

## WELCH ECOLOGICAL SERVICES, LLC

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

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(360)-303-1051

October 26, 2023

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 2024. Welch Ecological will work in conjunction with subconsultant Peak Sustainability Group (formerly Kulshan Services, LLC). Also, included in this scope of work is support for tasks related to grant funding opportunities, the industrial stormwater permits for the Lynden Municipal Airport, and the discharge permit for the Wastewater Treatment Plant.

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

##### **Task 1: Provide support for continuing to develop and implement 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 through July 31, 2024, as well as the 2024 elements pursuant to the next permit issuance which will become effective August 1, 2024 and be authoritative through July 31, 2029. The 2024 tasks will primarily be to keep the developed programs ongoing at the appropriate level and evolving to include the new permit tasks that have been added. Our efforts will remain focused on translating the new permit requirements and laying the foundation for new elements. At the appropriate juncture, established programs have been and will continue to be delegated to City Staff for implementation with oversight by Welch Ecological Services.

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. 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. Additionally, we will continue participation in the North Sound NPDES

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Coordinators group where pertinent issues regarding the new permit issuance and requirements are often on the agenda.

Welch Ecological will draft the annual Stormwater Management Program report for submittal to Ecology by March 31, 2024. The City will be alerted of due dates for notification of Status & Trends water quality monitoring option and Effectiveness & Source Identification studies options and associated pay-in due dates.

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 permit at the Airport and discharge permit at 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 internal coordination with long-range planning efforts especially working with the Planning Department on stormwater elements in the update to the GMA required Comprehensive Plan. Efforts will also capture the state of the short-term actions identified in the Stormwater Management Action Plan (SMAP) for sub-basin #9, the Central Business District.

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

Welch Ecological Services will report to Ecology on how planning efforts (Comprehensive Plan, Growth Management, transportation plans etc.) addressed water quality improvements and watershed protection assessments.

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

Summary reports will document the status of implementation of the completed SMAP. Additional efforts will focus on laying the foundation for the future efforts in Stormwater Management Action Planning. Information will be compiled to inform the decision to either develop a new SMAP for a new selected high priority area or add specific action items, both short-term and long-term, to the existing SMAP for sub-basin #9.

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

Welch Ecological Services will coordinate with WCD and provide oversight on their tasks developing the education and outreach arm of the Stormwater Management Program. This will include continuing to monitor the efforts already begun and overseeing the development and launching of new campaigns (such as behavior change monitoring, youth programs, and social marketing campaigns, Don't Wait to Inflate). We will work with WCD on the new permit addition of property owners as a new target audience and the educational materials regarding new source control BMPs for PCBs. Welch Ecological will manage the overall extent of their efforts to ensure compliance with and that timelines specified in the permit are met. We will review and submit to Ecology a report on the evaluation and of Behavior Change campaign with the annual report submittal March 31, 2024.

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### **Task 4: Provide support to the City on Mapping and Documentation**

Welch Ecological Services will provide the City with guidance on new mapping and documentation requirements. We will work with City Staff to make sure mapping of required features are kept up to date. This will include delineating tributary conveyances to all known outfalls 24" or greater and characterizing land use. We will lay the foundation for new mapping requirements including mapping tributary basins to outfalls that have stormwater treatment and flow control BMPs/facilities owned or operated by the permittee. In addition, we will begin to evaluate methods for mapping tree canopy based on available, existing data as this will be required during the new permit term.

### **Task 5: 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. We will continue to coordinate with Whatcom County, Whatcom Clean Water Program Pollution Identification and Correction Field Staff Team, and Whatcom Conservation District (WCD) on stormwater water quality issues. This includes on-call response, follow up and documentation of spill reports and filing ERTS with 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 the specified level required by the permit and field screening methods will be documented. We will work on code revisions to address the new requirements for emergency firefighting activities and allowable discharges of external building washdown taking into account the new emphasis on PCBs in building materials.

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 6: 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 (and 2024 Permit once adopted). Permit and review new development using procedures as documented in the most current version of Ecology's Stormwater Management Manual for Western Washington (under review currently expected in 2024). City runoff development standards and code revisions will be drafted to continue to encourage Low impact development (LID) techniques and barriers to its use will be identified. The impact of the new permit language specific to roads/ pavement maintenance and underground utility project will be explored. The Engineering Design and Development Standards will be updated as needed to reflect the expected adoption of a new version of the Ecology Stormwater Manual. Staff training will continue.

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### **Task 7: Provide support to the City on Stormwater Management for Existing Development**

The Stormwater Management for Existing Development (SMED) element is a new permit feature. Welch Ecological Services will provide support for developing a program to control or reduce stormwater discharges to waters of the State from areas of existing development. Work will be started to help prioritize the pathway that the City should take to meet the requirement to implement stormwater facility retrofits. Several options will be assessed including implementing strategic stormwater investments identified in the SMAP or identifying opportunistic stormwater investments by leveraging projects outside of the SMAP. A plan will be developed over the next few years to meet the permit assigned “level of effort” as defined as an equivalent acreage of improvements (determined as a function of population). Funding sources and scheduling specifics will be determined over the next few years.

### **Task 8: Source Control Program for Existing Development**

Welch Ecological Services will provide continued support for implementing the Source Control Program for existing development. We will work with City Staff to continue to develop, document, manage, and implement the standard operating procedures of the program. The first step will be to continue to filter and update the business inventory. The result of the re-assessment will be to settle on the new count or number of businesses that will require inspections in 2024. 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 City entered into an interlocal agreement with the Whatcom County Health and Community Services 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 continue to be a component of the City’s program.

