

## **WELCH ECOLOGICAL SERVICES, LLC**

1155 North State Street, #411. Bellingham, WA 98225

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(360)-303-1051

September 23, 2022

Mark Sandal  
Public Works Department  
Programs Manager  
City of Lynden  
300 4<sup>th</sup> Street  
Lynden, WA 98264

### **Scope of Work NPDES Phase II Stormwater Permit Compliance Support for the City of Lynden**

Welch Ecological Services, LLC has prepared this Scope of Work to provide compliance support to the City of Lynden for meeting the terms and conditions of its Western Washington Phase II Municipal Stormwater (NPDES) Permit requirements for calendar year 2023. Welch Ecological will work in conjunction with subconsultants Peak Sustainability Group (formerly Kulshan Services, LLC), and Worthen Consulting. Also, included in this scope of work is support for tasks related to grant funding opportunities and the industrial stormwater permits for the Lynden Municipal Airport and the Wastewater Treatment Plant.

#### **NPDES Phase II Permit Tasks:**

##### **Task 1: Provide support for continuing to develop a Municipal Stormwater Management Program**

Welch Ecological Services will provide support for continued development and implementation of the City of Lynden's municipal stormwater management program (SWMP). The SWMP shall include ongoing tasks for gathering, tracking, maintaining, and using information to evaluate the efficacy of the overall program. This scope outlines tasks associated with completing the requirements of the current permit effective August 1, 2019 through July 31, 2024. The 2023 tasks will remain focused on documenting development and implementation of program elements, annual reporting, and recordkeeping. Specifically, work will continue to support ongoing program elements and concentrate effort on the new requirements under all program elements, and in particular, completing a Stormwater Management Action Plan and implementing the Source Control for Existing Development program.

We will continue to revise cost tracking procedures. Training of staff on new LID code, IDDE, pollution source control, and O&M procedures will occur through stormwater committee meetings and crew safety meetings. Illicit Discharge Detection and Elimination Water quality hot spot trending response sampling will be undertaken. We will work with Whatcom Conservation District and the regional educational group to cover further development of social marketing strategies and effectiveness monitoring. On-call response and compliance documentation will also continue and the annual report and TMDL report will be submitted per Appendix 2 of the permit. We will support the City in meeting the monitoring and reporting requirements for

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the BC Avenue fecal sampling program and alert the City of due dates for notification of Status & Trends water quality monitoring option and Effectiveness & Source Identification studies options and associated pay-in due dates.

Additionally, we will continue participation in the North Sound NPDES Coordinators group where source control program development items are often on the agenda. We will work toward forming a Whatcom County regional group to address sharing lessons learned and resources will continue and particular emphasis will be on a regional approach to addressing pollutant generation from and inspection of mobile businesses. Staff training will be provided.

The following sections of this scope detail the tasks by permit element. This scope outlines two additional tasks: providing support for positioning the City for grant funding, and aiding the City on reporting requirements associated with their industrial stormwater permits (the Airport, and the Wastewater Treatment Plant).

### **Task 2: Provide support to the City on Stormwater Management Planning**

Support will be provided to the City on continued Stormwater Management Planning including coordination with other NPDES permittees. The main focus of this years' effort will be to document coordination with long-range planning efforts and complete the development of a Stormwater Management Action Plan (SMAP) per the new permit requirements.

#### *Coordinating with long-range plan updates*

Welch Ecological Services will summarize water quality and watershed protection policies, strategies, codes, and other measures to protect and improve local receiving water through planning efforts. We will report to Ecology on how planning efforts (Comprehensive Plan, Growth Management, transportation plans etc.) addressed water quality improvements and watershed protection assessments over both permit terms.

#### *Stormwater Management Action Plan (SMAP)*

This plan began with a study assessing the state of receiving waters within the City's jurisdiction, a watershed inventory of basin characteristics, and then presented a prioritized ranking of areas where receiving waters will benefit most from stormwater retrofits and management actions to reduce pollutant loading. The SMAP will summarize findings from the previous assessments and build upon program elements to develop a SMAP specific to the selected high priority sub-basin, #9 the Historic Business District. Using these background assessments, the goal is to develop a plan to address the following

- Identify specific stormwater management actions to protect water quality in the Historic Business District Sub-basin including:
  - a. *A description of the stormwater facility retrofits needed for the area, including the BMP types and preferred locations.*
- *Land management/development strategies identified for water quality management which includes a proposed implementation schedule and budget sources for:*
  - a. *Short-term actions (i.e., actions to be accomplished within six years), and*
  - b. *Long-term actions (i.e., actions to be accomplished within seven to 20 years).*

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- *A process and schedule to provide future assessment and feedback to improve the planning process and implementation of procedures or projects and employ adaptive management techniques.*

The final SMAP developed for the priority basin will be submitted by March 31, 2023 along with the Annual Report submission.

