

**DATE** JULY 26, 2017

**TO** JENÉE COLTON, KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS

**FROM** DIANA HASEGAN, PE, ENV SP, OSBORN CONSULTING, INC.

**SUBJECT** WESTERN WASHINGTON CATCH BASIN STUDY – FINAL SURVEY RESULTS TECHNICAL MEMORANDUM

## INTRODUCTION

This memorandum presents the methods and results of the survey soliciting information from all Phase I and II Western Washington municipal permittees regarding catch basin (CB) inspection and maintenance effectiveness. The survey was prepared and distributed to jurisdictions by the project team and Technical Advisory Committee (TAC). The receipt and evaluation of the surveys and solicited information as well as interviews with jurisdictions were completed by Osborn Consulting, Inc. (OCI) under contract to Cardno, Inc.

This project is funded through the Regional Stormwater Monitoring Program (RSMP)<sup>1</sup> as part of the Effectiveness Studies Component (S8.C). The municipal Stormwater permit in Washington State requires permittees to inspect and maintain catch basins under their jurisdiction on a regular basis. For Phase I permittees, the default inspection frequency is annual. For Phase II permittees the frequency ranges from two to five years. Since the permit allows for an alternative schedule with demonstration that maintenance is needed less frequently, this study aims to extract important information related to the cleaning threshold that would help permittees direct limited inspection and maintenance resources to provide the greatest environmental benefit.

Therefore, this study was designed to evaluate the existing records for CB inspection and maintenance to identify correlating factors that could be used to predict CB maintenance needs and to examine the program designs among Western Washington jurisdictions to identify cost efficiencies in program implementation. OCI has been tasked with receiving, evaluating, and compiling the data from jurisdictions for use by the project team to perform the study. This memorandum is intended to record the results of the survey and data request and summarize the responses received. The jurisdictions included in the project database have been selected based on the quantity and quality of the data received.

## SURVEY AND DATA REQUEST

The first task included the preparation of a survey soliciting information from all 127 Phase I and Phase II Western Washington permittees (including secondary permittees) receipt of solicited information, and interviews for obtaining program design and cost information. A short online survey was sent to each Phase I and Phase II jurisdiction about their catch basin programs. The online survey included twelve questions. The survey questions were divided into four groups focusing on the definition, inspection methods, data collection, and cost. Questions 1-3 asked about which permit schedule for routine CB

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<sup>1</sup> RSMP is changing their name to Stormwater Action Monitoring (SAM) in 2017.

inspection and maintenance was used by the jurisdictions and how the jurisdiction defined their catch basins. Questions 4-6 asked about how the jurisdictions performed their catch basin inspections and how they determined when a catch basin needed to be cleaned. Questions 7-9 inquired about the methods employed to record their inspection and maintenance data. The last three questions asked for information about the costs associated with the catch basin inspection and maintenance requirements, and requested copies of the field inspection form and the Standard Operating Procedures (SOP) for its catch basin program. A copy of the survey questions is included in **Attachment A**.

Along with the request to complete the survey, a request for catch basin inspection and maintenance records was also issued. The data request asked only for existing records that do not require new data collection or analysis efforts. The specific data fields being requested and their definition are included in **Attachment A**.

## **SURVEY RESPONSE RATE**

A total of 127 survey requests were sent to Washington State Department of Transportation (WSDOT), Phase I (including secondary permittees), and Phase II permittees in the Western Washington region. The survey was completed by 49 jurisdictions<sup>2</sup>, including WSDOT, five Phase I permittees (and five secondary permittees), and 39 Phase II jurisdictions. This represents a 39-percent response rate to the survey request. Among the jurisdictions that completed the survey, WSDOT, four of the Phase I jurisdictions, and 23 of the Phase II jurisdictions submitted data. Pierce County submitted data but did not respond to the survey. King County has multiple agencies responsible for implementing portions of the municipal stormwater permit which differ in their catch basin inspection and maintenance program design<sup>3</sup>. Seven of these agencies responded to the survey but are counted only once in the above statistics. Four of the seven agencies also submitted data. For informational purposes, the survey results of these custodial agencies are incorporated into the following survey results summary. **Attachment B** provides an unprocessed download of the survey responses and all the data received from permittees.

## **SURVEY RESULTS SUMMARY**

The survey questions and responses are summarized in the section below and more detailed tables and figures are provided in **Attachment C**. **Table C-1** provides a summary of all the jurisdictions that submitted survey and/or data. These jurisdictions are shown on a map in **Figure C-1**. The total responsive count (Phase I and II permittees plus secondary permittees and King County's custodial agencies) for the surveys was 54. The total responsive count for data submittals was 34.

## **CATCH BASIN INSPECTION SCHEDULE**

**Question 1: Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.**

Inspection schedules vary between Phase I and Phase II permittees, and jurisdictions can select from multiple permit schedule choices for their catch basin program.

Phase I permittees can choose from one or more of the following programs:

- Standard approach – to inspect all CBs and inlet annually.

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<sup>2</sup> Five secondary permittees (schools and ports) are included in this total.

