

# Survey and Data Request

Draft 10/2/15

Ecology (RSMP) Effectiveness Studies  
Stormwater Source Control Data Assessment  
City of Lakewood and Cardno consultants

## INTRODUCTION

The City of Lakewood and Cardno consultants are undertaking a stormwater source control data assessment as an effectiveness study of the Ecology Regional Stormwater Monitoring Program (RSMP). The objective of the assessment is to provide information that can help jurisdictions improve their environmental inspection programs at businesses and on private property. The data analysis design is based on analysis of existing data from municipal inspections that include evaluation of stormwater source control activities and related BMPs.

In order to perform the data assessment, we are requesting relevant data from NPDES Municipal permittees. This document provides the details of the data request and includes a few brief survey questions to help us better understand each jurisdiction's data and inspection programs.

## EFFECTIVENESS QUESTIONS

A list of prioritized effectiveness questions was developed by Ecology, local jurisdictions, and other stakeholders involved with managing stormwater in western Washington. This data assessment is seeking to provide informed answers to these questions, which are the basis of the project proposal and scope of work. The effectiveness questions to be addressed during this phase of the project are as follows.

Final Source Control Effectiveness Questions	
1.	What is the optimum frequency of inspections to maintain the functionality of stormwater treatment and control facilities and ensure the proper use of source control BMPs at businesses?
2.	Which is more effective for specific high value BMPs: focusing on the property owners or focusing on the business owners, or a combination of the two? a. Target both structural and operational BMP types, and situations where a business owner is and is not cooperative and willing.
3.	Which required BMPs were implemented based upon follow up inspection? Which optional BMPs were installed based upon follow up inspection?
4.	What were the primary barriers to not adopting or installing BMPs?
5.	Address the connection between in-person visits and source control BMPs; identify situations where technical assistance and/or follow-up inspections are needed to ensure BMPs are implemented. a. Gather data about percent compliance. Partner with LSC to do this study.

An additional question related to combining source control inspection efforts was also prioritized for the source control effectiveness study. That question will be addressed during a later phase of the project that will seek to develop a combined inspection framework.

**DATA REQUEST**

We are requesting data from environmental inspections performed by NPDES municipal permittees in western Washington at businesses and on commercial properties. Specifically, we are seeking data about stormwater source control efforts and stormwater BMPs from all sizes and types of businesses inspected as part of municipal inspections. Data are also being requested from the Ecology Local Source Control (LSC) program and the non-governmental organization, Environmental Coalition of South Seattle (ECOSS) since both of those entities focus on business inspections or visits that include pollution prevention assistance, BMP evaluation, and environmental awareness and education.

Also, if your jurisdiction has done any data analysis or summary of your own data on questions of inspection frequency and BMP usage, please share this with us. Whether published or just for internal purposes, existing assessments of business inspection data would be valuable references for this effort.

We anticipate the following plan for the data request with the intention of minimizing municipal staff time and limiting the data requested to known variables.

- Step 1. Review the attached Excel file that contains a list of potential variables and indicate which ones are available from your jurisdiction and in what form those data are available.
- Step 2. Please complete the survey on the following pages.
- Step 3. Send the Excel file and survey back to us and we will review it to determine which variables we will request from you and if we need further clarification for particular variables.
- Step 4. We will follow-up this initial request with a specific data request customized to each jurisdiction's available data sources and variables.

**SURVEY – Answer for each applicable municipal inspection program in your jurisdiction with distinct data sources.**

1. Indicate yes or no for program types and sources of available data.

Program Data Source	Data Availability	
	Yes	No
Environmental/stormwater/maintenance inspection		
Hazardous material/waste management inspection		
Local Source Control (Ecology)		
Moderate Risk Waste program		
Envirostars/Incentive inspection		
Health/restaurant inspection		
Fire/Safety inspection		
<i>other:</i>		
<i>other:</i>		

2. Check all ways in which your data are stored. Check all that apply and use copies of this page for more than 2 programs. Please specify what database is used if you check *other*.

Data Storage Mode	Program:	Program:
Databases:		
Excel		
Access		
<i>other:</i>		
Paper files		
Scanned files saved as .pdf or similar non-editable format		
<i>other:</i>		

3. Please briefly describe how data are organized. For example, are data records arranged so that the business is one row and every inspection or interaction with that business is in columns associated with that row? Or perhaps do the rows represent inspections and the columns have data on the business and the results of the inspection? For data in relational databases or retrieved by queries, please briefly describe the format of data tables and relevant queries. If possible, please provide a sample page from your data source(s) that have some of the same variables as on the attached Excel list.

4. Please briefly describe the different types of inspections that contribute data to your jurisdiction's data sources for stormwater source control.

Inspection Type	Program(s)	Description
Screening		
Initial		
Follow-up		
Emergency/Spill Response		
<i>other:</i>		
<i>other:</i>		
<i>other:</i>		

5. Please describe your jurisdiction's definition of "compliance" in the context of stormwater source control activities and BMPs at businesses and on commercial properties.
6. Please describe how follow-up inspections are linked to specific issues related to compliance? For example, what percentage of out-of-compliance businesses receive follow-up inspections? Is there a set follow-up inspection schedule or expected number of follow-ups planned each year?
7. Rank the relative importance of the following elements in your business inspection program (1 = most important, 5 = least important). The same ranking can be used for more than one program element, and not all ranks (1 through 5) need to be used.

<b>Program Element</b>	<b>Rank (1 high, 5 low)</b>
Educational	
Public Outreach	
Annual Inspection Target	
Technical Assistance	
Compliance	
<i>other:</i>	
<i>other:</i>	

8. Has your jurisdiction (any program) done any data analysis on your own data that may be relevant to the effectiveness questions that will be addressed in this data assessment? If so, please describe. Are digital copies available of the data analysis results and associated reports?
9. Provide any other comments or suggestions for improving the data analysis for this effectiveness study.

VARIABLES LIST FOR STORMWATER SOURCE CONTROL DATA ASSESSMENT  
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VARIABLES/DATA FIELDS	DATA TYPE				POTENTIAL VALUES	AVAILABLE (Check all that apply)
	QUANTITATIVE	CATEGORICAL	DESCRIPTIVE	CALCULATED		
Jurisdiction		x				
<b>INSPECTION TYPE OR FREQUENCY</b>						
Type of inspection		x	x		initial, followup, spill, complaint, referral	
Initial inspection date		x				
Follow-up inspection date		x				
Date of follow-up activity (non-inspection)		x				
Frequency of initial inspection	x			x		
Frequency of follow-up inspection	x			x		
other						
<b>COMPLIANCE</b>						
Date of compliance		x				
Date of non-compliance		x				
Compliance status		x			in/out	
Reason for inspection			x		routine, annual, spill	
Definition of compliance			x		BMPs and AKART	
Number of inspections to achieve compliance	x			x		
other						
<b>BMPs</b>						
BMP type		x			source control, treatment, storage	
BMP value (function or treatment)		x			runoff, water quality, hazardous material, cleanup	
BMP name		x				
BMP size/volume	x					
Level of BMP evaluation			x		screening, functionality check, maintenance	
Operational/structural BMP		x			operational, structural	
High value BMP?		x			Yes, No	
BMP required/optional		x			Required, Optional	
Inspection that BMP is associated with			x			
other						
<b>BARRIERS</b>						
Technical assistance offered?		x			Yes, No	
Barriers to BMP implementation		x	x			
other						
<b>BUSINESS INFORMATION</b>						
Business name (DBA)			x			
Primary NAICS #		x				
Primary NAICS description		x				
Primary SIC #		x				
Primary SIC description		x				
Role of contact at business		x			business owner, business manager, property owner, other	
Generator status		x			SQG, MQG, LQG	
Individual discharge permit?		x			Yes, No	
Cooperation level of business		x			Cooperative, non-cooperative	
Risk level of business activity	x					
High risk business activity		x			Yes, No	
Non-English primary language			x			
Multiple tenant business?		x			Yes, No	
other						
<b>OTHER</b>						