### **Task 3: Provide support to the City on Education and Outreach and Public Involvement**

Welch Ecological Services will continue to coordinate with Whatcom County and Whatcom Conservation District (WCD) on stormwater water quality issues. We will coordinate with WCD and provide oversight on their tasks developing the education and outreach arm of the Stormwater Management Program. This will include developing and launching new campaigns (such as behavior change monitoring, youth programs, and social marketing campaigns) as well as managing the overall extent of their efforts to ensure compliance with and timelines specified in the permit are met.

### **Task 4: Provide support to the City on Illicit Discharge Detection and Elimination**

Welch Ecological Services will provide the City with Illicit Discharge Detection and Elimination (IDDE) support for program implementation and additional program development including spill response documentation, outfall monitoring, hot spot trending response, tracing sources of illicit discharges, and building on the procedures for eliminating discharges and connections. This includes on-call response, follow up and documentation of spill reports and filing ERTS to Ecology or responding to ERTS referred from Ecology. The program to detect and identify non-stormwater discharges and illicit connections will continue to ensure that the efforts cover at a minimum of => 12% of the MS4 as required by the permit and field screening methods will be documented. We will continue to track the effectiveness of the septic to sewer program and work with the WCD on the Lynden Septic Smart Campaign.

All data collected on spills, illicit discharges, illicit connections will be recorded in Ecology's WQWebIDDE system. Staff training will continue and consultants will employ updated methods using the current IC/ID Ecology approved manual (Herrera and Aspect, 2020).

### **Task 5: Provide support to the City on Controlling Runoff from New Development, Redevelopment, and Construction Sites**

Welch Ecological Services will provide the City with support on runoff control code revisions to provide clearer regulatory mechanisms for legal authority to inspect stormwater facilities and include Appendix 10 of the 2019 NPDES Permit and review new development using procedures as documented in the most current version of Ecology's Stormwater Management Manual for Western Washington (2019). Documentation of the City procedures for site plan review and construction site inspections will continue. City runoff development standards and code revisions will be drafted to continue to encourage Low impact development (LID) techniques

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and barriers to its use will be identified. The Engineering Design and Development Standards will be updated as needed to reflect the current Ecology 2019 Stormwater Manual. Staff training will continue.

### **Task 6: Provide support to the City on Operations and Maintenance Stormwater Protocols**

Welch Ecological Services will provide support for implementing policies, protocols, and outlining good housekeeping procedures for municipal activities. Municipal O&M plan, maintenance standards and protocol review will address activities on land managed or maintained by the City including streets, parking lots, roads, highways, buildings, parks, open space, road right-of-ways, maintenance yards, and stormwater facilities. The public catchbasin inspection and cleaning and regulated private stormwater facility inspection programs will continue. Recordkeeping protocols will be re-visited to streamline the tracking of individual inspection and status thereof. Staff training on pollution prevention will be conducted. In addition, as part of the Business inspection program, we will continue to work with City staff to reduce stormwater impacts from City facilities including maintenance shops and Fire, Police and WWTP sites.

### **Task 7: Source Control Program for Existing Development**

Provide support for building, managing and implementing a Source Control Program for existing development. Welch Ecological Services will continue to develop, document, manage and implement the standard operating procedures of the newly developed pollutant source control program for existing development. This task was begun in 2022 and includes adopting an ordinance requiring the application of source control Best Management Practices (BMPs) for pollutant generating sources associated with existing land uses and tracking the evolution of the inventory. Part of the SOPs will address the evolving / shifting nature of the pared down inventory of businesses that meet the potential pollutant generator status including businesses closing, periods of inactivity, redevelopment under a new sector, information gleaned through windshield surveys etc. Ecology is well aware that the number of active pollutant-generating businesses is a moving target and gives flexibility but guidance on how to address this uncertainty. We have chosen to track changes on a site-by-site basis as information becomes available during the year and conduct an annual re-assessment of the inventory. The result of the re-assessment is to settle on the new count or number of businesses that will require inspections in 2024. A clear cutoff date will be set to allow for expectations and planning of each year's effort.

The City entered into an interlocal agreement with the Whatcom County Health Department to partner on business inspections as part of the Source Control Program. County Health is under contract with the Department Ecology to perform a Pollutant Prevention Assistance program in Whatcom County and has agreed to conduct source control inspections for a selected set of potential pollutant generating business within the City of Lynden. These inspections will be a component of the City's new program.