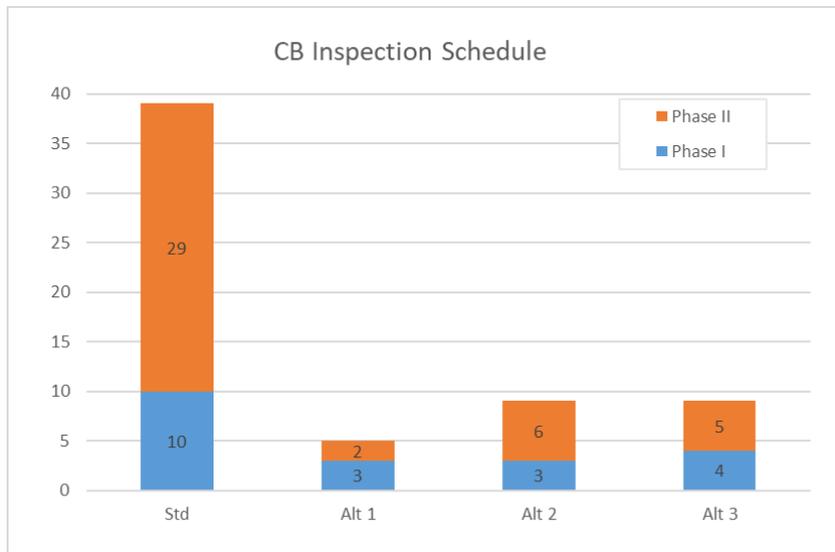
<sup>3</sup> King County calls these custodial agencies.

- Alternative 1 – to inspect all CBs more or less frequently than annually to meet maintenance standards based on at least two years of CB inspection records.
- Alternative 2 – to inspect all CBs annually on a “circuit basis,” whereby 25-percent of CBs and inlets within each circuit are inspected to identify maintenance needs.
- Alternative 3 – to clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term.

Phase II permittees can choose from one or more of the following programs:

- Standard approach – to inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter.
- Alternative 1 – to inspect all CBs more or less frequently than every two years to meet maintenance standards based on at least four years of CB inspection records.
- Alternative 2 – inspect all CBs once by 8/1/17 and every two years thereafter on a “circuit basis,” whereby 25-percent of CBs and inlets within each circuit are inspected to identify maintenance needs.
- Alternative 3 – clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term.

Distributions of catch basin inspection schedules are presented in **Figure 1**. Of the 54 survey respondents, about 70-percent of jurisdictions used the standard approach. Approximately 17-percent of the jurisdictions used either Alternative 2 or Alternative 3, and only 9-percent of jurisdictions used Alternative 1 for routine catch basin inspection and maintenance.



**Figure 1: Catch Basin Inspection Schedule**

## CATCH BASIN DEFINITION

**Question 2: What is your jurisdiction’s working definition of a CB? King County has adopted Washington State DOT’s definition for a catch basin of a 12” minimum sump depth. What differentiates a catch basin from an inlet in your jurisdiction?**

From the 54 responders, a plurality (about 44-percent or 24 jurisdictions) used the same catch basin definition as WSDOT. Two jurisdictions (Port of Seattle and City of Bellingham) defined their catch basins

with a minimum of 6 inches, and one jurisdiction (City of Battle Ground) defined its catch basins with a minimum of 18 inches. Eight jurisdictions defined a catch basin as a structure with a sump of any kind, and 11 jurisdictions did not have a clear definition of a catch basin. Six jurisdictions defined their catch basins with criteria other than the sump depth.

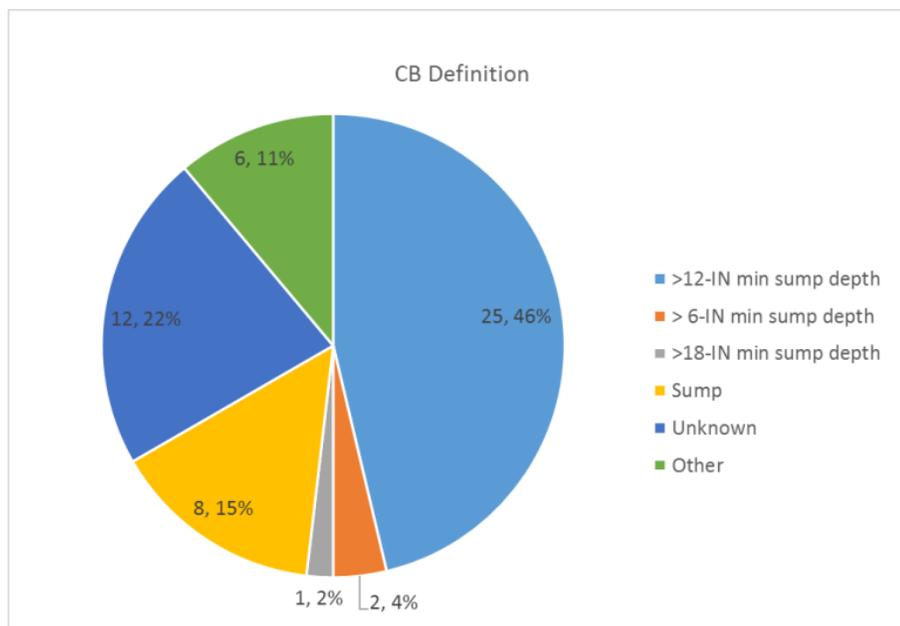


Figure 2: Catch Basin Definitions Distribution

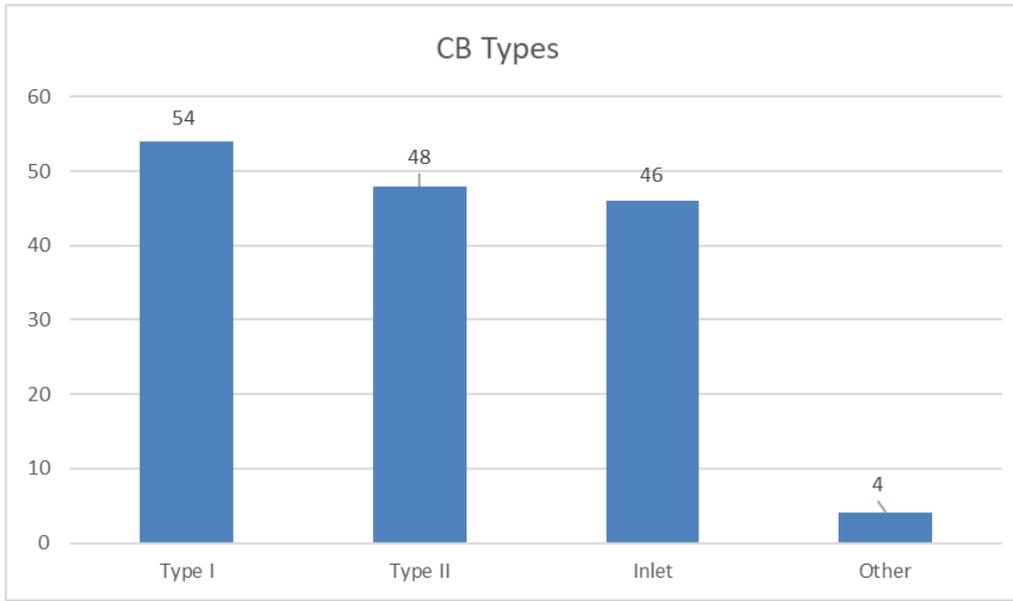
### CATCH BASIN TYPES

**Question 3: What types of catch basins are in your jurisdiction? There are multiple types of CBs and varying definitions in the industry. We have included definitions below based on King County road standards (<http://kingcounty.gov/depts/transportation/roads/road - standards.aspx>). However, if these don't apply in your jurisdiction, please check "Other" and describe CB types that are included in your jurisdiction's CB inspection and maintenance program.**

All respondents used Type I catch basins that are defined as inline or feeder structures for surface drainage with a grated lid that is typically square or rectangular. The underground concrete structure is typically square or rectangular. The catch basin may include a sump or may contain a riser outflow pipe in lieu of, or in addition to, a sump. The Type I catch basin is intended to collect runoff both directly from surface flow and via inflow pipe(s) to the catch basin.

Approximately 89-percent of the respondents used Type II CBs, which are defined as an inline structure for surface drainage with a round lid. Sometimes these structures are referred to as a manhole or maintenance hole and may have a lockable lid. The underground concrete structure is typically round and may include a sump. These structures are typically deeper than a Type I CB and include a ladder for access. They are also intended to collect runoff via inflow pipe(s) to the CB only, but not via direct surface runoff. Approximately 85-percent of the respondents used inlets that are defined as feeder structures for surface drainage. Their underground concrete structure is rectangular and typically includes a shallow sump. They are also intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another catch basin, manhole, or ditch. Approximately 7-percent of the respondents used other types of structures such as dry wells and bottomless structures.

Figure 3 summarizes the distribution of catch basin types among the respondents to the survey.

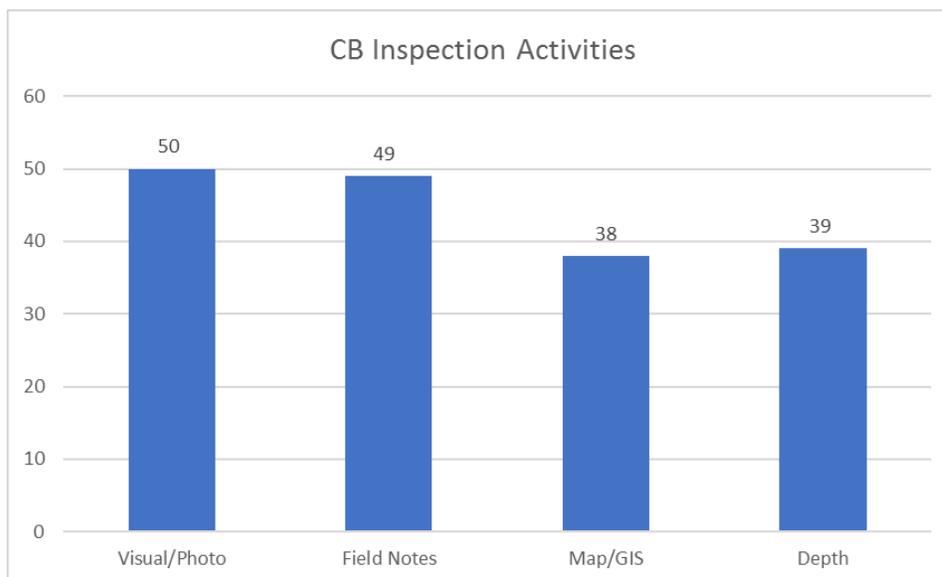


**Figure 3: Catch Basin Types Bar Chart**

### CATCH BASIN INSPECTION ACTIVITIES

**Question 4: Which activities may be included in a catch basin inspection your jurisdiction? Check any that apply.**

As shown in **Figure 4**, most of the respondents used multiple types of activities for tracking catch basin inspections. The most common inspection activities among respondents were visual/photo inspections and field notes. About 70-percent of the respondents also used Geographic Information Systems (GIS), and 72-percent of jurisdictions measured the depth of accumulated solid in the catch basin with equipment such as sediment rod probes, tape measures and markings on vector tubes.



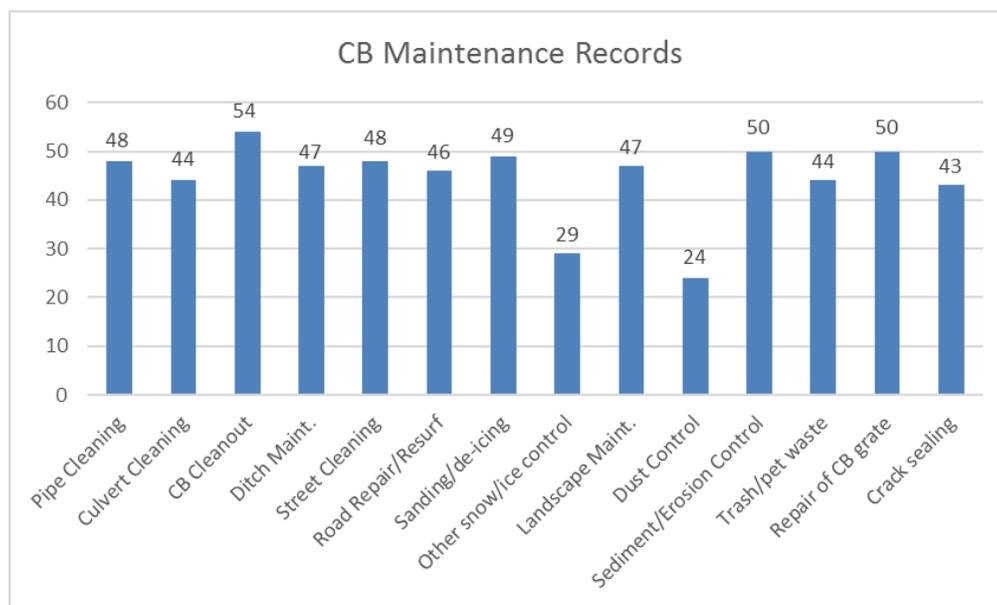
**Figure 4: Catch Basin Inspection Activities Bar Chart**

## CATCH BASIN MAINTENANCE ACTIVITIES

**Question 5: What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.**

As shown in **Figure 5**, respondents performed many different types of road and catch basin maintenance activities. Some key findings from Question 5 include:

- All of the jurisdictions used catch basin cleanout as one of their catch basin maintenance activities.
- 93-percent of the jurisdictions perform sediment/erosion control activities and repair of catch basin grates.
- The least performed road and catch basin maintenance activities were snow/ice control and dust control.



**Figure 5: Catch Basin Maintenance Record Bar Chart**

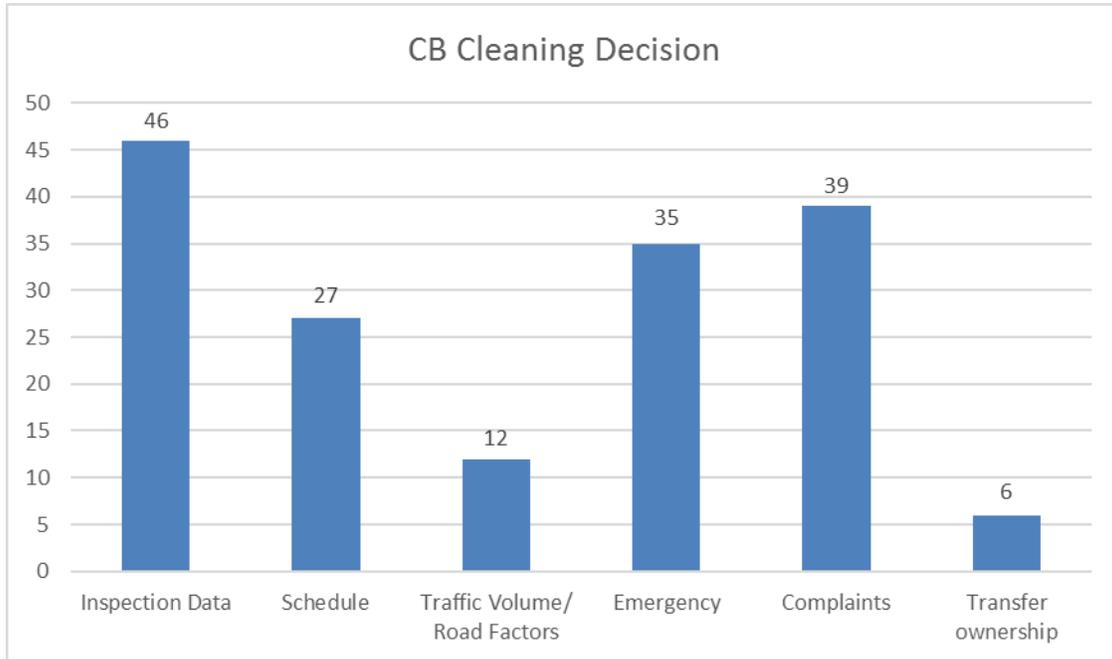
## CATCH BASIN CLEANING DECISION

**Question 6: How does your jurisdiction determine if a catch basin needs to be cleaned out? Check any that apply.**

**Figure 6** summarizes responses to the Question 6, regarding the basis of the cleaning decision. Some key findings from this question include:

- 85-percent of the respondents decided to perform catch basin cleaning based on the inspection data.
- Approximately 70-percent of respondents perform catch basin cleaning to respond to citizen complaints or occurrence of an emergency such as flooding or combined sewer overflow (CSO) event.
- About half of the respondents perform catch basin maintenance based on a schedule.

- About 20-percent of the respondents incorporate traffic volumes or other road use factors in their decision to clean the catch basins.
- Only 10-percent of respondents clean catch basins at the time of transfer of ownership.



**Figure 6: Catch Basin Cleaning Decision**

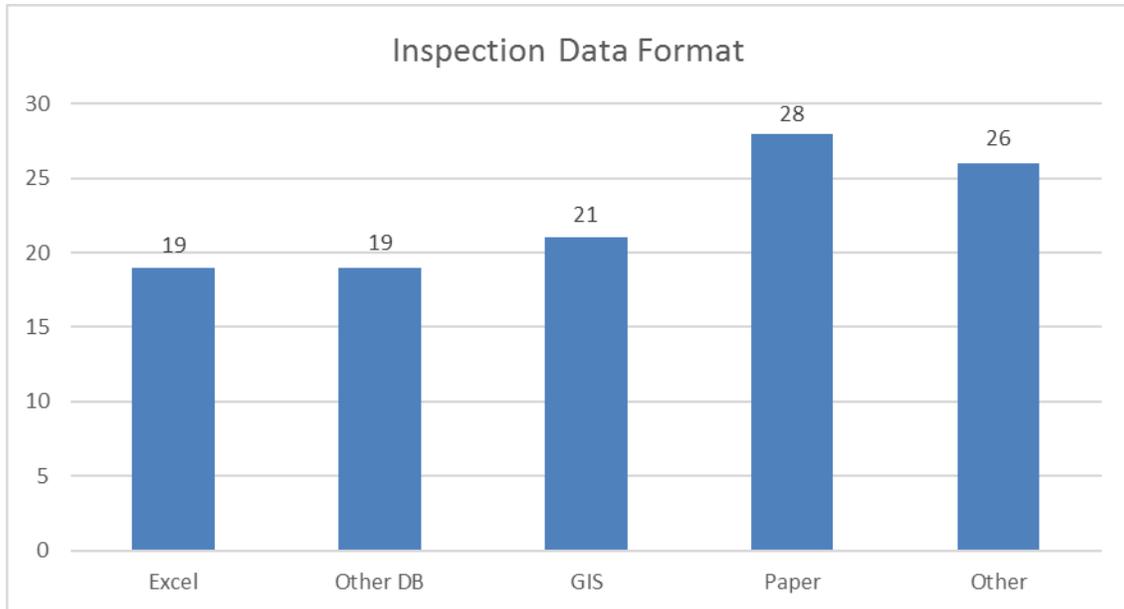
## INSPECTION AND MAINTENANCE DATA FORMATS

**Question 7: What type of records do you keep for CB inspection and maintenance? Check all that apply in the available format.**

Question 7 focused on the format in which inspection and maintenance records and costs are being documented. Jurisdictions may keep these records in multiple formats. While there are a lot of similarities between inspection and maintenance, and some jurisdictions perform these two activities concomitantly, the responses show that there is a difference between the tracking of inspection versus maintenance activities. Questions 8 and 9 inquired about the format of the GIS data available regarding catch basin structures and inspection and maintenance activities.

**Figure 7** summarizes the responses to Question 7, regarding the format in which jurisdictions keep records of inspections performed. Key findings from the responses include:

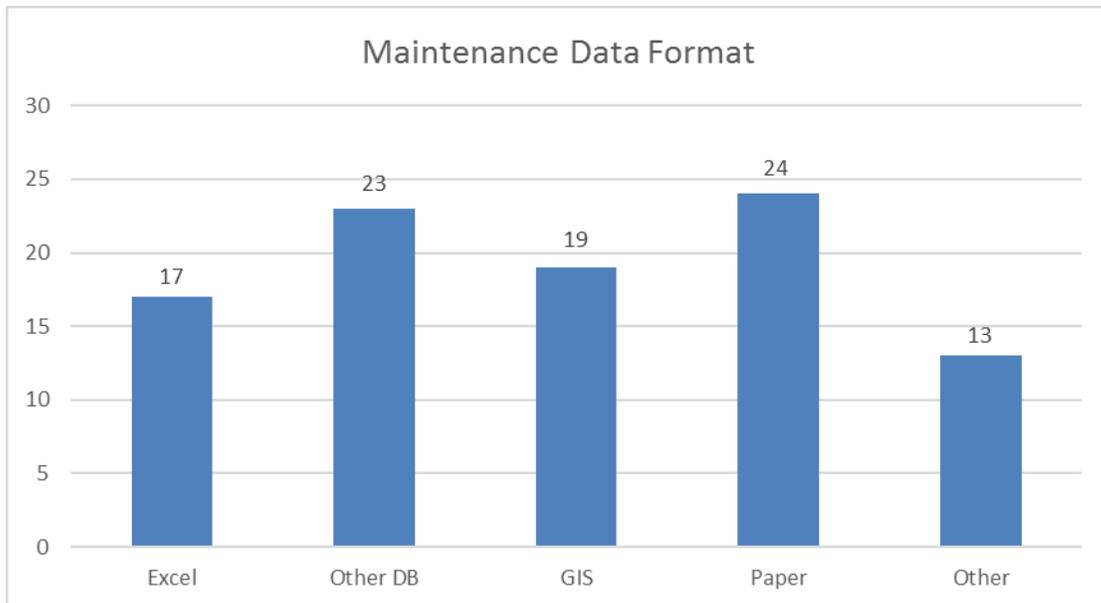
- Most of the respondents (52-percent) use paper records to track their catch basin inspection data.
- About 40-percent use GIS to track catch basin inspection data.
- Only about 35-percent of respondents use Microsoft Excel or another database such as Maximo, Mainsaver, or Microsoft Access.



**Figure 7: Catch Basin Inspection Data Format**

**Figure 8** summarizes the responses to question 7 regarding the format in which jurisdictions keep records of maintenance performed. Key findings from the responses include:

- 45-percent of respondents use paper to track their maintenance data inspection data.
- Approximately half of jurisdictions (44%) use other database formats to keep maintenance data such as Maximo, Mainsaver, or Access.
- 35-percent of respondents use GIS to keep maintenance data.
- 32-percent of jurisdictions used Microsoft Excel to store maintenance data.

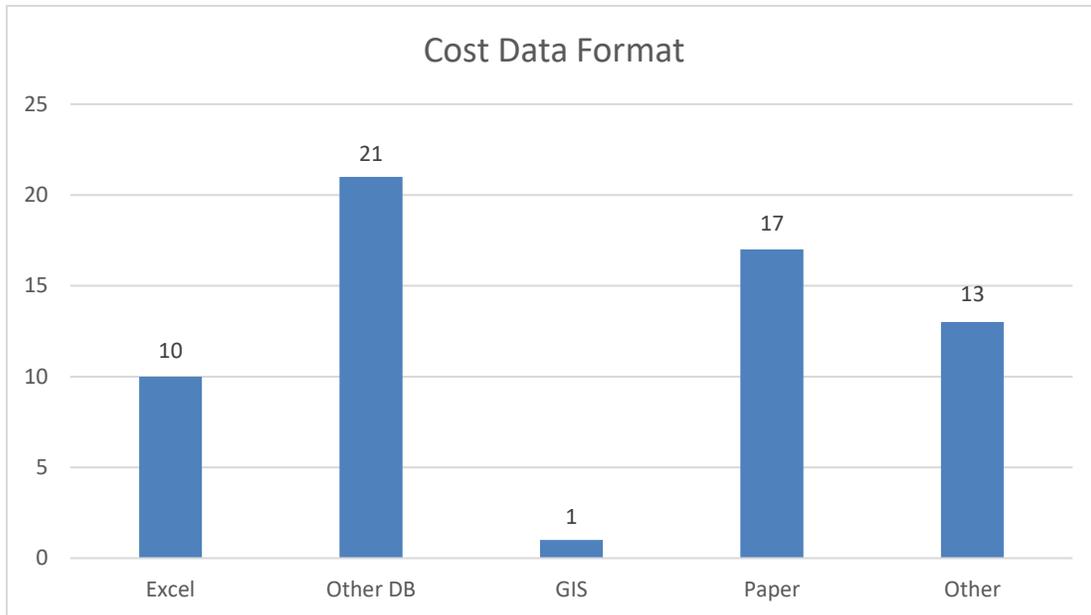


**Figure 8: Catch Basin Maintenance Data Format Bar Chart**

## COST DATA FORMAT

**Figure 9** summarizes the responses to question 7 regarding cost data. Key findings about cost data format include:

- About 40-percent of jurisdictions kept their cost data using other databases such as Maximo, Mainsaver, or Access.
- 31-percent of respondents keep their cost data on paper.
- 19-percent of respondents keep their cost data in Microsoft Excel.
- Only one respondent reported using GIS to track cost data.



**Figure 9: Catch Basin Cost Data Format**

Questions 10 focused on cost information for inspection and maintenance activities, questions 11 and 12 inquired about field inspection forms and standard operating procedures, while question 13 was a catch-all for additional information and feedback. Refer to **Table C-2** for more details.

- **Question 10: Please provide the cost of your program for CB inspections and maintenance (not including disposal) on an annual basis or by average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.**
- **Question 11: If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.**
- **Question 12: If available, please send your jurisdiction's Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.**
- **Question 13: Do you have any questions, comments or feedback about this survey?**

## INTERVIEWS

After data submissions were received and evaluated, follow-up interviews with participating permittees were performed to clarify accurate data interpretation and/ or program design and implementation methods. In addition, permittees were asked to report any cost-efficiencies in program design and implementation methods they had learned through their own program experience. From the data provided by the jurisdictions, five key questions were evaluated to determine if a follow-up interview was needed:

- Did the jurisdiction provide catch basin locations (coordinates or GIS data)?
- Did the jurisdiction provide inspection dates and inspection results such as sediment depth or percent full?
- Did the jurisdiction provide catch basin maintenance dates?
- Did the jurisdiction provide SOP information for field inspection and maintenance?
- Did the jurisdiction provide cost information for its catch basin program?

If any of the questions above were answered negatively, an interview was recommended with the jurisdiction. The list of jurisdictions recommended for interview was discussed with the project team and a refined list was developed. The jurisdictions were divided into four priority levels for interviews based on the potential for additional valuable data:

- Level 1 priority were those jurisdictions that either indicated on the survey they might have valuable data in GIS and/or Excel but did not submit the data or submitted data, but key fields were missing (i.e. inspection dates or catch basin details).
- Level 2 priority were those jurisdictions that may have available inspection data or catch basin details, but it wasn't clear from the survey on the level of detail they had.
- Level 3 priority were those jurisdictions that did not submit cost or standard operating procedures for their catch basin inspection and cleaning, but indicated on the survey they were intending to submit these data.
- Level 4 priority were those jurisdictions that the team had knowledge of good data being collected, but which had not uploaded the data to the study.
- The remaining jurisdiction either submitted data of insufficient quality, quantity, or did not submit data at all.

These jurisdictions and the results of the interviews to date are summarized in **Table C-3**. Data submittals follow-up questions and clarifications were requested from 24 of the jurisdictions. Seven of these jurisdictions were also contacted through phone interviews.

## **DATABASE MAPPING AND DATA COMPLETENESS**

The data submitted by jurisdictions were first screened for availability of catch basin details including locations (coordinates or GIS), inspection details and maintenance details. Only thirteen jurisdictions had submitted all three types of data:

- City of Auburn
- City of Battle Ground
- City of Everett
- City of Kent
- City of Kirkland
- City of Poulsbo
- City of Puyallup
- City of Seattle - Seattle Public Utilities
- City of Tacoma
- City of Tumwater
- Port of Seattle
- King County Roads Division
- Washington State Department of Transportation.

The data from these thirteen jurisdictions were then mapped to the fields requested by the project team. **Attachment D** provides a field-by-field assessment of the data provided and whether missing data were critical (Primary Type of Field) or noncritical. The table distinguishes between the fields that contained information and those that were empty. Jurisdictions with missing critical data were contacted to try to fill in the data gaps. Eight out of the thirteen jurisdictions were identified as providing all the critical information needed uploaded into the database. The five jurisdictions that were not carried forward were either missing cleaning records or had combined inspection and maintenance records that only recorded whether the catch basin was inspected without distinguishing whether it needed to be cleaned or not.

The jurisdictions that were processed further and imported into the project database are:

- City of Everett;
- City of Kent;
- City of Kirkland;
- City of Seattle - Seattle Public Utilities;
- City of Tacoma;
- City of Tumwater;
- King County Roads Division;
- Washington State Department of Transportation.

King County provided a template database which was used to create the project database. Catch basin inspection and maintenance records were standardized to use the same units of measurement and the fields were mapped to those planned for use in the project database. Assumptions and notes for each import are captured in a summary page included in **Attachment D**.

Data qualifiers were added into the database to account for data quality issues that may need to be further investigated or handled during the data analysis stage of this work. The following codes were used for the data qualifiers:

- P – the calculated Percent Fill field resulted in a number greater than 100%.<sup>4</sup>
- M – Percent Fill on inspection table, or Sediment Depth on Catch Basin table is not filled in because critical information was missing.<sup>5</sup>
- K – for King County data only, used for older King County data (2011-2014), which doesn't have asset IDs (will need assignment by King County during data analysis prep)<sup>6</sup>
- A – for Kent data only, when 60% fill was assumed.<sup>7</sup>
- S – sump depth equal to zero.<sup>8</sup>

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<sup>4</sup> Percent fill is defined as the percent of total sump depth filled with sediment. The field was computed based on sediment depth and sump depth. Data input errors, unit errors or incorrect sump depths could be reasons for these erroneous fields.

<sup>5</sup> Percent fill field was computed based on sediment depth and sump depth. If either of these values were not available from the jurisdiction, the data was qualified with this letter.

<sup>6</sup> King County used a different AssetID system between 2011-2014 and did not provide matching catch basin details.

<sup>7</sup> City of Kent does not record percent fill in their catch basins and therefore an assumed value of 60% was used for those catch basins that required cleaning.

<sup>8</sup> Sump depth in the data provided was filled in with a value of zero. Data with a blank in the sump depth field were not qualified with this letter.

**Table 1** below summarizes the inspection and maintenance data imported into the project database and **Attachment E** includes the project database file.

<b>TABLE 1: Summary of Imported Data</b>					
<b>Jurisdiction</b>	<b>Catch Basin Records Imported</b>	<b>Inspection Records Imported</b>	<b>Maintenance Records Imported</b>	<b>Years of Inspection Data</b>	<b>Years of Maintenance Data</b>
<b>WSDOT</b>	12,480	15,337	575	2000, 2007-2009, 2011-2017	2008, 2012-2016
<b>King County<sup>9</sup></b>	36,553	16,231	3,583	2011-2015	2011-2017
<b>Seattle - SPU</b>	35,438	246,689	69,972	2008-2016	2008-2016
<b>Tacoma</b>	20,020	38,649	21,500	2001-2003, 2013-2017	2012, 2014-2017
<b>Everett</b>	16,449	23,463	9,246	2010-2017	2010-2017
<b>Kent</b>	16,309	30,613	18,777	2010-2017	2007-2017
<b>Kirkland</b>	469	209	152	2014-2017	2007-2017
<b>Tumwater</b>	3,207	3,131	137	2014-2017	2008-2017

## **LIST OF ATTACHMENTS**

Attachment A: Blank Survey and Request Documents

Attachment B: Unprocessed Survey Results and Data

Attachment C: Survey Results Summary

Attachment D: Database Information

Attachment E: Database Files

<sup>9</sup> Asset IDs resolution for an older data set still needs to be completed by King County. Data were incorporated in the inspection and maintenance records, but are not linked to any catch basin records.

# ATTACHMENT A

## BLANK SURVEY AND REQUEST DOCUMENTS

RSMP LOGO (under

January 16, 2017

To: NPDES Municipal Stormwater Permittees  
Through: Cami Apfelbeck, Stormwater Work Group Chair  
From: Brandi Lubliner, Regional Stormwater Monitoring Program Coordinator

### **Regional Stormwater Monitoring Program (RSMP) Effectiveness Study**

By participating in the RSMP you meet your NPDES municipal stormwater permit S8 Monitoring and Assessment requirements. The S8.C Effectiveness Studies component is the largest RSMP component. There are ten studies underway that were identified by you and your colleagues in 2014. The Stormwater Work Group's Pooled Resources Oversight Committee oversees the RSMP and manages your funds to conduct these relevant and important studies for stormwater management.

