

3 Regulatory Requirements and Planning Documents

3.1 Introduction

This chapter of the plan identifies compliance requirements for the Lake Whatcom Watershed under the NPDES and the Endangered Species Act (ESA) in the context of currently implemented Whatcom County programs, policies, and regulations in the Lake Whatcom Watershed.

With respect to NPDES requirements, Whatcom County is a required permittee under the Ecology NPDES Phase II permit. The City of Bellingham and the City of Ferndale are also NPDES Phase II permit holders. The urban portions of the Lake Whatcom Watershed are included in the County's permit because they are defined as an urban area by the U.S. Census Bureau. The urban portions of the watershed include the western end of the lake and the area around Sudden Valley.

Whatcom County is an NPDES Phase II permit holder and cannot transfer responsibility for permit compliance to another entity. Whatcom County is responsible for discharges to its stormwater system, including those stormwater inputs from Sudden Valley that enter the County's stormwater network. Whatcom County is not responsible for the maintenance of stormwater networks on private roadways, but is responsible for the quality of stormwater runoff that enters its system from those private roadways.

There are no ESA listings for the Lake Whatcom Watershed, as there is a natural blockage that prevents anadromous fish from reaching the lake. Therefore, the ESA is not a significant regulatory driver in Lake Whatcom, and analysis of ESA requirements is not included here.

This chapter describes the regulatory requirements of the current NPDES permit, presents a gap analysis with respect to the NPDES requirements, identifies State of Washington requirements, and makes recommendations for revising County regulations, ordinances, programs, and plans to address the requirements identified in the gap analysis.

3.2 Relevant Whatcom County Ordinances, Plans, Programs, and Standards

A number of relevant activities have been completed recently in Whatcom County, such as the adoption of the Critical Areas Ordinance (CAO) and WRIA 1 Watershed Management and Salmon Recovery plans. These and other Whatcom County ordinances, plans, programs, and standards have different levels of influence on stormwater management in Whatcom County and/or the Lake Whatcom Watershed. Following is a list of ordinances, plans, and programs with policies that affect stormwater management in Whatcom County:

- Whatcom County Comprehensive Plan (2005)
- Whatcom County Development Standards (2002)

- Design standards for roads and drainage
- Birch Bay Comprehensive Stormwater Plan (2006)
- Update to Parks and Recreation Open Space Plan (2006)
- Subdivision Ordinance, WCC Title 21
- Zoning Ordinance, WCC Title 20
- Stormwater Special District (WCC 20.80.636)
- Water Resource Special Management Area (WCC 20.80.735)
- Ecology NPDES Phase II Stormwater Regulations
- Whatcom County CAO, WCC Chapter 16.16 (2005)
- Update to County's Shoreline Management Program, WCC Title 23 (under way)
- WRIA 1 Watershed Management Project Plan
- WRIA 1 Salmon Recovery Plan
- Comprehensive Flood Hazard Management Plan
- River and Flood Repair and Maintenance Program
- Drayton Harbor Shellfish Closure Response Strategy
- Portage Bay Shellfish Closure Response Strategy
- Marine Resources Committee Annual Project List
- 6-Year Road Program

The County has also completed a number of studies and adopted plans specific to Lake Whatcom:

- Lake Whatcom Management Committee Goals (1992)
- Strategies for Lake Whatcom 1993-1995
- Interlocal agreement formalizing joint commitment including funding (1998)
- Lake Whatcom Management Plan (1999)
- Lake Whatcom 5-Year Program adopted (2000)
- Lake Whatcom Phase I Storm Water Project Report (2002)

As an example of the content of these plans, there were six goals for stormwater in the 1992 Lake Whatcom jointly adopted resolution:

1. Do not allow degradation from stormwater
2. Adopt stormwater standards
3. Control development density and location
4. Phase in a stormwater management program
5. Evaluate options to reduce impacts on water quality
6. Require maintenance

The Lake Whatcom Phase I Stormwater Project Report identified the following early actions:

- Provide maintenance and operations
- Correct culvert drainage problems

- Retrofit ditches with swales
- Retrofit outfalls
- Provide street sweeping
- Stabilize stream beds
- Monitor construction activities
- Purchase lakefront

The plans influence and provide guidance to development of a stormwater management program in the watershed. The ordinances and development standards control development and provide potential protection of the existing watershed environment (i.e., natural, social, and economic) with new development.

The Shoreline Master Program and the CAO regulate development of aquatic areas such as lakes, wetlands, streams, and marine waters. They require buffers from aquatic resources for new development. The Zoning Ordinance (WCC Title 20) also includes requirements for setbacks that protect aquatic resources. The CAO does not require use of low-impact development (LID) techniques but does allow some buffer reduction if LID is used where appropriate.

The Lake Whatcom watershed has been designated as a stormwater special district by the County Zoning Ordinance, WCC 20.80.635. The Zoning Ordinance requires use of stormwater BMPs in stormwater special districts. However, the stormwater special district requirements under WCC 20.80.636 do not specifically require the use of LID techniques. The special district provisions do require implementation of permanent stormwater BMPs, which could result in management measures that qualify as LID techniques. Because of this, new development in the watershed has not been required to maximize LID techniques. Development and adoption of a mandatory LID ordinance should be considered. Whatcom County may wish to use Ecology's NPDES Phase II Permit Minimum Requirement #5 as a means for evaluating LID techniques and performance. In addition, care should be taken to apply LID techniques appropriate for the project location. For instance, infiltration along steep slopes may not be appropriate.

Existing provisions of the Water Resource Special Management Area requirements that have not been applied within the watershed to date include "tree canopy area retention." Retention of existing trees on both public and private property is a key citizen concern.

Chapter 2 of the Whatcom County Development Standards (Whatcom County, 2002) covers stormwater management throughout Whatcom County. Section 221 of Chapter 2 covers the Stormwater Special District Standards that apply to the Lake Whatcom Watershed (as well as other areas). As this section is written, an applicant has the option of using either the same requirements that were in the 1996 Whatcom County Development Standards or the most recent version of Ecology's Stormwater Management Manual for Western Washington (2005). The 1996 Development Standards refer to the 1992 Ecology manual rather than to the updated 2005 Ecology manual. As this is written, applicants may opt for the lesser 1996 Development Standards when developing a comprehensive stormwater management plan for a new development or redevelopment covered by the standards.

For Whatcom County to meet the NPDES Phase II Stormwater permit conditions, the County should adopt development standards as stringent as the 2005 Ecology manual. Though Whatcom County PDS may already be using the 2005 Ecology manual within the Lake Whatcom watershed, the development standards should be updated to reflect this. Although the 2005

Ecology manual (or equivalent) is required only in NPDES Phase II areas, Whatcom County should use the 2005 Ecology manual as guidance for updating the Development Standards that would be applicable watershed-wide.

Stormwater design and design review require detailed technical knowledge and thorough analysis. There are many assumptions that must be checked. For example, a developer must estimate the size of future houses and amount of impervious surface on lots. This affects the size of the stormwater detention and treatment facilities. Over the years, the size of new homes has increased greatly, yet many developers still use old estimates with lower impervious areas. This means that stormwater facilities may be too small to provide the expected benefits.

The Road Standards chapter (Chapter 5) of the Whatcom County Development Standards (May 2004) includes provisions for road widths within Stormwater Special Districts. Section 505.U of these standards states that “developers shall work with design professionals to reduce stormwater runoff by presenting low-impact alternatives to the standard road design” and that “the County Engineer shall review low-impact alternatives to the standard road design ... as warranted to reduce stormwater runoff in the [stormwater] special district areas.” Drawings contained within the development standards show recommendations for road widths depending on average daily traffic volumes. Whatcom County should increase the implementation of reduced-width roadway designs by increasing implementation and enforcement of this requirement.

3.3 NPDES Phase II Regulatory Requirements and Gap Analysis

3.3.1 NPDES Phase II Requirements

The Western Washington Phase II Municipal Stormwater Permit was issued by Ecology on January 17, 2007, and became effective February 16, 2007. That permit was used for this regulatory gap analysis. The following paragraphs provide a brief summary of the key permit requirements and implications for the County and Lake Whatcom Watershed. The bulk of the permit requirements are listed in the first part of the permit, which includes the Special Conditions, S1 through S9 (designations used to identify the permit section descriptions below).

The permit will create significant costs to Whatcom County, particularly for the following:

- Maintenance
- Record-keeping
- Reporting
- Permit review, inspections, and enforcement
- Illicit control inventory, mapping, and inspections
- Staff training

The activities listed above are all necessary to achieve the goals adopted by Whatcom County for management of the Lake Whatcom Watershed.

3.3.1.1 S4. Compliance with Standards

This section of the permit states, “This permit does not authorize a violation of Washington State Surface Water Quality Standards.” Permittees must identify and implement measures to “reduce the discharge of pollutants to the maximum extent practicable (MEP). ... The permittee shall use

all known, available, and reasonable methods of prevention, control and treatment (AKART) to prevent and control pollution.” The Clean Water Act requires stormwater treatment by permittees to the MEP. Washington State law requires use of AKART. Ecology has determined that MEP is equivalent to AKART and that compliance with the 2005 Ecology Stormwater Management Manual for Western Washington is AKART.

Section S4.F. states that if the permittee becomes aware that a discharge is causing or contributing to a violation of water quality standards, the permittee must notify Ecology within 30 days. If Ecology determines that a discharge is contributing to a violation, Ecology shall notify the permittee and the permittee must submit a report that includes the following:

- A description of existing management measures
- A description of additional measure needed to prevent or reduce any pollutants causing or contributing to a violation
- A schedule for implementing the additional measures.

This provision has caused concern among some jurisdictions. Existing national data indicates that stormwater discharges frequently exceed water quality standards. The required response may be perceived as an open-ended requirement and compliance could be costly.

Section S4.G states that Ecology may revoke or amend the permit requirements if new information becomes available, such as new BMPs.

3.3.1.2 S5. Stormwater Management Program for Cities, Towns, and Counties

This section of the permit requires the permittee to develop and implement a written Stormwater Management Program (SWMP). The SWMP shall be designed to reduce the discharge of pollutants to the MEP using AKART. The SWMP shall include the following five requirements:

- Public education and outreach (including identification of a program, measurement of results, and measures to improve performance)
- Public involvement and participation (for development of the SWMP)
- Illicit discharge detection and elimination (including requirement for inventory, mapping, ongoing inspections, and adoption of ordinances to reduce or prohibit illicit discharges)
- Controlling runoff from new development, redevelopment, and construction sites (Adopt, inspect, and enforce the 2005 Ecology Stormwater Management Manual for Western Washington. This includes AKART for treatment and applies to redevelopment including roads. This requires sizing for detention to be based on forested pre-existing (i.e., pre-development) conditions in most cases.)
- Pollution prevention and operation and maintenance for municipal operations (Develop maintenance standards, annual inspections of each drainage facility except catch basins, which must be inspected once during the 5-year permit term.)

Each of these five NPDES Phase II requirements are described by a set of minimum performance measures outlined in the permit. The performance measures are addressed individually in this gap analysis for the Lake Whatcom Watershed. Table 3-1 at the end of this chapter contains additional detail on these requirements.

Section S5 of the permit requires the permittee to implement actions to comply with TMDL requirements.

The permittee must track all costs for each element and track all inspections and enforcement actions.

3.3.1.3 S7. Compliance with Total Maximum Daily Load Requirements

Ecology may modify the permit at any time to add requirements if a new TMDL is approved by the U.S. Environmental Protection Agency (EPA).

3.3.1.4 S8. Monitoring

The permittee must develop a plan for monitoring but is not required to perform monitoring within the 5-year term of the permit. The monitoring plan must address discharges and measurement of management practices. If the permittee obtains monitoring data, it must be reported to Ecology in an annual report.

3.3.1.5 S9. Reporting Requirements

Permittee must submit an annual report that includes the following elements:

- Copy of the SWMP
- Appendix 3 of the permit (a form that addresses the status of implementation, assessment of progress, description of activities, schedule and evaluation of the SWMP)

3.3.2 NPDES Phase II Gap Analysis

Table 3-1 contains an outline of the NPDES Phase II requirements and corresponding performance measures along with the county regulations, ordinances, programs, or plans and any Lake Whatcom Watershed programs or plans that address each performance measure. Table 3-1 also contains a listing of potential improvements to Whatcom County programs, plans, or policies that would address the identified gap.

3.4 Total Maximum Daily Load

Lake Whatcom has been listed on the State's 303(d) list for violations of the state's water quality standards. Parameters listed for Lake Whatcom include Dieldrin and PCBs from fish tissues and dissolved oxygen, mercury, and TP. This requires that the state establish TMDLs for each parameter and develop a water-cleanup plan that specifies actions required to reduce the pollutant loads. These efforts will focus on DO and fecal coliform bacteria in Silver Beach Creek and Austin Creek. The other parameters are undergoing further investigations.

Additional modeling being conducted by the University of Utah and Portland State University is anticipated to be available late in 2007, shortly after the completion of this plan. Further sampling is also being conducted to help pinpoint the specific locations and extent of the pollutant sources.

3.5 State of Washington Requirements and Gap Analysis

There are several other State of Washington requirements other than NPDES Phase II that address surface water management and/or stormwater. These include the Growth Management Act, Shorelines Management Act, State Environmental Policy Act (SEPA), the Puget Sound Water Quality Management Plan (Puget Sound Water Quality Action Team, 2000), and many others. The Growth Management Act, for example, requires the following:

- “(1) A land use element ... Where applicable, the land use element shall review drainage, flooding, and stormwater runoff in the area and nearby jurisdictions and provide guidance for corrective actions to mitigate or cleanse those discharges that pollute water of the state.”
- “(5) Rural element ... (c) Measures governing rural development. The rural element shall include measures that apply to rural development and protect the rural character of the area. ... (iv) Protecting critical areas ... and surface water and ground water resources ...” Section .030(15) states, “ ‘Rural character’ refers to the patterns of land use ... (g) That are consistent with the protection of natural surface water flows and ground water and surface water recharge and discharge areas.”

Compliance with the Phase II NPDES requirements will also achieve compliance with most of the other state regulations relevant to stormwater, as the NPDES Phase II requirements generally cover topics mentioned in these other documents, with at least one exception: the above language from the Growth Management Act would require retention of forest cover and limitations on impervious surfaces to provide “protection of natural surface water flows.” This is addressed in the requirements for forest retention in Whatcom County regulations that designate the Lake Whatcom Watershed as a Water Resource Special Management Area. A thorough gap analysis has not been conducted on all of the other State of Washington requirements as part of this Lake Whatcom Stormwater Plan.

3.6 Recommendations Based on Gap Analysis

Gaps were identified between regulatory requirements of the NPDES Phase II Permit, State of Washington requirements, and Whatcom County regulations, ordinances, programs, and plans. The following recommendations are made to meet requirements identified by the gap analysis:

- Update the Whatcom County Development Standards to contain requirements at least as stringent as the 2005 version of the Ecology Stormwater Management Manual as required in NPDES Phase II areas within the Lake Whatcom watershed.
- Conduct a survey of the average amount of impervious surface on new construction projects in the past 1 to 3 years in comparison to the impervious surface approved in the site plan for those projects. Require that new development applications use the results as an estimate for calculating stormwater hydrographs and sizing facilities, or limit impervious surface on individual lots through building permits to the amount of impervious surface identified in the original permit application for subdivision. Encourage smaller lot sizes and shared open space.
- Require the maximum potential infiltration on development sites. Require amended soils to increase infiltration and detention of stormwater. Require pervious pavement with suitable base materials for infiltration for walkways, patios, driveways, and residential streets.
- Enforce Chapter 5 Section 505 U of the Whatcom County Development Standards to reduce pavement widths on residential streets. Whatcom County should increase the implementation of reduced-width roadway designs by increasing implementation and enforcement of this requirement.
- Implement the same stormwater management program throughout the Lake Whatcom Watershed as is required in the designated urban areas by Ecology’s Phase II Municipal Stormwater Permit, to address the gaps outlined in Table 3-1. Table 3-1 contains a listing of sections in this plan with recommendations to address the various requirements of the NPDES Phase II permit.

TABLE 3-1. NPDES PHASE II REQUIREMENTS AND CORRESPONDING WHATCOM COUNTY REGULATIONS, PLANS, AND PROGRAMS

NPDES Phase II Requirements	Minimum Performance Measures Associated with NPDES Phase II Requirements	Applicable County Regulation or Program	Potential Improvement to Whatcom County Programs, Plans, or Policies	Sections in this Plan with Recommendations to Address This Requirement
<p>1. Public Education and Outreach</p> <p>[Education programs aimed at residents, businesses, industrials, elected officials, policy makers, planning staff, and other employees of the Permittee to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.]</p>	<p>a) Implement or participate in an education and outreach program targeting the following audiences:</p> <p>i. General Public</p> <p>General impacts of stormwater flows into surface waters</p> <p>Impacts from impervious surfaces</p> <p>Source control BMPs and environmental stewardship actions and opportunities in the areas of pet waste, vehicle maintenance, landscaping, and buffer</p> <p>ii. General public, businesses, including home-based and mobile businesses</p> <p>BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps, and other hazardous materials</p> <p>Impacts of illicit discharges and how to report them</p> <p>iii. Homeowners, landscapers and property managers</p> <p>Yard care techniques protective of water quality</p> <p>BMPs for use and storage of pesticides and fertilizers</p> <p>Low impact development techniques, including site design, pervious paving, retention of forests and mature trees</p> <p>Stormwater pond maintenance</p> <p>iv. Engineers, contractors, developers, review staff, and land use planners</p> <p>Technical standards for stormwater site and erosion control plans</p> <p>Low impact development techniques, including site design, pervious paving, retention of forests, and mature trees</p> <p>b) Implement or participate in an effort to measure understanding and adoption of the targeted behaviors among the targeted audiences. The resulting measurements shall be used to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors.</p> <p>c) Track and maintain records of public education and outreach activities.</p>	<p>Lake-Friendly Gardening Kit (Whatcom Co. Water Resources, Washington State University Whatcom County Cooperative Extension, Lake Whatcom Management Program), geared towards homeowners living in the Lake Whatcom watershed. http://lakewhatcom.wsu.edu/gardenkit/INDEX.HTML.</p> <p>WCC Chapter 16.32, establishing regulations for fertilizer application on residential lawns and public properties within the Lake Whatcom Watershed.</p> <p>Whatcom County Development Standards, dated August 1996, Chapter 2: Stormwater Management (revised September 11, 2002); Part 2, Temporary Erosion and Sediment Control; Part 3, Permanent Stormwater Management (Section 219, Technical Requirements).</p> <p>The public is involved in stewardship activities.</p> <p>The Whatcom County Water Resources Public Involvement and Education (PIE) program implements programs in watershed planning, management of Lake Whatcom, and recovery of endangered and threatened fish species. The PIE program produces a newsletter (i.e., Watershed News) about the WRIA 1 Watershed Management Project, a county-wide watershed planning effort.</p> <p>Whatcom County Health Department http://www3.doh.wa.gov/here/materials/CRA_Detail.aspx?ID=358</p> <p>WSU Cooperative Extension http://whatcomshellfish.wsu.edu/Drayton/</p>	<p>Additional education on natural yard care techniques, especially for homeowners, landscapers, and property managers.</p> <p>Reducing purchase of and properly storing, using, and disposing of automotive chemicals, hazardous cleaning supplies, and other hazardous materials; education and spill prevention efforts.</p> <p>Increasing involvement in environmental stewardship activities; reach out to children, students, adults, and visitors.</p> <p>See Chapter 6</p> <p>Develop ongoing program action.</p> <p>Develop ongoing program action.</p>	<p>7.41 Education</p> <p>7.41 Education</p> <p>7.4.8 Record-Keeping and Annual Reporting</p>
<p>2. Public Involvement and Participation</p> <p>[Ongoing opportunities for public involvement through advisory councils, watershed</p>	<p>a) Create opportunities for the public to participate in the decision-making process involving the development, implementation, and update of the Permittee's entire Stormwater Management Plan (SWMP). Each Permittee must develop and implement a process for consideration of public comments on their SWMP.</p>		<p>Implement public participation plan.</p>	<p>7.41 Education</p>

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committees, etc.]	b) Each Permittee must make their SWMP, the annual report required under S9.A, and all other submittals required by this Permit, available to the public.	Reports and plans are posted on the County web site. Follow links from county homepage: http://www.co.whatcom.wa.us .	Create opportunities for ongoing public involvement.	7.4.9 Watershed Keeper
<p>3. Illicit Discharge Detection and Elimination</p> <p>[Ongoing program to detect, remove, and prevent illicit connections, discharges, and improper disposal, including spills, into the municipal separate storm sewer system (MS4). Full implementation of an illicit discharge and elimination program.]</p>	<p>a) A storm sewer system map shall be developed no later than 4 years from the effective date of this permit. These maps should be periodically updated.</p> <p>b) Develop and implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illegal discharges, and/or dumping into the Permittee’s municipal separate storm sewer system to the maximum extent allowable under state and federal law.</p> <p>c) Develop and implement an ongoing program to detect and address non-stormwater discharges, spills, illicit connections and illegal dumping into the Permittee’s municipal separate storm sewer system.</p> <p>d) Permittees shall inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.</p> <p>e) Adopt and implement procedures for program evaluation and assessment, including the tracking number and type of spills or illicit discharges identified; inspections made; and any feedback received from public education efforts.</p>	<p>Whatcom County has finished inventorying drainage structures, such as culverts, catch basins, and manholes, using Global Positioning System (GPS). Inventory of the Lake Whatcom Watershed, as the highest priority, occurred first. There are 28 basins to inventory within Whatcom County. http://www.co.whatcom.wa.us/publicworks/maintenance/surface.jsp.</p> <p>Whatcom County is conducting an illicit discharge and elimination pilot project within the Lake Whatcom Watershed. The goal of this pilot project is to identify potential illicit discharges/locations and phosphorus “hotspots” in watershed sub-basins in order to focus source control or treatment measures.</p> <p>Public Works, Solid Waste Division, performs public education (brochures, classroom presentations, household newsletters [84,000 homes]), performs litter pickup for illegal dump cleanups, and organizes Adopt-a-Road programs; garbage pickup and disposal is contracted for the Lake Whatcom Watershed area; yard waste disposal is available for City of Bellingham residents (over 5,300 tons collected in 2004).</p> <p>Partially implemented in other Whatcom County watersheds.</p>	<p>Initial mapping complete for Lake Whatcom Watershed.</p> <p>Develop system to update inventory with new information on existing development and with as-built for new development.</p> <p>Inventory drainage outfalls discharging to Lake Whatcom</p> <p>Develop and implement.</p> <p>Develop and implement.</p> <p>Develop and disseminate.</p> <p>Develop and implement.</p>	<p>7.4.5 Inspections and Enforcement and 7.4.6 Illicit Detection and Elimination</p> <p>7.4.4 Maintenance and Operations</p> <p>7.4.5 Inspections and Enforcement and 7.4.6 Illicit Detection and Elimination</p> <p>7.41 Education</p> <p>7.4.8 Record-Keeping and Annual Reporting</p>

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	f) Provide appropriate training for municipal field staff on the identification and reporting of illicit discharges into MS4s.		Develop and implement.	7.41 Education
<p>4. Controlling Runoff from New Development, Redevelopment and Construction Sites [Develop, implement, and enforce a program to reduce pollutants in stormwater runoff to MS4 from new development, redevelopment, and construction site activities. This applies to all sites 1 acre or greater, including those projects less than 1 acre that are part of a larger projects and including roads.]</p>	<p>a) The program shall include an ordinance or other enforceable mechanism that addresses the runoff from new development, redevelopment, and construction site projects. AKART and 2005 Stormwater Management Manual for Western Washington or equivalent required.</p> <p>b) The program shall include a permitting process with plan review, inspection and enforcement capability to meet the standards listed for both private and public projects, using qualified personnel. At a minimum, this program shall be applied to all sites that disturb a land area 1 acre or greater, including projects less than 1 acre that are part of a larger common plan of the development or sale.</p>	<p>Whatcom County Development Standards, Chapter 2: Stormwater Management, dated August 1996, revised September 2002.</p> <p>WCC 20.80.635 designates the Lake Whatcom Watershed as a Stormwater Special District. WCC 20.80.636 requires the use of permanent onsite stormwater quantity and quality facilities on all lots less than 5 acres where new development or redevelopment increases impervious surfaces by 500 square feet or more.</p> <p>Whatcom County Development Standards, Chapter 2 Section 221: Stormwater Special District Standards, dated May 2002.</p> <p>WCC 20.80.735 designates the Lake Whatcom Watershed as a Water Resource Special Management Area. This requires enhanced erosion and sedimentation control.</p> <p>Whatcom County “watersheds” planners and inspectors conduct the review of private and public permits, conduct erosion and sedimentation control BMP inspections, conduct field education, and coordinate on enforcement actions, etc., within the regulatory Lake Whatcom Watershed.</p> <p>Inspection of water quality violations is provided by Ecology. County inspectors work closely with Ecology inspectors.</p> <p>County inspectors inspect BMPs at the start of a project, and periodic inspections occur until the project is complete. Correction notices are often issued and penalty assessments are issued as well.</p> <p>Existing Whatcom County code specifies 500 square feet for land disturbance in sensitive watersheds</p>	<p>Update Whatcom County Development Standards with requirements for NPDES Phase II areas at least as stringent as those requirements within the 2005 Ecology Stormwater Management Manual for Western Washington. <i>(Currently, Section 221 of Chapter 2 of the Development Standards allow the option, in certain cases, of using either the same requirements as in the 1996 Development Standards or the most recent version of the Ecology manual. However, the 1996 Development Standards refer to the 1992 Ecology manual.)</i></p> <p>Enhance the County inspection program with adequate staffing to reduce noncompliance with BMP requirements and water quality violations.</p>	<p>7.4.3 Regulations</p> <p>7.4.3 Regulations</p>

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	<p>c) The program shall include provisions to ensure adequate long-term M&O of post-construction stormwater facilities and BMPs that are permitted and constructed pursuant to (b) above.</p> <p>d) The program shall include a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained. Permittees shall keep records of all projects disturbing more than 1 acre, and all projects of any size that are part of a common plan of development or sale that is greater than 1 acre that are approved after the effective date of this permit.</p> <p>e) The program shall make available copies of the "Notice of Intent for Construction Activity" and/or copies of the "Notice of Intent for Industrial Activity" to representatives of proposed new development and redevelopment. Permittees will continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.</p> <p>f) The Permittee shall ensure that all staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques, or staffing. Permittees shall document and maintain records of the training provided and the staff trained.</p>	<p>Whatcom County Development Standards, dated September 2002; Chapter 2: Stormwater Management; Section 220: Maintenance of Stormwater Facilities.</p> <p>Site owners are required to inspect annually and maintain as appropriate. The County has no routine inspection program for maintenance. Residential facilities are unlikely to be maintained without formal County inspection program.</p> <p>A penalty for failing to maintain would require a complaint and demonstration that lack of maintenance of such a facility by the responsible party is in violation of a permit condition. In such cases, enforcement action may be pursued by the applicable County department/division (i.e., Public Works – Engineering). Penalties do not appear to be common occurrences.</p> <p>The County currently uses a permit tracking system to document inspections, enforcement actions, etc., associated with a permit action.</p> <p>In place.</p>	<p>Expand the County inspection program to ensure maintenance. Increase inspections and expand enforcement efforts.</p> <p>Enhance tracking and reporting function to ensure maintenance is conducted adequately.</p> <p>None.</p> <p>Develop and fund program.</p>	<p>7.4.4 Maintenance and Operations</p> <p>7.4.8 Record-Keeping and Annual Reporting</p> <p>Not included in this plan. This is implemented by the Planning and Development Services Department</p> <p>7.41 Education</p>

TABLE 3-1. NPDES PHASE II REQUIREMENTS AND CORRESPONDING WHATCOM COUNTY REGULATIONS, PLANS, AND PROGRAMS

NPDES Phase II Requirements	Minimum Performance Measures Associated with NPDES Phase II Requirements	Applicable County Regulation or Program	Potential Improvement to Whatcom County Programs, Plans, or Policies	Sections in this Plan with Recommendations to Address This Requirement
<p>5. Pollution Prevention and Operation and Maintenance for Municipal Operations</p> <p>[Develop and implement an M&O program that includes training and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.]</p>	<p>a) Adoption of maintenance standards that are as protective, or more protective, of facility function as those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.</p> <p>b) Annual Inspection of all municipally owned or operated permanent stormwater treatment and flow control facilities and appropriate maintenance actions in accordance with the adopted maintenance standards.</p> <p>c) Spot checks of potentially damaged permanent treatment and flow-control facilities (other than catch basins) after major storm events.</p> <p>d) Inspection of catch basins and inlets owned or operated by the Permittee at least once before the end of the permit term. Clean catch basins if the inspection indicates cleaning is needed to comply with maintenance standards established in the 2005 Stormwater Management Manual for Western Washington. Decant water shall be disposed of in accordance with Appendix 5 Street Waste Disposal.</p> <p>e) Compliance with the inspection requirements in a, b, c, and d above shall be determined by the presence of an established inspection program designed to inspect all sites and achieving inspection of 95 percent of all sites.</p> <p>f) Establishment and implementation of practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads, or highways owned or maintained by the Permittee, and road maintenance activities conducted by the Permittee.</p>	<p>Updating the M&O Surface Drainage Program occurs regularly for changes made by the National Marine Fisheries Service, Ecology, and WDFW on water quality and ESA issues.</p> <p>Other activities include checking drainage structures (ditches, culverts, catch basins, and manholes) to make sure that they are in good working condition. There are approximately 3,000 culverts in Whatcom County inventoried into the County Road Inventory System (CRIS), with many requiring cleaning, reset, or replacement. Replacement usually requires an upgrade in order to meet the standards of the WDFW fish passage program. Catch basins can also require replacement because of failure or being undersized (restricting flow), and many need annual maintenance for debris removal and cleaning.</p> <p>Not currently done.</p> <p>Activities include checking drainage structures (e.g., ditches, culverts, catch basins, and manholes) to make sure that they are in good working condition. There are approximately 3,000 culverts in Whatcom County inventoried into the CRIS, with many requiring cleaning, reset, or replacement. Replacement usually requires an upgrade in order to meet the standards of the WDFW fish passage program. Catch basins can also require replacement because of failure or being undersized (restricting flow), and many need annual maintenance for debris removal and cleaning.</p> <p>A program in Lake Whatcom Watershed has been initiated.</p>	<p>Develop and fund program.</p> <p>Fund and train appropriate staff to make inspections.</p> <p>Fund and train staff to inspect all facilities.</p> <p>Expand and fund program.</p>	<p>7.4.3 Regulations</p> <p>7.4.4 Maintenance and Operations</p> <p>7.4.4 Maintenance and Operations</p> <p>7.4.4 Maintenance and Operations</p> <p>-</p> <p>7.4.4 Maintenance and Operations</p>