Educational and outreach materials will be compiled on a sector basis with specific source Control BMPs identified. Business Inspections will be conducted at a rate equal to 20% of current businesses listed as potential pollutant generating enterprises and 100% of complaints. The count of source control regulated businesses for 2023 is 290; 20% of which is 58 establishments that require inspections. We will coordinate with City Staff, County Health, and subconsultant inspectors to meet this target and continue code review and

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clarification of enforcement policy. Recordkeeping of the Business Inspection program will follow standard operating procedures. City staff will be trained on source control BMPs.

### **Other Tasks not related to the NPDES permit:**

#### **Task 8: Provide support for submitting application for Grant Funding**

Welch Ecological Services will provide support to position the City for grant funding and consultation as needed on existing grants and grant agreement negotiations. Documentation for quarterly reports will be completed as requested to meet the capacity grant reporting requirements.

#### **Task 9: Provide support to the City on the Industrial Stormwater permits for the Airport and Wastewater Treatment Plant**

*Subtask 9a:* Welch Ecological Services will provide the City support on the Airport Industrial Stormwater permit water quality monitoring and annual report submittal.

*Subtask 9b:* Welch Ecological Services will continue follow-up with the Wastewater Plant Superintendent to and work towards reporting water quality records per the Quality Assurance Project Plan (QAPP) addressing dissolved oxygen.

### **SCHEDULE**

Welch Ecological Services will begin work once we have authorization to proceed.

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### COST ESTIMATE

The cost for our proposed Scope of Services has been prepared based the following rates applicable from January 1, 2023 to December 31, 2023:

<u>Labor Category</u>	<u>Billable Rate per Hour</u>
Karen F. Welch, WES*	\$125.00
Reid Armstrong , PSG*	\$105.00
Carol Worthen, WC*	\$125.00

\*WES is Welch Ecological Services, LLC; PSG is Peak Sustainability Group (formerly Kulshan Services, LLC); WC is Worthen Consulting.

Following is a breakdown of fees by task and firm.

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## ESTIMATED FEES

Task #	Description of Scope	WES	PSG	CW	Task Total
<b>Task 1.</b>	Provide support for developing a Municipal Stormwater Program.	\$35,625	\$2,100	\$ -	\$37,725
<b>Task 2.</b>	Provide support on continued development of a Stormwater Management Planning efforts including coordination with long-range plans and stormwater management action plan (SMAP).	\$41,250	\$1,680	\$ -	\$42,930
<b>Task 3.</b>	Provide support for coordinating with Whatcom Conservation District on the Education and Outreach portion of the Stormwater Program.	\$4,500	\$1,680	\$ -	\$6,180
<b>Task 4.</b>	Provide support to the City on Illicit Discharge Detection and Elimination.	\$12,000	\$13,230	\$ -	\$25,230
<b>Task 5.</b>	Provide support on Controlling Runoff from New Development, Redevelopment, and Construction Sites.	\$4,500	\$ -	\$ -	\$4,500
<b>Task 6.</b>	Provide support to the City on Operations and Maintenance Protocols to reduce stormwater impacts.	\$12,000	\$4,725	\$ -	\$16,725
<b>Task 7.</b>	Provide support on the Source Control Program development, management, and implementation. Conduct inspections of 20% of identified pollutant generating businesses; 100% of complaints.	\$13,500	\$3,780	\$22,750	\$40,030
<b>Task 8.</b>	Provide support to the City to position for grant funding	\$2,000		\$ -	\$2,000
<b>Task 9.</b>	Industrial Stormwater Permit support				
	<b>Subtask 9a:</b> Provide support to the City on the industrial stormwater permit for the Airport	\$2,000		\$ -	\$2,000
	<b>Subtask 9b:</b> Provide support to the City on the industrial stormwater permit for the wastewater treatment plant	\$3,000		\$ -	\$3,000
<b>Expenses</b>	Lab Analyses				\$3,000
	Lodging				\$1,410
	18 trips to Lynden				\$ 600
<b>Total Budget</b>					<b>\$185,330</b>

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We will not exceed the total fee for this Scope of Work without prior authorization. If project requirements change or unforeseen conditions are encountered that will require services beyond the scope outlined above, we will bring these to your attention and seek approval for modification to the scope of services and budget as appropriate.

Please provide us with authorization to proceed by signing in the space provided below and returning a copy for our files. If any questions arise regarding this proposal, please do not hesitate to give me a call (360-303-1051) or send me an email ([karenfwelch@comcast.net](mailto:karenfwelch@comcast.net)) so that I can help clarify your questions.

Sincerely,

WELCH ECOLOGICAL SERVICES, LLC

AUTHORIZATION TO PROCEED



Karen F. Welch, MEM  
Principal Hydrologist

\_\_\_\_\_  
Client

Date: 9/23/2022

Date: