender road ditch, between Nugents Corner and Marine Drive.
Parameter(s)	Fecal Coliform.
EPA Approval Date	August 8, 2000
MS4 Permittee:	**Phase II Permit: City of Ferndale WAR04-5552** **Phase II Permit: City of Lynden**

Actions Required

City of Ferndale

Continue bacteria sampling under Ecology-approved *Stormwater Quality Monitoring for Fecal Coliform bacteria QAPP* dated 6/19/2009.

- Once the City of Ferndale reduces fecal coliform bacteria below state water quality standards in the current outfall sampling area, the City of Ferndale should designate a new representative area for continued fecal coliform sampling at MS4 outfalls.
- With each annual report, the City of Ferndale shall submit an up to date Stormwater Capital Improvement plan to address existing deficiencies in the stormwater treatment and conveyance system.

City of Lynden

The City of Lynden shall designate a high priority area discharging to its MS4 system for fecal coliform sampling at a representative outfall location, and submit a Stormwater Capital Improvement Plan with each annual report.

- City of Lynden shall designate a high priority sampling location from an MS4 outfall.

- City of Lynden shall submit a fecal coliform Quality Assurance Project Plan (QAPP) to Ecology for review and approval by December 1, 2013. Monitoring shall be ongoing from March 2014 to the end of the permit term.
- With each annual report, City of Lynden shall submit the monitoring results and an up to date Stormwater Capital Improvement Plan to address existing deficiencies in the stormwater treatment and conveyance system.

Name of TMDL	**Stillaguamish River**
EPA Approved Document(s) for TMDL	*Stillaguamish River Watershed Fecal Coliform, Dissolved Oxygen, pH, Arsenic, and Mercury Total Maximum Daily Load (Water Cleanup Plan) - Submittal Report*, May 2005, Ecology Publication No. 05-10-044. http://www.ecy.wa.gov/biblio/0510044.html *Stillaguamish River Watershed Fecal Coliform, Dissolved Oxygen, pH, Arsenic, and Mercury Total Maximum Daily Load (Water Cleanup Plan) - Water Quality Implementation Plan*, June 2007, Ecology Publication No. 07-10-033. http://www.ecy.wa.gov/biblio/0710033.html
Location of Original 303(d) Listings	QJ28UC, HD76OJ, JU33JU, GH05SX, IJ55EP, VJ74AO, 390KRD, OT80TY, QE93BW, ZO73WL, WO38NV, SN06ZT, LU17DC
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittees' municipal stormwater permit and draining to fresh or marine waters within Water Resource Inventory Area (WRIA) 5
Parameter	Fecal Coliform, Dissolved Oxygen
EPA Approval Date	June 21, 2005
MS4 Permittee	Phase I Permit: Snohomish County Phase II Permit: Arlington

Actions Required

Business Inspections: Each Permittee shall inspect commercial animal handling areas and commercial composting facilities to ensure implementation of source control BMPs for bacteria.*Commercial animal handling areas* are associated with Standard Industrial Code (SIC) 074 and 075 and include veterinary and pet care/boarding services, animal slaughtering, and support activities for animal production. Facilities where the degradation and transformation of organic solid waste takes place under controlled conditions designed to promote aerobic decomposition are considered *composting facilities* (definition in accordance with Chapter 173-350 WAC). All qualifying facilities shall be inspected by August 1, 2016. Permittees shall implement an ongoing inspection program to re-inspect facilities with bacteria source control problems a minimum of every three years.

Public Education and Outreach: Each Permittee shall conduct public education and outreach activities to increase awareness of bacterial pollution problems and promote proper pet waste management behavior.
Operations & Maintenance: Each Permittee shall install and maintain animal waste collection and/or education stations at municipal parks and other Permittee owned and operated lands reasonably expected to have substantial domestic animal (dog and horse) use and the potential for pollution of stormwater.

IDDE Field Screening: Each Permittee shall conduct illicit discharge detection and elimination (IDDE) field screening for bacteria sources in MS4 subbasins which discharge to surface waters in the area where these TMDL requirements apply. Phase II cities shall screen 100% of these MS4 subbasins by the expiration date of the permit. Snohomish County shall screen 50% of rural MS4 basins in the TMDL area by the expiration date of the permit unless the option to combine this requirement with the surface water monitoring requirement is selected below. Permittees shall implement the schedules and activities identified in S5.C.8 of the Phase I permit or S5.C.3 of the Western Washington Phase II permit in response to any illicit discharges found.

Surface Water Monitoring: Each Permittee shall select surface water monitoring location(s) as appropriate for characterization and long term trends evaluation of fecal coliform. Each Permittee shall submit a draft QAPP to Ecology for review and approval, no later than February 2, 2015. If Ecology does not request changes within 60 days, the draft QAPP is considered approved. At a minimum, the monitoring program shall:

- Begin by August 1, 2015.
- Collect 12 samples in at least one location per calendar year.
- Submit available data to the Environmental Information Management (EIM) database by May 31 of each year.
- Provide a data summaries and narrative evaluation of the data in each annual report's TMDL summary.
- Be documented in a QAPP which follows *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*, July 2004, Ecology Publication No. 04-03-030

Permittees shall follow Ecology-approved QAPPs unless changes are approved by Ecology. Permittees subject to multiple TMDL monitoring requirements may conduct an integrated monitoring program in accordance with an Ecology-approved QAPP. Snohomish County may combine the targeted IDDE field screening requirement, above, with the surface water monitoring requirement as documented in the County's microbial water quality assessment (MWQA), or similar, program per an Ecology-approved QAPP.

Name of TMDL	**Snohomish River Tributaries**
EPA Approved Document(s) for TMDL	*Water Quality Assessment of Tributaries to the Snohomish River and Nonpoint Source Pollution TMDL*, September 1997, Ecology Publication No. 97-334. www.ecy.wa.gov/biblio/97334.html *Snohomish River Tributaries Fecal Coliform Total Maximum Daily Load Submittal Report*, June 2001, Ecology publication No. 00-10-087. www.ecy.wa.gov/biblio/0010087.html *Lower Snohomish River Tributaries Fecal Coliform Bacterial Total Maximum Daily Load: Detailed Implementation Plan*, June 2003, Ecology Publication No. 03-10-031. www.ecy.wa.gov//biblio/0310031.html
Location of Original 303(d) Listings	WA-07-1012, WA-07-015, WA-07-1052, WA-07-1163WA-07-1163, WA-07-1030 and WA-07-040
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittees' municipal stormwater permit and draining to the WASWIS segment number, and all upstream tributaries within the jurisdiction of the Permittee and within the geographic area covered by this permit contributing to waterbodies: Allen Creek, YT94RF: Quilceda Creek, TH58TS: French Creek, XZ24XU: Woods Creek, FZ74HO: Pilchuck River, NF79WA: Marshland Watershed, XW79FQ.
Parameter	Fecal Coliform
EPA Approval Date	August 9, 2001
MS4 Permittee	Phase I Permit: Snohomish County Phase II Permit: Granite Falls, Lake Stevens, Monroe, Snohomish, Marysville, Arlington, Everett