We will coordinate with City Staff and County Health to meet this target and continue code review and clarification of enforcement policy. We will work with other Whatcom County entities to address regional issues and share resources and lessons learned with particular emphasis on a regional approach to addressing pollutant generation from and inspection of mobile businesses. Recordkeeping of the Business Inspection program will be a priority. City staff will be trained and certified on source control inspection methods and BMPs.

### **Task 9: 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. The 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. We will develop protocol to address the new permit focus on roads and PCBs in building materials. The public

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catch basin inspection and cleaning and regulated private stormwater facility inspection programs will continue to be implemented by City Staff with oversight from Welch Ecological Service to ensure that all permit required target dates and deliverables are met. 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.

The Enhanced Maintenance Plan will be finalized and revised to ensure Ecology's approval. Purchase of a new Sweeper Truck will occur and the new enhanced street sweeping program will be launched. Metrics will be tracked, documented and assessed so that adaptive management can occur as needed per the adopted Enhanced Maintenance Plan. Progress reports will be drafted to meet the grant stipulated deliverables.

### **Task 10: Compliance with Total Maximum Daily Load Requirements**

Welch Ecological Services will provide support on meeting the following specific TMDL requirements set for Lynden in Appendix 2 of the 2019 Phase II Permit:

- 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.

We will support the City in meeting the monitoring and reporting requirements for the BC Avenue fecal sampling program through the end of the current permit term (BC Avenue fecal sampling will likely not be required once the new permit becomes effective). The stormwater capital improvement plan will be updated annually to fulfill the additional Appendix 2 requirement.

The new 2024 permit, if adopted as proposed, will have a different set of requirements for TMDL compliance. The new requirements ask for increased efforts under other program elements: Business Inspections, Education & Outreach, Operations and Maintenance, and IDDE. A TMDL report will accompany the Annual Report submittal to Ecology.

### **Other Tasks not related to the Municipal Stormwater permit:**

#### **Task 11: Provide support for submitting applications 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 and Enhanced Maintenance/Sweeper Plan Grant.

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**Task 12: Provide support to the City on the Industrial Stormwater permit for the Airport and NPDES Discharge permit for the Wastewater Treatment Plant**

*Subtask 12a:* Welch Ecological Services will provide the City support on the Airport Industrial Stormwater permit water quality monitoring and annual report submittal.

*Subtask 12b:* Welch Ecological Services will continue follow-up with the Wastewater Plant Superintendent should questions or revisions arise on the submitted Nooksack River Dissolved Oxygen study.

**SCHEDULE**

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

**COST ESTIMATE**

The cost for our proposed Scope of Services has been prepared based the following rates applicable from January 1, 2024 to December 31, 2024:

<u>Labor Category</u>	<u>Billable Rate per Hour</u>
Karen F. Welch, WES*	\$130.00
Reid Armstrong , PSG*	\$105.00

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

The following Table provides a breakdown of fees by task and firm.

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### ESTIMATED FEES

Task #	Description of Scope	WES	PSG	Task Total
Task 1.	Provide support for continuing development and implementation of a Municipal Stormwater Program	\$ 37,310	\$ 2,100	\$ 39,410
Task 2.	Provide support on continued development of a Stormwater Management Planning efforts	\$ 14,300	\$ 1,155	\$ 15,455
Task 3.	Provide support for coordinating with Whatcom Conservation District on the Education and Outreach portion of the Stormwater Program.	\$ 4,810	\$ 2,100	\$ 6,910
Task 4.	Provide support on Mapping and documentation requirements.	\$ 12,610	\$ 1,260	\$ 13,870
Task 5.	Provide support to the City on Illicit Discharge Detection and Elimination	\$ 12,480	\$ 13,020	\$ 25,500
Task 6.	Provide support on Controlling Runoff from New Development, Redevelopment, and Construction Sites.	\$ 4,680	\$ -	\$ 4,680
Task 7.	New Element Provide support on Stormwater Management for Existing Development (SMED)	\$ 6,240	\$ -	\$ 6,240
Task 8.	Provide support on the Source Control/Business Inspection Program development and implementation	\$ 4,680	\$ -	\$ 4,680
Task 9.	Provide support to the City on Operations and Maintenance Protocols to reduce stormwater impacts	\$ 12,480	\$ 4,725	\$ 17,205
Task 10.	Provide support on Compliance with TMDL	\$ 10,140	\$ -	\$ 10,140
Task 11.	Provide support to the City to position for grant funding	\$ 2,080	\$ -	\$ 2,080
Task 12.	Non Municipal Permit Support - Industrial Stormwater and Discharge permits	\$ 2,080	\$ -	\$ 2,080
	<b>Subtask 12a</b> : Provide support to the City on the industrial stormwater permit for the Airport	\$ 2,340	\$ -	\$ 2,340
	<b>Subtask 12b</b> : Provide support to the City on the NPDES discharge permit for the wastewater treatment plant	\$ 1,040	\$ -	\$ 1,040
Expenses	Lab Analyses			\$ 3,000
	Mileage Round Trip to Lynden			\$ 1,510
			<b>Total</b>	
			<b>Budget</b>	<b>\$ 156,140</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: 10/23/2023

Date: