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.*

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Name of TMDL	WRIA 32 - WALLA WALLA RIVER BASIN
EPA Approved Document(s) for TMDL	Walla Walla River Basin Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report, November 2006, Publication No. 06-10-074
	https://fortress.wa.gov/ecy/publications/documents/0610074.pdf
Location of Original 303(d) Listings	Dry Creek 41636
	Garrison Creek 12381
	Garrison Creek 12382
	Mill Creek 41638
	Mill Creek 41641
	Mill Creek 41645
	Mill Creek 41710
	Mill Creek 16783 (WA-32-1070)
	Mud Creek 41646
	Russell Creek 41671
	Touchet River 16784
	Touchet River 16787 (WA-32-1020)
	Touchet River 41245
	Touchet River 41246
	Touchet River 41652
	Walla Walla River 16789 (WA-32-1010)
	Walla Walla River 41666
	Walla Walla River 41668
	Walla Walla River 41713
	Yellowhawk Creek 41649
Area Where TMDL Requirements Apply	These requirements apply to areas served by MS4s within the Cities of College Place and Walla Walla, and of Walla Walla County.
Parameter(s)	Fecal Coliform Bacteria
MS4 Permittee:	City of College Place
	City of Walla Walla
	Walla Walla County

WALLA WALLA COUNTY

Actions Required

Walla Walla County shall:

- Inventory and inspect the stormwater system to develop a map and descriptions of known and suspected illicit connections and potential sources of fecal coliform to the MS4 by December 31, 2019.
- 2. Develop and implement a pet waste education program for residents of Walla Walla County.
- 3. Consider during SEPA review the potential for projects to increase runoff and sources of fecal coliform, and the need for mitigation measures to reduce these adverse impacts to the MS4 and surface waters.
- 4. Beginning August 1, 2020, annually select a minimum of two outfall locations for sampling. Sample bacteria and turbidity in the receiving water body at each outfall during two separate storm events (in spring and fall).
 - a. Use the collected data to trace and remedy fecal coliform sources as part of the Illicit Discharge Detection & Elimination (IDDE) efforts.
 - b. Selection of outfalls for monitoring should consider previous coliform data, including that done under the original TMDL, that done under Ecology's TMDL effectiveness monitoring, and other available data.
- 5. Starting January 1, 2020, for each outfall drainage area investigated under the IDDE program, Walla Walla County shall submit to Ecology in the annual report summarizing:
 - a. Results of any outfall monitoring that include a comparison of monitoring data to the TMDL Waste Load Allocation to evaluate progress toward meeting the percent reduction needed at the outfall (per bacteria TMDL).
 - b. A description of any and all actions taken to reduce fecal coliform pollution, including any business inspections conducted, outreach and education efforts, and any other efforts made to reduce bacteria loadings to receiving surface water bodies.
 - c. For the areas draining to the remaining stormwater basins under its jurisdiction, submit a plan outlining subsequent focus areas for the IDDE program.
 - d. For any monitored outfall that has not progressed toward the WLA target (percent reduction) by June 30, 2022, additionally address the following in the annual report:
 - i. A description of key actions, and who will conduct them.
 - ii. A proposed implementation schedule, including milestones and deadlines, with provisions for reviewing the plan for effectiveness on an annual basis.
 - iii. The specific type of monitoring that will be used to evaluate the effectiveness of the plan.

CITY OF COLLEGE PLACE

Actions Required

The City of College Place shall:

- 1. Inventory and inspect the stormwater system to develop a map and descriptions of known and suspected illicit connections and potential sources of fecal coliform to the MS4 by June 30, 2020.
- 2. Develop and implement a pet waste education program for residents of the City of College Place per the schedule in S5.B.1.
- 3. Consider during SEPA review, the potential for projects to increase runoff and sources of fecal coliform, and the need for mitigation measures to reduce these adverse impacts to the MS4 and surface waters.
- 4. Beginning on August 1, 2020, annually select a minimum of two outfall locations for sampling. Sample bacteria and turbidity in the receiving water body at each outfall during two separate storm events (in spring and fall).
 - a. Use the collected data to trace and remedy fecal coliform sources as part of the Illicit Discharge Detection & Elimination (IDDE) efforts.
 - b. Selection of outfalls for monitoring should consider previous coliform data, including that done under the original TMDL, that done under Ecology's TMDL effectiveness monitoring, and other available data.
- 5. Beginning January 1, 2020, for each outfall drainage area investigated under the IDDE program, City of College Place shall submit to Ecology in the annual report summarizing:
 - a. Results of any outfall monitoring that include a comparison of monitoring data to the TMDL Waste Load Allocation to evaluate progress toward meeting the percent reduction needed at the outfall (per bacteria TMDL).
 - b. A description of any and all actions taken to reduce fecal coliform pollution, including any business inspections conducted, outreach and education efforts, and any other efforts made to reduce bacteria loadings to receiving surface water bodies.
 - c. For the areas draining to the remaining stormwater basins under its jurisdiction, submit a plan outlining subsequent focus areas for the IDDE program.
 - d. For any outfall that has not progressed toward the WLA target (percent reduction) by December 30, 2022, additionally address the following in the annual report:
 - i. A description of key actions, and who will conduct them.
 - ii. A proposed implementation schedule, including milestones and deadlines, with provisions for reviewing the plan for effectiveness on an annual basis.
 - iii. The specific type of monitoring that will be used to evaluate effectiveness of the plan.

CITY OF WALLA WALLA

Actions Required

The City of Walla Walla shall:

- 1. Inventory and inspect the stormwater system to develop a map and descriptions of known and suspected illicit connections and potential sources of fecal coliform to the MS4 by December 31, 2019.
- 2. Develop and implement a pet waste education program for residents of the City of Walla Walla per the schedule in S5.B.1.
- 3. Consider during SEPA review, the potential for projects to increase runoff and sources of fecal coliform, and the need for mitigation measures to reduce these adverse impacts to the MS4 and surface waters.
- 4. Beginning on August 1, 2020, annually select a minimum of two outfall locations for sampling. Sample bacteria and turbidity in the receiving water body at each outfall during two separate storm events (in spring and fall).
 - a. Use the collected data to trace and remedy fecal coliform sources as part of the Illicit Discharge Detection & Elimination (IDDE) efforts.
 - b. Selection of outfalls for monitoring should consider previous coliform data, including that done under the original TMDL, that done under Ecology's TMDL effectiveness monitoring, and other available data.
- 5. Starting January 1, 2020, for each outfall drainage area investigated under the IDDE program, the City of Walla Walla shall submit to Ecology with the annual report, summarizing:
 - a. Results of any outfall monitoring that include a comparison of monitoring data to the TMDL Waste Load Allocation to evaluate progress toward meeting the percent reduction needed at the outfall (per bacteria TMDL).
 - b. A description of any and all actions taken to reduce fecal coliform pollution, including any business inspections conducted, outreach and education efforts, and any other efforts made to reduce bacteria loadings to receiving surface water bodies.
 - c. For the areas draining to the remaining stormwater basins under its jurisdiction, submit a plan outlining subsequent focus areas for the IDDE program.
- 6. For any monitored outfall that has not progressed toward the WLA target (percent reduction) by June 30, 2022, additionally address the following in the annual report:
 - a. A description of key actions, and who will conduct them.
 - b. A proposed implementation schedule, including milestones and deadlines, with provisions for reviewing the plan for effectiveness on an annual basis.
 - c. The specific type of monitoring that will be used to evaluate the effectiveness of the plan.

Name of TMDL	WRIA 34 - SOUTH FORK PALOUSE RIVER
EPA Approved Document(s) for TMDL	South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load: Water Quality Improvement Report, October 2009, Publication No. 09-10-060
Location of Original 303(d) Listings	Paradise Creek 10443 (WA-34-1025) Paradise Creek 10439 (WA-34-1025) Paradise Creek 10444 (WA-34-1025) South Fork Palouse River 6712 (WA-34-1020) South Fork Palouse River 6711 (WA-34-1020) South Fork Palouse River 6707 (WA-34-1020) South Fork Palouse River 6707 (WA-34-1020) Dry Fork Creek 46406 Missouri Flat Creek 6713 (WA-34-1024)
Area Where TMDL Requirements Apply	These requirements apply to areas served by MS4s within the City of Pullman, including the Washington State University Campus that is within the City of Pullman.
Parameter(s)	Fecal Coliform Bacteria
MS4 Permittee	City of Pullman WAR04-6504 Washington State University WAR04-6700

CITY OF PULLMAN

Actions Required

The City of Pullman, within the permit coverage area, shall:

- 1. Continue to implement a pet waste education program for residents of Pullman.
- 2. The City of Pullman Planning and Public Works Departments will consider during SEPA review, the potential for projects to increase runoff and sources of fecal coliform, and the need for mitigation measures to reduce related impacts to the MS4 and surface waters.
- 3. When monitoring outfalls identified in the TMDL (Table 28), to address sources and progress toward load allocations (target percent reductions), all monitoring must be conducted under an Ecology-approved Quality Assurance Project Plan (QAPP). Ecology must be given a minimum of 3 months prior to sampling to review and approve the QAPP.
- 4. Enter monitoring data collected into Ecology's Environmental Information Management (EIM) database. The database can be accessed at https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database .
- 5. Implement IDDE investigations based on the results of the 2017-2018 outfall compliance monitoring and the 4-Year Action Plan Revised September 2017.
 - a. By September 1, 2019, submit an updated 4-Year Action Plan to Ecology for approval. This plan must include outfall drainage areas where IDDE investigations will take place, a description of anticipated investigatory methods, and if known, descriptions of suspected sources. Ecology (regional stormwater permit planner and TMDL lead) will have 60 days to review plan and request modifications or clarifications. Once City of Pullman receives Ecology comments and requested changes, they will have 30 days to submit a revised plan.
 - i. Investigations will be prioritized in the following order:
 - A. Those with suspected known sources.
 - B. Those with the highest reductions still needed to meet WLAs.
 - ii. Investigatory activities that meet *both* the following conditions should be summarized in the plan but do not need to be included for action in the updated 4-Year Action Plan:
 - A. Sources investigated prior to permit issuance under the 4-Year Action Plan Revised September 2017; and
 - B. Sources corrected as evidenced by water quality sampling data collected prior to permit issuance.
 - b. Begin implementing this plan no later than January 15, 2020.
 - c. For each outfall drainage area investigated under the IDDE program (updated 4-Year Action Plan), the City of Pullman shall submit to Ecology a report with the annual report after initiating the investigation summarizing:
 - i. Sources or other findings of importance to meeting WLAs.
 - ii. Actions taken to reduce fecal coliform pollution.

- 6. For any outfall identified in the TMDL (Table 28) that has not achieved the load allocations (target percent reductions) by December 31, 2020, submit to Ecology a plan by March 31, 2021, describing how further reductions to meet criteria will be achieved at the outfall. The plan shall include:
 - a. A description of the operational, structural, or investigatory practices currently being implemented to reduce bacteria concentrations that are causing or contributing to the violations of the water quality standards.
 - b. A description of potential additional operational, structural, or investigatory practices that may or will be implemented.
 - c. A schedule for implementing these additional practices.
 - d. A description for additional monitoring plans and schedules for determining progress toward load allocations (target percent reductions) . Progress toward load allocations (target percent reductions) must be assessed at least every 12 months.
- 7. For any outfall identified in the TMDL (Table 28) remaining out of compliance with water quality standards, submit a plan as described under Appendix 2.C. (of this section) with each annual report.

WASHINGTON STATE UNIVERSITY (WSU)

Actions Required

Washington State University, within the area under its jurisdiction, shall:

- 1. Continue to conduct education and outreach, with an emphasis on animal waste disposal practices to reduce potential bacteria-laden runoff.
- 2. The Capital Planning Department will consider during SEPA review, the potential for projects to increase runoff and sources of fecal coliform, and the need for mitigation measures to reduce these adverse impacts to the MS4 and surface waters.
- 3. When monitoring to assess actions taken and progress toward elimination of stormwater-related bacteria discharges to surface water, all monitoring must be conducted under an Ecology-approved QAPP. Ecology must be given a minimum of 3 months prior to sampling to review and approve the QAPP.
- 4. Enter monitoring data collected into Ecology's Environmental Information Management (EIM) database. The database can be accessed at https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database.
- Implement IDDE investigations based on the results of the 2017-2018 outfall compliance monitoring and the 3-Year Action Plan included in the QAPP titled Washington State University (WSU) Pullman, WA – South Fork of the Palouse River/Missouri Flat Creek Fecal Coliform Bacteria Monitoring (January 30, 2018), approved by Ecology December 2017.
- 6. By September 1, 2019, submit a plan for fecal coliform IDDE investigations to Ecology for approval. This plan must include storm sewers where IDDE investigations will take place, a description of anticipated investigatory methods, and if known, descriptions of suspected sources. Ecology (regional stormwater permit planner and TMDL lead) will have 30 days to review

plan and request modifications or clarifications. Once WSU receives Ecology comments and requested changes, they will have 30 days to submit a revised plan.

- a. Investigations will be prioritized in the following order:
 - i. Those with suspected known sources.
 - ii. Those with the highest reductions still needed to meet WLAs.
- b. Investigatory activities that meet *both* the following conditions should be summarized in the plan but do not need to be included for action in the IDDE investigation plan:
 - Sources investigated prior to permit issuance under the 2017
 3-year Action Plan; and
 - ii. Sources corrected as evidenced by water quality sampling data collected prior to permit issuance.
- 7. Begin implementing this plan no later than January 15, 2020.
- 8. For each outfall drainage area investigated under the IDDE program, WSU shall submit to Ecology a report with the annual report after initiating the investigation summarizing:
 - a. Sources or other findings of importance to meeting WLAs
 - b. Actions taken to reduce fecal coliform pollution.
- 9. For any outfall that has not achieved compliance with fecal coliform bacteria criteria by December 31, 2020, submit to Ecology a plan by March 31, 2021, describing how further reductions to meet criteria will be achieved at the outfall. The plan shall include:
 - a. A description of the operational, structural, or investigatory practices currently being implemented to reduce bacteria concentrations that are causing or contributing to the violations of the water quality standards.
 - b. A description of potential additional operational, structural, or investigatory practices that may or will be implemented.
 - c. A schedule for implementing these additional practices.
 - d. A description for additional monitoring plans and schedules for determining the outfall's compliance with water quality standards. Compliance with standards must be assessed at least every 12 months.
- 10. For any outfall remaining out of compliance with water quality standards, submit a plan as described under Appendix 2.9. (of this section) with each annual report.

Name of TMDL	WRIA 39 - SELAH DITCH
EPA Approved Document(s) for TMDL	Selah Ditch Multiparameter Total Maximum Daily Load: Technical Assessment Report, January 2005, Publication No. 05-10-020
	Selah Ditch Multiparameter Total Maximum Daily Load: Water Quality Improvement Report, June 2006, Publication No. 06-10-040
Location of Original 303(d) Listings	Selah Ditch, Water Resource Inventory Area (WRIA) 39, Selah Ditch is a short (0.83 mile), straight, man-made drainage canal that is classified as a Class A water body.
Area Where TMDL Requirements Apply	City of Selah
Parameter(s)	Fecal Coliform Bacteria, and Temperature
EPA Approval Date	Water Quality Improvement Plan – June 2006
MS4 Permittee	City of Selah

CITY OF SELAH

Actions Required

Education and Outreach

- 1. Identify and provide public education materials and opportunities on sources and BMPs to reduce fecal coliform.
- 2. No later than March 31, 2021, evaluate the effectiveness of the educational opportunities to reach the target audience and reduce pollutant contributions.

IDDE

1. Inventory and inspect the stormwater system to develop a map and descriptions of known illicit connections and potential sources of fecal coliform to the MS4 by December 31, 2020.

Effectiveness Assessment

- 1. The City of Selah shall convene a Technical Advisory Workgroup comprised of local participants to review effectiveness monitoring data, plan modifications to BMPs and promote public awareness of fecal coliform sources and implementation of the identified mitigating measures to meet the TMDL goals.
- 2. By March 31, 2021, evaluate and prepare an effectiveness monitoring assessment report as described in the Water Quality Improvement Plan (June 2006), on BMPs implemented for reducing fecal coliform. Public Involvement
- 3. By July 2021, the results of the effectiveness monitoring will be reviewed by a technical advisory workgroup, and recommendations made to improve effectiveness of education and outreach campaign, and implementation of BMPs to achieve water quality goals.

Name of TMDL	WILSON CREEK SUB-BASIN
EPA Approved Document(s) for TMDL	Wilson Creek Sub-Basin Bacteria Total Maximum Daily Load (Water Cleanup Plan), Submittal Report, June 2005 Publication Number 05-10-041
Location of Original 303(d) Listings	Wilson Creek (WA-39-1020) PY59BF (inside city limits) Mercer Creek EY18WK Whiskey Creek SO19BM
Area Where TMDL Requirements Apply	City of Ellensburg
Parameter(s)	Fecal Coliform Bacteria
EPA Approval Date	TMDL – June 2005
MS4 Permittee	City of Ellensburg, Central Washington University

CITY OF ELLENSBURG

Actions Required

The City of Ellensburg, within the area under its jurisdiction, shall:

- 1. Implement the schedules and activities for Public Education and Outreach identified in S5.B.1. include the following:
 - a. A targeted education program for pet waste, including installing pet waste pick-up bags in city parks and/or on city property and/or open spaces where pets may be present.
 - b. Provide information to the general public about the relationship between feeding wildlife water fowl and fecal coliform bacteria in stormwater.

CENTRAL WASHINGTON UNIVERSITY

Action Required

Central Washington University, within the area under its jurisdiction, shall:

 Implement the schedules and activities for public education and outreach identified in S6.D.1.b.vii. Part of this program shall include installing pet waste pick-up bags on university owned spaces where people might walk their pets.

Name of TMDL	SPOKANE RIVER AND LAKE SPOKANE DISSOLVED OXYGEN TOTAL MAXIMUM DAILY LOAD
EPA Approved	Spokane River and Lake Spokane Dissolved Oxygen Total
Document(s) for	Maximum Daily Load Water Quality Improvement Report
TMDL	Revised February 2010
	Publication No. 07-10-073
Location of Original	Lake Spokane 40939
303(d) Listings	Spokane River 17523 (WA-54-1010)
	Spokane River 15188 (WA-54-1010)
	Spokane River 15187 (WA-54-1010)
	Spokane River 11400 (WA-57-1010)
	Spokane River 6373 (WA-54-1020)
Area Where TMDL	These requirements apply to areas served by MS4s owned or
Requirements Apply	operated by the Permittees within the TMDL coverage area.
Parameter(s)	Total Phosphorus, Ammonia, CBOD₅
MS4 Permittee:	City of Spokane WAR04-6505

CITY OF SPOKANE

Actions Required

The City of Spokane, within the area under its jurisdiction, shall:

- The City of Spokane shall continue to implement the Appendix 2 TMDL monitoring program that was developed during the August 1, 2014, to July 31, 2019, Eastern Washington Phase II Municipal Stormwater Permit cycle for the Cochrane Basin. Stormwater shall be monitored for phosphorus, ammonia, CBOD, and flow rates. Monitoring shall be conducted shall be conducted according to the Cochran Basin DO TMDL Stormwater Sampling Quality Assurance Project Plan (April 2016).
- 2. The City of Spokane shall continue to implement the monitoring program throughout the duration of the Eastern Washington Phase II Permit issued on August 1, 2019, and expires on July 31, 2024.
- 3. The results of the monitoring for each calendar year shall be entered into Ecology's EIM database by January 31st of the following year.

4. The City of Spokane shall evaluate and report the results of the monitoring program on an annual basis with respect the City of Spokane's share of the stormwater Waste Load Allocations in the TMDL.