Actions Required

Business Inspections: Each Permittee shall inspect commercial animal handling areas and commercial composting facilities to ensure implementation of source control BMPs for bacteria.*Commercial animal handling areas* are associated with Standard Industrial Code (SIC) 074 and 075 and include veterinary and pet care/boarding services, animal slaughtering, and support activities for animal production. Facilities where the degradation and transformation of organic solid waste takes place under controlled conditions designed to promote aerobic decomposition are considered *composting facilities* (definition in accordance with Chapter 173-350 WAC). All qualifying facilities shall be inspected by August 1, 2016. Permittees shall implement an ongoing inspection program to re-inspect facilities with bacteria source control problems a minimum of every three years.

Public Education and Outreach: Each Permittee shall conduct public education and outreach activities to increase awareness of bacterial pollution problems and promote proper pet waste management behavior.

Operations & Maintenance: Each Permittee shall install and maintain animal waste collection and/or education stations at municipal parks and other Permittee owned and operated lands reasonably expected to have substantial domestic animal (dog and horse) use and the potential for pollution of stormwater.

IDDE: Permittees conducting IDDE-related field screening under S5.C.8 of the Phase I permit or S5.C.3 of the Western Washington Phase II permit shall screen for bacteria sources in any screened MS4 subbasins which discharge to surface waters in the TMDL area.

Targeted Source Identification & Elimination: By February 2, 2014, each Permittee shall review the fecal coliform data collected per approved QAPPs under the 2007 Permit. The purpose of this review is to identify a minimum of one high priority area (such as a tributary or a stream segment) that will be the focus of source identification and elimination efforts during this permit cycle. Each Permittee shall prepare written documentation of this review and the identified high priority area; documentation shall be submitted with the Annual Report for 2014. Permittees shall begin to implement source identification and elimination efforts in the MS4 subbasins discharging to the identified high priority area no later than August 1, 2014. Permittees are encouraged to address potential bacteria pollution sources not associated with the MS4. Stormwater quality sampling for bacteria sources is required as part of this focused source identification and elimination effort. Permittees shall implement the schedules and activities identified in S5.C.8 of the Phase I permit or S5.C.3 of the Western Washington Phase II permit in response to any illicit discharges found. Each annual report's TMDL summary shall include qualitative and quantitative information about the source identification and elimination activities, including procedures followed and sampling results, implemented in the selected high priority area(s).

Surface Water Monitoring: Each Permittee shall review the fecal coliform data collected per approved QAPPs under the 2007 Permit and select surface water monitoring location(s) as appropriate for continued characterization and long term trends evaluation of fecal coliform. Each Permittee shall submit a draft revised QAPP to Ecology for review and approval, no later than February 2, 2015. If Ecology does not request changes within 60 days, the draft QAPP is considered approved. At a minimum, the monitoring program shall:

- Begin by August 1, 2015.
- Collect 12 samples in at least one location per calendar year.
- Submit available data to the Environmental Information Management (EIM) database by May 31 of each year.
- Provide data summaries and narrative evaluation of the data in each annual report's TMDL summary.
- Be documented in a QAPP which follows *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*, July 2004, Ecology Publication No. 04-03-030.

Permittees shall follow Ecology-approved QAPPs unless changes are approved by Ecology. Permittees subject to multiple TMDL monitoring requirements may conduct an integrated monitoring program in accordance with an Ecology-approved QAPP. Snohomish County may combine the high priority area source identification and elimination requirement with the surface water monitoring requirement as documented in the County's microbial water quality assessment (MWQA), or similar, program per an Ecology-approved QAPP.

Name of TMDL	**North Creek**
EPA Approved Document(s) for TMDL	*North Creek Watershed: Total Maximum Daily Load Evaluation for Fecal Coliform Bacteria*, June 2001, Ecology Publication No. 01-03-020. http://www.ecy.wa.gov/biblio/0103020.html *North Creek Fecal Coliform Total Maximum Daily Load Submittal Report*, June 2002, Ecology publication No. 02-10-020. http://www.ecy.wa.gov/biblio/0210020.html *North Creek Fecal Coliform Bacteria Total Maximum Daily Load: Detailed Implementation Plan*, October 2003, Ecology Publication No. 03-10-047. http://www.ecy.wa.gov/biblio/0310047.html
Location of Original 303(d) Listings	WA-08-1065
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittees' municipal stormwater permit and draining to the portion of the WASWIS segment SM74QQ starting at the confluence with the Sammamish River and including all upstream tributaries contributing to the North Creek segment of WASWIS SM74QQ.
Parameter	Fecal Coliform
EPA Approval Date	August 2, 2002
MS4 Permittee	Phase I Permit: Snohomish County Phase II Permit: Everett, Bothell, Mill Creek

Actions Required

Business Inspections: Each Permittee shall inspect commercial animal handling areas and commercial composting facilities to ensure implementation of source control BMPs for bacteria.*Commercial animal handling areas* are associated with Standard Industrial Code (SIC) 074 and 075 and include veterinary and pet care/boarding services, animal slaughtering, and support activities for animal production. Facilities where the degradation and transformation of organic solid waste takes place under controlled conditions designed to promote aerobic decomposition are considered *composting facilities* (definition in accordance with Chapter 173-

350 WAC). All qualifying facilities shall be inspected by August 1, 2016. Permittees shall implement an ongoing inspection program to re-inspect facilities with bacteria source control problems a minimum of every three years.

Public Education and Outreach: Each Permittee shall conduct public education and outreach activities to increase awareness of bacterial pollution problems and promote proper pet waste management behavior.

Operations & Maintenance: Each Permittee shall install and maintain animal waste collection and/or education stations at municipal parks and other Permittee owned and operated lands reasonably expected to have substantial domestic animal (dog and horse) use and the potential for pollution of stormwater.

IDDE: Permittees conducting IDDE-related field screening under S5.C.8 of the Phase I permit or S5.C.3 of the Western Washington Phase II permit shall screen for bacteria sources in any screened MS4 subbasins which discharge to surface waters in the TMDL area.

Targeted Source Identification & Elimination: By February 2, 2014, each Permittee shall review the fecal coliform data collected per approved QAPPs under the 2007 Permit. The purpose of this review is to identify a minimum of one high priority area (such as a tributary or a stream segment) that will be the focus of source identification and elimination efforts during this permit cycle. Each Permittee shall prepare written documentation of this review and the identified high priority area; documentation shall be submitted with the Annual Report for 2014. Permittees shall begin to implement source identification and elimination efforts in the MS4 subbasins discharging to the identified high priority area no later than August 1, 2014. Permittees are encouraged to address potential bacteria pollution sources not associated with the MS4. Stormwater quality sampling for bacteria sources is required as part of this focused source identification and elimination effort. Permittees shall implement the schedules and activities identified in S5.C.8 of the Phase I permit or S5.C.3 of the Western Washington Phase II permit in response to any illicit discharges found. Each annual report's TMDL summary shall include qualitative and quantitative information about the source identification and elimination activities, including procedures followed and sampling results, implemented in the selected high priority area(s).

Surface Water Monitoring: Each Permittee shall review the fecal coliform data collected per approved QAPPs under the 2007 Permit and select surface water monitoring location(s) as appropriate for continued characterization and long term trends evaluation of fecal coliform. Each Permittee shall submit a draft revised QAPP to Ecology for review and approval, no later than February 2, 2015. If Ecology does not request changes within 60 days, the draft QAPP is considered approved. At a minimum, the monitoring program shall:

- Begin by August 1, 2015.
- Collect 12 samples in at least one location per calendar year.
- Submit available data to the Environmental Information Management (EIM) database by May 31 of each year.

- Provide data summaries and narrative evaluation of the data in each annual report's TMDL summary.
- Be documented in a QAPP which follows *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*, July 2004, Ecology Publication No. 04-03-030.

Permittees shall follow Ecology-approved QAPPs unless changes are approved by Ecology. Permittees subject to multiple TMDL monitoring requirements may conduct an integrated monitoring program in accordance with an Ecology-approved QAPP. Snohomish County may combine the high priority area source identification and elimination requirement with the surface water monitoring requirement as documented in the County's microbial water quality assessment (MWQA), or similar, program per an Ecology-approved QAPP.

Name of TMDL	**Swamp Creek**
EPA Approved Document(s) for TMDL	*Swamp Creek Fecal Coliform Bacteria Total Maximum Daily Load: Water Quality Improvement Report and Implementation Plan*, June 2006, Ecology Publication No. 06-10-021. http://www.ecy.wa.gov/biblio/0610021.html
Location of Original 303(d) Listings	WA-08-1060
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittees municipal stormwater permit and draining to the portion of the WASWIS segment SM74QQ starting at the confluence with the Sammamish River and including all upstream tributaries contributing to the Swamp Creek segment of WASWIS GJ57UL.
Parameter	Fecal Coliform
EPA Approval Date	August 16, 2006
MS4 Permittee	Phase I Permit: Snohomish County Phase II Permit: Everett, Bothell, Lynnwood, Brier, Mountlake Terrace, Kenmore

Actions Required

Business Inspections: Each Permittee shall inspect commercial animal handling areas and commercial composting facilities to ensure implementation of source control BMPs for bacteria. *Commercial animal handling areas* are associated with Standard Industrial Code (SIC) 074 and 075 and include veterinary and pet care/boarding services, animal slaughtering, and support activities for animal production. Facilities where the degradation and transformation of organic solid waste takes place under controlled conditions designed to promote aerobic decomposition are considered *composting facilities* (definition in accordance with Chapter 173-350 WAC). All qualifying facilities shall be inspected by August 1, 2016. Permittees shall implement an ongoing inspection program to re-inspect facilities with bacteria source control problems a minimum of every three years.

Public Education and Outreach: Each Permittee shall conduct public education and outreach activities to increase awareness of bacterial pollution problems and promote proper pet waste management behavior.

Operations & Maintenance: Each Permittee shall install and maintain animal waste collection and/or education stations at municipal parks and other Permittee owned and operated lands reasonably expected to have substantial domestic animal (dog and horse) use and the potential for pollution of stormwater.

IDDE: Permittees conducting IDDE-related field screening under S5.C.8 of the Phase I permit or S5.C.3 of the Western Washington Phase II permit shall screen for bacteria sources in any screened MS4 subbasins which discharge to surface waters in the TMDL area.

Targeted Source Identification & Elimination: By February 2, 2014, each Permittee shall review the fecal coliform data collected per approved QAPPs under the 2007 Permit. The purpose of this review is to identify a minimum of one high priority area (such as a tributary or a stream segment) that will be the focus of source identification and elimination efforts during this permit cycle. Each Permittee shall prepare written documentation of this review and the identified high priority area; documentation shall be submitted with the Annual Report for 2014. Permittees shall begin to implement source identification and elimination efforts in the MS4 subbasins discharging to the identified high priority area no later than August 1, 2014. Permittees are encouraged to address potential bacteria pollution sources not associated with the MS4. Stormwater quality sampling for bacteria sources is required as part of this focused source identification and elimination effort. Permittees shall implement the schedules and activities identified in S5.C.8 of the Phase I permit or S5.C.3 of the Western Washington Phase II permit in response to any illicit discharges found. Each annual report's TMDL summary shall include qualitative and quantitative information about the source identification and elimination activities, including procedures followed and sampling results, implemented in the selected high priority area(s).

Surface Water Monitoring: Each Permittee shall review the fecal coliform data collected per approved QAPPs under the 2007 Permit and select surface water monitoring location(s) as appropriate for continued characterization and long term trends evaluation of fecal coliform. Each Permittee shall submit a draft revised QAPP to Ecology for review and approval, no later than February 2, 2015. If Ecology does not request changes within 60 days, the draft QAPP is considered approved. At a minimum, the monitoring program shall:

- Begin by August 1, 2015.
- Collect 12 samples in at least one location per calendar year.
- Submit available data to the Environmental Information Management (EIM) database by May 31 of each year.
- Provide data summaries and narrative evaluation of the data in each annual report's TMDL summary.

- Be documented in a QAPP which follows *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*, July 2004, Ecology Publication No. 04-03-030.

Permittees shall follow Ecology-approved QAPPs unless changes are approved by Ecology. Permittees subject to multiple TMDL monitoring requirements may conduct an integrated monitoring program in accordance with an Ecology-approved QAPP. Snohomish County may combine the high priority area source identification and elimination requirement with the surface water monitoring requirement as documented in the County's microbial water quality assessment (MWQA), or similar, program per an Ecology-approved QAPP.

Name of TMDL	**Bear-Evans Watershed**
Document(s) for TMDL	*Bear-Evans Watershed Fecal Coliform Bacteria Total Maximum Daily Load, Water Quality Improvement Report*, June 2008, Ecology Publication No. 08-10-026. http://www.ecy.wa.gov/biblio/0810026.html *Bear-Evans Watershed Temperature, Dissolved Oxygen and Fecal Coliform Bacteria Total Maximum Daily Load, Water Quality Implementation Plan*, March 2011, Ecology Publication No. 11-10-024. http://www.ecy.wa.gov/biblio/1110024.html
Location of Original 303(d) Listings	Bear Creek (EW54VY, BA64JJ, WR69YU)) Cottage Lake Creek (NO74J5) Unnamed Tributary to Bear Creek (EU47RU) Evans Creek (MI67EG)
Area Where TMDL Requirements Apply	Bear Creek and Evans Creek watersheds (includes Cottage Lake watershed)
Parameter	Fecal Coliform
EPA Approval Date	August 11, 2008
MS4 Permittee	Phase I: King County Phase II: No actions identified for Phase II Permittees

Actions Required

King County

- Install and maintain animal waste education and/or collection stations at municipal parks and other Permittee owned and operated lands reasonably expected to have substantial domestic animal (dog and horse) use and the potential for pollution of stormwater.
- Designate areas discharging via the MS4 to the TMDL area as high priority areas for illicit discharge detection and elimination. Complete IDDE field screening for bacteria sources in 50 percent of MS4 subbasins, including rural MS4 subbasins, by ~~August 1,~~

~~2018~~February 2, 2017 and implement the schedules and activities identified in S5.C.8 of the Phase I permit for response to any illicit discharges found.

Name of TMDL	**Cottage Lake**
EPA Approved Document(s) for TMDL	*Cottage Lake, Total Phosphorus, Total Maximum Daily Load Analysis, Submittal Report*, June 2004, Ecology Publication No. 03-10-085. http://www.ecy.wa.gov/biblio/0310085.html *Cottage Lake, Total Phosphorus, Total Maximum Daily Load, Water Quality Implementation Plan*, March 2007, Ecology Publication No. 06-10-066. http://www.ecy.wa.gov/biblio/0610066.html

~~**Name of TMDL**~~	~~**Cottage Lake**~~
~~**EPA Approved Document(s) for TMDL**~~	~~*Cottage Lake, Total Phosphorus, Total Maximum Daily Load Analysis, Submittal Report*, June 2004, Ecology Publication No. 03-10-085. http://www.ecy.wa.gov/biblio/0310085.html~~ ~~*Cottage Lake, Total Phosphorus, Total Maximum Daily Load, Water Quality Implementation Plan*, March 2007, Ecology Publication No. 06-10-066. http://www.ecy.wa.gov/biblio/0610066.html~~
Location of Original 303(d) Listings	WA-08-9070 & 49ITVC
Area Where TMDL Requirements Apply	Cottage Lake and tributaries to Cottage Lake
Parameter	Total Phosphorus
EPA Approval Date	September 2004
MS4 Permittee	Phase I: King County

Action Required

King County shall apply phosphorus control treatment requirements to new and redevelopment projects, as applicable, throughout the Cottage Lake watershed, including all tributaries to Cottage Lake. King County's Department of Development and Environmental Services (DDES) shall not rely on the quarter mile/15 percent distance downstream clause in King County's Surface Water Design Manual.

Name of TMDL	**Issaquah Creek Basin Water Cleanup Plan for Fecal Coliform Bacteria**
Document(s) for	*Issaquah Creek Basin Water Cleanup Plan for Fecal Coliform Bacteria:*

TMDL	*Total Maximum Daily Load Submittal Report*, June 2004. Ecology Publication No. 04-10-055. http://www.ecy.wa.gov/pubs/0410055.pdf
Location of Original 303(d) Listings	Issaquah Creek, TF310B (WA-08-1110) North Fork Issaquah Creek, CZ80NC (WA-08-1110) Tibbetts Creek, MB51QQ, EA48LQ (WA-08-1115)
Area Where TMDL Requirements Apply	These requirements apply to areas served by MS4s within the TMDL coverage area.
Parameter(s)	Fecal Coliform Bacteria
EPA Approval Date	October 1, 2004
MS4 Permittee:	Phase I Permit: King County Phase II Permit: City of Issaquah, WAR04-5518

Actions Required

City of Issaquah

- Designate areas discharging via the MS4 to Tributary 0170 and to the Lewis Lane Outfall as the highest priority areas for illicit discharge detection and elimination routine field screening efforts. Complete field screening for bacteria sources by December 31, 2014 and implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit for response to any illicit discharges found.
- Install and maintain pet waste education and collection stations at municipal parks and other Permittee owned and operated lands adjacent to streams. Focus on locations where people commonly walk their dogs.

King County

- Install and maintain animal waste education and/or collection stations at municipal parks and other Permittee owned and operated lands reasonably expected to have substantial domestic animal (dog and horse) use and the potential for pollution of stormwater.
- Designate areas discharging via the MS4 to the TMDL area as high priority areas for illicit discharge detection and elimination. Complete IDDE field screening for bacteria sources in 50 percent of the MS4 subbasins, including rural MS4 subbasins, by ~~February 2, 2017~~August 1, 2018 and implement the schedules and activities identified in S5.C.8 of the Phase I permit for response to any illicit discharges found.

Name of TMDL	**Little Bear Creek Fecal Coliform Water Quality Improvement Project**
Document(s) for TMDL	*Little Bear Creek Fecal Coliform Total Maximum Daily Load (Water Cleanup Plan)*, May 2005, Ecology Publication No. 05-10-034. http://www.ecy.wa.gov/biblio/0510034.html
Location of	Little Bear Creek, UT96KR (WA-08-1085).

Original 303(d) Listings	
Area Where TMDL Requirements Apply	These requirements apply to areas served by MS4s within the TMDL coverage area.
Parameter(s)	Fecal coliform bacteria

EPA Approval Date	July 1, 2005
MS4 Permittee:	**Phase I Permit:** Snohomish County **Phase II Permit:** City of Woodinville, WAR04-5545

Actions Required

City of Woodinville

- By December 31, 2014, complete field screening of Little Bear Creek to identify potential illicit discharges or connections. Conduct bacteria sampling from any flowing outfall, in accordance with protocols in *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection*, October 2004, or another methodology of comparable or improved effectiveness. Implement related schedules and activities identified in S5.C.3 of the Western Washington Phase II permit for response to any illicit discharges found.
- Confirm that pet waste collection stations are installed and maintained in all public lands/parks adjacent to Little Bear Creek.

Snohomish County

- Prioritize and conduct bacteria source identification and elimination in high priority MS4 subbasins that discharge to surface waters in the area where these TMDL requirements apply. In order to prioritize bacteria source identification and elimination activities based on surface water quality data, Snohomish County shall incorporate the Little Bear Creek watershed into the County's microbial water quality assessment (MWQA), or similar, monitoring program in accordance with the schedule for QAPP development and approval required for the Snohomish River Tributaries TMDL.
- Inspect commercial animal handling areas and commercial composting facilities to ensure implementation of source control BMPs for bacteria. *Commercial animal handling areas* are associated with Standard Industrial Code (SIC) 074 and 075 and include veterinary and pet care/boarding services, animal slaughtering, and support activities for animal production. Facilities where the degradation and transformation of organic solid waste takes place under controlled conditions designed to promote aerobic decomposition are considered *composting facilities* (definition in accordance with Chapter 173-350 WAC). All qualifying facilities must be inspected by August 1,

2016.Permittees shall implement an ongoing inspection program to re-inspect facilities with bacteria source control problems every three years.

- Conduct public education and outreach activities to increase awareness of bacterial pollution problems and promote proper pet waste management behavior.
- Install and maintain animal waste collection and/or education stations at municipal parks and other Permittee owned and operated lands reasonably expected to have substantial domestic animal (dog and horse) use and the potential for pollution of stormwater.

Name of TMDL	**Puyallup Watershed Water Quality Improvement Project**
Document(s) for TMDL	*Puyallup River Watershed Fecal Coliform Total Maximum Daily Load – Water Quality Improvement Report and Implementation Plan*, June 2011, Ecology Publication No. 11-10-040. http://www.ecy.wa.gov/biblio/1110040.html
Location of Original 303(d) Listings	Puyallup River 16712, 7498, White River 16711, 16708, 16709, Clear Creek 7501, Swan Creek 7514, Boise Creek 16706
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittees' municipal stormwater permit and discharging to water bodies listed within the specific requirement in this TMDL section.
Parameter	Fecal Coliform
EPA Approval Date	September 2011
MS4 Permittee	Phase I Permit: King County, Pierce County Phase II Permit: Auburn, Edgewood, Enumclaw, Puyallup, Sumner

Actions Required

City of Auburn

- Beginning no later than October 1, 2013, conduct twice monthly wet weather sampling of stormwater discharges to the White River at Auburn Riverside High School to determine if specific discharges from Auburn's MS4 exceed the water quality criteria for fecal coliform bacteria.
    - Data shall be collected for one wet season.
    - Data shall be collected in accordance with an Ecology-approved QAPP.
    - Data collected since EPA TMDL approval can be used to meet this requirement.
- For any of the outfalls monitored, above showing discharges that exceed water quality criteria for primary contact recreation: designate those areas discharging via the MS4 of concern as high priority areas for illicit discharge detection and elimination efforts and implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit for response to any illicit discharges found beginning no later than August 1, 2014.

- Install and maintain pet waste education and collection stations at municipal parks and other Permittee owned and operated lands adjacent to streams. Focus on locations where people commonly walk their dogs.

City of Edgewood

- Designate areas discharging via the MS4 to Jovita Creek as the highest priority areas for illicit discharge detection and elimination routine field screening and implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit.

City of Enumclaw

- Designate areas discharging via the MS4 to Boise Creek from creek mile 1.7 to 1.0 as the highest priority areas for illicit discharge detection and elimination routine field screening. Implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit, and implement a pet waste education program in this area according to S5.C.1 of the permit.

King County

- Designate areas discharging via the MS4 to Boise Creek as high priority areas for illicit discharge detection and elimination. Complete IDDE field screening for bacteria sources in 100 percent of the MS4 subbasins, including rural subbasins, by February 2, 2016 and implement the schedules and activities identified in S5.C.8 of the Phase I permit for response to any illicit discharges found. Field screening must include activities for both the dry season (May through September) and the wet season (October through April).
- Inventory commercial animal handling areas (associated with Standard Industrial Code 074 and 075) in areas discharging via the MS4 to Boise Creek and conduct inspections of these areas as part of the Source Control program required in S5.C.7 of the Phase I permit. All qualifying facilities must be inspected by August 1, 2016. The Permittee shall implement an ongoing inspection program to re-inspect facilities or areas with bacteria source control problems every three years.
- Designate areas discharging via the MS4 to Jovita Creek as high priority areas for illicit discharge detection and elimination field screening, and implement the schedules and activities identified in S5.C.8 of the Phase I permit.

Pierce County

- Designate areas discharging via MS4 to Swan Creek as high priority areas for illicit discharge detection and elimination efforts. Complete field screening by December 31, 2014 and implement the schedules and activities identified in S5.C.8 of the Phase I permit.
- Designate areas discharging via MS4 to Salmon Creek as high priority areas for illicit discharge detection and elimination field screening and implement the schedules and activities identified in S5.C.8 of the Phase I permit.

- Designate areas discharging via the MS4 to Alderton Creek as high priority areas for illicit discharge detection and elimination field screening and implement the schedules and activities identified in S5.C.8 of the Phase I permit.
- Designate areas discharging via the MS4 to upper Deer Creek as high priority areas for illicit discharge detection and elimination field screening and implement the schedules and activities identified in S5.C.8 of the Phase I permit.

City of Puyallup

- Designate areas discharging via the MS4 to Deer Creek as high priority areas for illicit discharge detection and elimination field screening and implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit. Focus investigation on field screening during dry weather (May through September).

City of Sumner

- Designate areas discharging via the MS4 to Salmon Creek as the highest priority areas for illicit discharge detection and elimination routine field screening and implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit.

Name of TMDL	**Clarks Creek Fecal Coliform TMDL**
Document(s) for TMDL	*Clarks Creek Watershed Fecal Coliform Bacteria Total Maximum Daily Load (Water Quality Improvement Report)*, May 2008, Ecology Publication No. 07-10-110. http://www.ecy.wa.gov/biblio/0710110.html *Clarks Creek Watershed Fecal Coliform Bacteria Total Maximum Daily Load (Water Quality Implementation Plan)*, December 2009, Ecology Publication No. 09-10-081. http://www.ecy.wa.gov/biblio/0910081.html
Location of Original 303(d) Listings	Clarks Creek 7497, 7501, Meeker Creek 7508, 7507
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittees' municipal stormwater permit and discharging to water bodies listed within the specific requirement in this TMDL section.
Parameter	Fecal Coliform
EPA Approval Date	June 4, 2008
MS4 Permittee	Phase II Permit: Puyallup

Actions Required

City of Puyallup

- Designate areas discharging via the MS4 to Meeker Creek as high priority areas for illicit discharge detection and elimination field screening and implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit.

Name of TMDL	**South Prairie Creek Water Quality Improvement Project**
Document(s) for TMDL	*South Prairie Creek Bacteria and Temperature Total Maximum Daily Load (Water Cleanup Plan): Submittal Report*, June 2003, Ecology Publication No. 03-10-055. http://www.ecy.wa.gov/biblio/0310055.html *South Prairie Creek Bacteria and Temperature Total Maximum Daily Load (Water Cleanup Plan): Detailed Implementation Plan*, July 2006, Ecology Publication No. 06-10-018. http://www.ecy.wa.gov/biblio/0610018.html

Location of Original 303(d) Listings	South Prairie Creek VC19MO (WA-10-1085), Wilkeson Creek NX07HW (WA-10-1087)
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittees' municipal stormwater permit and discharging to water bodies listed within the specific requirement in this TMDL section.
Parameter	Fecal Coliform
EPA Approval Date	August 6, 2003
MS4 Permittee	Phase I Permit: Pierce County Phase II Permit: Buckley

Actions Required

Pierce County

- Designate areas discharging via the MS4 to Tributary 1 upstream of SR162 as high priority areas for illicit discharge detection and elimination efforts. Complete field screening by December 31, 2013 and implement the schedules and activities identified in S5.C.8 of the Phase I permit for response to any illicit discharges found. Investigation must include activities for both the dry season (May through September) and the wet season (October through April).
- Designate areas discharging to Pierce County MS4 outfalls and conveyances upstream of SR165 along Spiketon Road, Mundy Loss Road, and Spiketon Ditch Road as high priority areas for illicit discharge detection and elimination efforts. Complete field screening by December 31, 2013 and implement the schedules and activities identified in S5.C.8 of the Phase I permit for response to any illicit discharges found. Investigation must include activities for both the dry season (May through September) and the wet season (October through April).

City of Buckley

- Designate areas discharging via the MS4 to Spiketon Creek as the highest priority areas for illicit discharge detection and elimination routine field screening and implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit.

Name of TMDL	**Nisqually River Basin Water Quality Improvement Project**
Document(s) for TMDL	*Nisqually Watershed Bacteria and Dissolved Oxygen Total Maximum Daily Load (Water Cleanup Plan): Submittal Report*, June 2005, Ecology Publication No. 05-10-040. http://www.ecy.wa.gov/biblio/0510040.html *Nisqually River Basin Fecal Coliform Bacteria and Dissolved Oxygen Total Maximum Daily Load: Water Quality Implementation Plan (WQIP)*, June 2007, Ecology Publication No. 07-10-016. http://www.ecy.wa.gov/biblio/0710016.html
Location of Original 303(d) Listings	Nisqually Reach 390KRD (WA-PS-0290), Nisqually River OE72JI (WA-11-1010), McAllister Creek LD26OX (WA-11-2000), Ohop Creek MW64EV (WA-11-1024), Red Salmon Creek NoID (WA-PS-0290)
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittees' municipal stormwater permit and discharging to water bodies listed within the specific requirement in this TMDL section.
Parameter	Fecal Coliform, Dissolved Oxygen
EPA Approval Date	August 5, 2005
MS4 Permittee	Phase I Permit: Pierce County Phase II Permit: Thurston County

Actions Required

Pierce County

- Designate areas discharging via the MS4 to Ohop Creek and Lynch Creek as high priority areas for illicit discharge detection and elimination efforts. Complete field screening by December 31, 2014 and implement the schedules and activities identified in S5.C.8 of the Phase I permit for response to any illicit discharges found.

Thurston County

- Annually implement the following best management practices for reducing fecal coliform bacteria in areas discharging to the Nisqually Reach via the MS4 in accordance with S5.C.1 and S5.C.5 of the Western Washington Phase II Permit:
    a. Reach households in targeted watershed through mailings, door hangers etc. to increase awareness of the sources of bacteria pollution.
    b. Adequately maintain vegetation around stormwater facilities, ditches, and ponds.

Name of TMDL	**Henderson Inlet Watershed Fecal Coliform Bacteria Water Quality Improvement Project**
Document(s) for TMDL	*Henderson Inlet Watershed Fecal Coliform Bacteria, Dissolved Oxygen, pH, and Temperature Total Maximum Daily Load Study*, March 2006, Ecology Publication No. 06-03-012. http://www.ecy.wa.gov/biblio/0603012.html *Henderson Inlet Watershed Fecal Coliform Bacteria, Dissolved Oxygen, and pH Total Maximum Daily Load: Water Quality Improvement Report Implementation Strategy*, October 2006, Ecology Publication No. 06-10-058. http://www.ecy.wa.gov/biblio/0610058.html *Henderson Inlet Watershed Fecal Coliform Bacteria Total Maximum Daily Load: Water Quality Implementation Plan*, July 2008, Ecology Publication No. 08-10-040. http://www.ecy.wa.gov/biblio/0810040.html
Location of Original 303(d) Listings	Henderson Inlet 390KRD (WA-13-0010), Dobbs Creek UNK000 (WA-13-1400), Sleepy Creek UNK000 (WA-13-1700), Woodard Creek MJ83ZH (WA-13-1600), Woodland Creek JH31LN (WA-13-1500)
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the permittees municipal stormwater permit and discharging to water bodies listed within the specific requirement in this TMDL section.
Parameter	Fecal Coliform, Dissolved Oxygen, pH, Temperature
EPA Approval Date	January 8, 2007
MS4 Permittee	Phase II Permit: Lacey, Olympia, Thurston County

Actions Required

Thurston County

1. Annually implement the following best management practices in areas discharging to the Henderson Inlet via the MS4 in accordance with S5.C.4 of the Western Washington Phase II Permit:
    a. Require phosphorus control for new and redevelopment projects that discharge via the MS4 to Woodard Creek and meet the project thresholds in Appendix 1, Minimum Requirement #6: Runoff Treatment of the Western Washington Phase II permit.
2. Annually implement the following best management practices for reducing fecal coliform in areas discharging to the Henderson Inlet via the MS4 in accordance with S5.C.3 of the Western Washington Phase II Permit:
    a. Designate areas discharging via the MS4 to Woodland Creek from river mile 1.6 to 0.2 and Jorgenson Creek upstream of Pleasant Glade Road as high priority areas for illicit discharge detection and elimination field screening. Implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit. Investigation shall include stormwater ponds and on-site septic systems as

potential fecal coliform sources, and sampling of wet-weather discharges (November through April).

3. Annually implement the following best management practices for reducing fecal coliform in areas discharging to the Henderson Inlet via the MS4 in accordance with S5.C.1 of the Western Washington Phase II Permit.
    a. Continue supporting the Watershed Septic System Operations and Maintenance Program. Develop a targeted educational plan delivering:
        i. Technical assistance to landowners through at least one presentation or workshop annually.
        ii. Technical assistance to landowners through one publication or targeted letter annually.
        iii. A resource webpage on the city's website.
    b. Continue offering public education and outreach efforts for fecal coliform reduction such as brochures, signage and pet waste stations to homeowner associations.

City of Lacey

1. Annually implement the following best management practices in areas discharging to the Henderson Inlet via the MS4 in accordance with S5.C. 1 of the Western Washington Phase II Permit:
    a. Continue the Private Stormwater Facilities Maintenance Program, providing commercial and residential stormwater facility/BMP owners educational resources for facility function and maintenance requirements.
    b. Offer bacteria pollution reduction brochures, signage and pet waste stations to homeowners associations.
    c. Maintain pet waste bag dispenser units in City parks.
    d. Install educational signage at City facilities/property.
    e. Develop a targeted educational plan for septic system owners that includes; goals, target audiences, messages, format, distribution and evaluation methods by December 31, 2016. Permittees may meet requirement individually or through regional efforts.
2. Continue developing and implementing a fecal coliform bacteria wet weather sampling program for the College Regional Stormwater Facility by December 31, 2013 in accordance with the illicit discharge detection and elimination efforts and activities identified in S5.C.3 of the Western Washington Phase II permit.
    a. Submit a plan to Ecology for approval by November 1, 2013. The sampling program shall establish a regularly scheduled sampling schedule (at least two times per year, as feasible and consistent with the city's Wet Weather Discharge Plan) during the wet season (November through April), specific sampling locations, sampling protocols, parameters, analytical methods and timelines for implementation.
    b. If sampling results indicate potential illicit discharges, conduct an investigation in accordance with S5.C.3 of the Western Washington Phase II permit.
    c. Submit a summary of sampling and investigations with each annual report.

3. Develop and implement a coordinated plan with the City of Olympia to monitor and reduce fecal coliform bacteria discharges from the Fones/Taylor wetland treatment facilities by December 31, 2014 in accordance with S5.C.3 of the Western Washington Phase II permit.
    a. Submit a program plan to Ecology that includes a timeline for implementation, sampling frequencies and identifies, at the minimum, who will be responsible for sampling, investigations and enforcement by December 31, 2013.
    b. If sampling results indicate potential illicit discharges, conduct an investigation in accordance with S5.C.3 of the Western Washington Phase II permit.
    c. Submit a summary of the coordinated efforts with sampling, investigation and enforcement actions taken with the annual reports.
4. Annually implement the following best management practices in areas discharging to the Henderson Inlet via the MS4 in accordance with S5.C.5 of the Western Washington Phase II Permit:
    a. Continue re-vegetation and nuisance vegetation management along Woodland Creek and its tributaries.

City of Olympia

1. Annually implement the following BMPs in areas discharging to the Henderson Inlet via the MS4 in accordance with S5.C.4 of the Western Washington Phase II permit:
    a. Require phosphorus control for new and redevelopment projects that discharge via MS4 to Woodard Creek and meet the project thresholds in Appendix 1, Minimum Requirement #6: Runoff Treatment of the Western Washington Phase II permit.
2. Develop and implement a coordinated plan with the City of Lacey to monitor and reduce fecal coliform bacteria discharges from the Fones/Taylor wetland treatment facilities by December 31, 2014 in accordance with S5.C.3 Illicit Discharge Detection and Elimination of the Western Washington Phase II permit.
    a. Submit a program plan to Ecology that includes a timeline for implementation, sampling frequencies and identifies, at the minimum, who will be responsible for sampling, investigations and enforcement by December 31, 2013.
    b. If sampling results indicate potential illicit discharges, conduct an investigation in accordance with S5.C.3 of the Western Washington Phase II permit.
    c. Submit a summary of the coordinated efforts with sampling, investigation and enforcement actions taken with each annual report.

Name of TMDL	**Sinclair and Dyes Inlets Fecal Coliform Bacteria Total Maximum Daily Load**
Document(s) for TMDL	*Sinclair and Dyes Inlets Fecal Coliform Bacteria Total Maximum Daily Load (TMDL) Water Quality Implementation Plan*, In Draft, Ecology Publication No. 11-10-051. *Fecal Coliform Model Verification Sampling Plan (Winter 2004),* February 19, 2004. http://www.ecy.wa.gov/programs/wq/tmdl/sinclair-

	dyes_inlets/w2004_fc_sap_final_ecy.pdf *Fecal Coliform Total Maximum Daily Load Study Plan for Sinclair and Dyes Inlet*, October 4, 2002. http://www.ecy.wa.gov/programs/wq/tmdl/sinclair-dyes_inlets/fc_tmdl_studyplan_final_draft_print.pdf
Location of Original 303(d) Listings	Dyes Inlet & Port Washington Narrows (WA-15-0020) Gorst Creek (WA-15-4000) Blackjack Creek (WA-15-4200) Annapolis Creek (WA-15-4400) Beaver Creek (WA-15-4900) Clear Creek (WA-15-5000) Barker Creek (WA-15-5100) Sinclair Inlet (WA-15-0040)
Area Where TMDL Requirements Apply	These requirements apply to areas served by MS4s listed below within the TMDL coverage area.
Parameter(s)	Fecal coliform bacteria
EPA Approval Date	July 5, 2012
MS4 Permittee:	Phase II Permit: City of Bainbridge Island, WAR04-5503; City of Bremerton, WAR04-5507; City of Port Orchard, WAR04-5536; Kitsap County, WAR04-5546

Actions Required

City of Bainbridge Island

- If a minimum of 10 monthly ambient water quality samples collected under a previous monitoring program approved by Ecology in nearshore areas below Lynwood Center between 2011 and 2013 indicate that this area does NOT meet water quality standards, then by December 1, 2014, the City shall designate those areas discharging via MS4 either directly or to creeks that discharge to shoreline areas along Rich Passage as the highest priority areas for illicit discharge detection and elimination field screening. The City shall implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit for response to any illicit discharges found.
- By December 31, 2016, review and, if necessary, increase the frequency of inspection and cleanout of catch basins (under S5.C.4 and 5 of the Western Washington Phase II permit) to maintain catch basin sediment levels below 60 percent full. Focus on MS4 areas that drain to nearshore areas along Rich Passage below Lynwood Center and the northern shoreline of Fletcher Bay near DOH site 457.
- Use appropriate investigative tools to ensure that contaminated stormwater is not contributing to the fecal coliform bacteria exceedances at DOH site 457, offshore Fletcher Bay.

- Install and maintain pet waste education and collection stations at Permittee owned and operated lands adjacent to stream and marine shorelines. Focus on locations where people commonly walk their dogs.

City of Bremerton

- Designate areas discharging via MS4 to Phinney and Ostrich Bay Creeks, to the eastern shoreline of Oyster Bay near DOH site 487, and to shorelines along Port Washington Narrows as the highest priority areas for illicit discharge detection and elimination routine field screening and, beginning no later than August 1,2014 implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit for response to any illicit discharges found.
- By December 31, 2016, review and, if necessary, increase the frequency of inspection and cleanout of catch basins (under S5.C.4 and 5 of the Western Washington Phase II permit) to maintain catch basin sediment levels below 60 percent full. Focus on MS4 areas that drain to Phinney and Ostrich Bay Creeks, to the eastern shoreline of Oyster Bay near DOH site 487 and to shorelines along Port Washington Narrows.
- Install and maintain pet waste education and collection stations at municipal parks and other Permittee owned and operated lands adjacent to stream and marine shorelines. Focus on locations where people commonly walk their dogs.

City of Port Orchard

- Designate areas discharging via MS4 to Blackjack, Annapolis, and Karcher Creeks and to shorelines along Sinclair Inlet as the highest priority areas for illicit discharge detection and elimination routine field screening and, beginning August 1, 2014, implement the associated schedules and activities identified in S5.C.3 of the Western Washington Phase II permit for response to any illicit discharges found.
- By December 31, 2016, review and, if necessary, increase the frequency of inspection and cleanout of catch basins (under S5.C.4 and 5 of the Western Washington Phase II permit to maintain catch basin sediment levels below 60% full. Focus on MS4 areas that drain to Blackjack, Annapolis, and Karcher Creeks and to shorelines along Sinclair Inlet.
- Install and maintain pet waste education and collection stations at municipal parks and other Permittee owned and operated lands adjacent to stream and marine shorelines. Focus on locations where people commonly walk their dogs.

Kitsap County

- Designate areas discharging via MS4 to Barker, Clear, Strawberry, Ostrich Bay, and Phinney creeks and shorelines at the head of Dyes Inlet as the highest priority areas for illicit discharge detection and elimination routine field screening (including agricultural land use inventories in rural areas) and, beginning no later than August 1, 2014, implement the associated schedules and activities identified in S5.C.3 of the Western Washington Phase II permit for response to any illicit discharges found. Conduct illicit discharge detection and elimination efforts in MS4 areas that discharge to Beaver, Pahrmann, Sacco, and upper Blackjack creeks and to the western shoreline of Chico Bay near DOH site 471 as resources allow.

- By December 31, 2016, review and, if necessary, increase the frequency of inspection and cleanout of catch basins (in accordance with S5.C.4 and 5 of the Western Washington Phase II permit) to maintain catch basin sediment levels below 60% full. Focus on areas within the Sinclair and Dyes Inlet watershed with closed conveyance systems and catch basins.
- Install and maintain pet waste education and collection stations at municipal parks and other Permittee owned and operated lands adjacent to stream and marine shorelines. Focus on locations where people commonly walk their dogs.

Name of TMDL	**Grays Harbor/Chehalis Watershed Fecal Coliform Bacteria Total Maximum Daily Load**
Document(s) for TMDL	*Grays Harbor/Chehalis Watershed Fecal Coliform Bacteria Total Maximum Daily Load Submittal Report*, December 2001, Ecology Publication No. 01-10-025. http://www.ecy.wa.gov/biblio/0110025.html *Quality Assurance Project Plan: Grays Harbor Fecal Coliform Bacteria Monitoring to Characterize Water Quality in Urban Stormwater Drains*, October 2010, Ecology Publication No. 10-10-066. http://www.ecy.wa.gov/biblio/1010066.html
Location of Original 303(d) Listings	Outer Grays Harbor 390KRD (WA-22-0020), Inner Grays Harbor 390KRD (WA-22-030), Inner Grays Harbor DS29ZH (WA-22-0030), Chehalis River PB33WC (WA-22-4040)
Area Where TMDL Requirements Apply	Requirements apply in all areas regulated under the Permittees' municipal stormwater permit and discharging to water bodies listed within the specific requirement in this TMDL section.
Parameter	Fecal Coliform
EPA Approval Date	December 2002
MS4 Permittee	Phase II Permit: Aberdeen

Actions Required

City of Aberdeen

1. Implement the schedules and activities identified in S5.C.1 of the Western Washington Phase II Permit. No later than February 28, 2015, develop a Public Education and Outreach and Involvement plan. The plan shall target the reduction of fecal coliform pollution by increasing public awareness, effecting behavior changes and shall include: goals, target audiences, messages, format, distribution and evaluation methods.
    a. The plan shall include at least the following elements and be fully implemented prior to the expiration date of the permit:

i. Target the residents of the three high priority water bodies identified under the 2007-2012 permit.
ii. Reach households in targeted watersheds through mailings, door hangers or similar outreach tools.
iii. Reach 4-6th grade students.

b. Design and implement a program which notifies residents, in a timely manner, when bacteria pollution that poses a public health concern (such as a wastewater overflow) reaches the MS4.
c. Conduct two public education surveys gauging resident's knowledge of the sources of bacteria and preventing bacteria pollution. One survey should measure resident's knowledge of bacteria pollution before outreach and the other should measure knowledge and likelihood of action after outreach.
d. Design and implement a stream team program where two citizen stream teams are formed to participate in stewardship activities.
e. Install and maintain pet waste bag dispenser units and explanatory signs in public areas with dog usage.
f. By December 31, 2014 develop an inventory of sources that have potential for bacteria runoff such as manure-composting facilities, stables, kennels, etc.
   i. Develop a targeted manure management educational plan for such facility owners delivering at least one presentation or letter annually and developing a resource webpage on the city's website.

2. Designate areas discharging to the MS4 urban drains identified in the TMDL as the highest priority areas for illicit discharge detection and elimination routine field screening efforts and implement the schedules and activities identified in S5.C.3 of the Western Washington Phase II permit. Field screening and source tracing methodology (see S5.C.3.c) must be consistent with the *Quality Assurance Project Plan: Grays Harbor Fecal Coliform Bacteria Monitoring to Characterize Water Quality in Urban Stormwater Drains, October 2010*.
   a. Implement a regulatory mechanism to control pet waste.
   b. Designate areas discharging via MS4 to the following discharge points: 501-ABDN, 510-MST, and 514-MST as high priority areas for illicit discharge detection and elimination efforts.
      i. Complete field screening by December 31, 2014 and implement the schedules and priority area for illicit discharge detection and elimination field screening identified in S5.C.3 of the Western Washington Phase II permit. Investigation must include activities for both the dry season (May through October) and the wet season (November through April).
      ii. Beginning no later than October 31, 2014, conduct twice monthly wet weather sampling of the discharge points 501-ABDN, 510-MST, and 514-MST to determine if specific discharges from Aberdeen's MS4 exceed the water quality criteria for fecal coliform bacteria.
         - Data shall be collected for two wet season.
         - Data shall be collected in accordance with an Ecology-approved QAPP.
         - Samples must be analyzed using an Ecology accredited lab.

- If sampling results indicate potential illicit discharges, conduct an investigation in accordance with S5.C.3 *Illicit Discharge Detection and Elimination* of the Western Washington Phase II permit.
- Data shall be submitted to Ecology in an approved format with the annual reports.