The Western Washington Catch Basin Cleaning Effectiveness Study was voted #1 of the ten studies in 2014. The goal is to learn the most effective inspection and maintenance schedule for costs, asset protection, and environmental benefit. This study will inform the follow permit sections: Phase I Special Conditions S5.C.9.a & S5.C.9.d, and Phase II Special Conditions S5.C.5.a & S5.C.5.d. You can expect a request for data in the next month.

Your data is critical to this effort. There is no other way to advance a regional understanding of stormwater management without your participation.

All RSMP projects' goals identify ways to increase efficiency, reduce costs, and make recommendations for effective stormwater management strategies. These recommendations are the feedback mechanism for stormwater managers and policy development. Only two of the ten studies require data from permittees; you have already seen the request from the business inspection source control effectiveness study which was voted #3 in 2014.

In order to ensure that your funds are spent well, we strongly encourage you to participate and provide your data for the catch basin cleaning effectiveness study as explained in the attached memo. These studies you are paying for will only be as good as the regional data you and your fellow permittees supply. We recognize pulling this data together will take some staff time. The data request has been designed to minimize your time and gather relevant information determined by the project's technical advisory team.

Please pass this request on to the right staff person in your organization.

Thank you for your time!

Brandi Lubliner, RSMP Coordinator, and this project's team:

Jenée Colton, King County  
Luanne Coachman, King County  
Blair Scott, King County  
Angela Gallardo, Kitsap County  
Laura Haren, City of Kent  
Grant Moen, City of Everett  
Kate Rhoads, City of Seattle

# Survey and Data Request of Municipal Catch Basin Maintenance Programs

Submittal Deadline: February 6, 2017

Western Washington Catch Basin Inspection and Maintenance Effectiveness Study

## PROJECT GOALS

The western Washington catch basin inspection and maintenance project (the Project) is an effectiveness study of the Regional Stormwater Monitoring Program (RSMP). The Project is intended to gather and evaluate existing records for catch basin (CB) inspection and maintenance. The goals of the Project are to identify factors that could be used to predict CB maintenance needs (informing permit language about schedule) and to examine inspection and maintenance (I&M) programs among western Washington municipal NPDES permittees to identify cost efficiencies in program implementation. A report will be prepared from the results and shared among participants that identifies ways to increase efficiency and reduce costs.

The effectiveness question the Project seeks to address is:

How can CB program data be used to inform individual inspection frequency needs for permit compliance?

The Project objectives are:

1. Identify trends and/or correlations in CB I&M data that support proposals of alternative inspection schedules to Ecology;
2. Develop an electronic database of available CB I&M data for Western Washington;
3. Identify transferable cost-efficiencies in the design and implementation of the CB I&M programs; and
4. Recommend a list of standard data that should be collected to inform future assessments of sediment accumulation rates.

For reference, project documents and deliverables can be found on the RSMP website:

<http://www.ecy.wa.gov/programs/wq/stormwater/municipal/rsmp/effective.html>. A link to the project scope can be found under the O&M tab and deliverables will be posted under each task as completed.

## WHAT WE NEED FROM YOU

### 1. Complete a short 11-question online survey – submit by January 30

A short online survey is provided to inform us on what type of information is available about your jurisdiction's CB program. Please submit your survey by January 30. Click on this link to take the survey: [Online survey link](#)

Please note that every time you click on the link it will take you to a new version of the survey and you will need to start over. Survey data are not saved until you hit the 'submit' button on the last page. Submit the survey before leaving the webpage (even if you have not finished). You can click the 'edit your response' link at the end to return to the survey that you started and edit or complete your responses. Once you are in 'edit' mode, you can save the link in your browser to return to your survey without having to start over.

### 2. CB inspection and maintenance data records, including program costs – submit by February 6.

After receiving your jurisdiction's completed survey, the project team will send you a link to upload your data records of catch basin inspection and maintenance. This project relies on available CB inspection and maintenance program information from across the region. We are only requesting that you provide existing records. No new data collection or analysis efforts are needed. The specific data fields being requested and their definitions are listed below. You may not have everything we request, but any information in this list will be helpful. If you don't have data exactly as described, please include similar data. If in doubt, including more data than what we request is better than including less.

Follow-up calls and interviews will be conducted with some permittees to fill in data gaps and to better understand their CB programs. The goal is to obtain datasets that can be analyzed across jurisdictions, so completeness of the dataset, the time period, and covering a variety of jurisdiction sizes and diversity in CB maintenance programs are key elements. Success of the study relies on your and others' participation. The most useful product will be derived from data contributed by many permittees.

### **DATA TRANSFER INSTRUCTIONS**

The project team is asking all western Washington municipal NPDES stormwater permittees to please send us your CB inspection and maintenance data after completing the survey. We will send a drop location to the contact listed in your survey and would like to receive your data by February 6, 2016.

Your records are requested for the categories listed in the table below, as available. Please include GIS metadata, data dictionaries, and descriptions of each data layer if available. If providing a GIS contact for your agency is easier, we are happy to receive this and follow up.

The survey asks for e-mail addresses for anyone you would like to have access to the upload site. We will send instructions and a link to the upload site to the provided e-mail addresses. Each entity will be provided a unique upload login so that your data will remain secure. Please do not email files to us due to size limits for file attachments.

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### **QUICK REFERENCE**

What is needed:

- Survey (11 questions)
- Information
  - CB inspection and maintenance records since 2007 (see attached table)
  - Limited GIS layers

When:

- Survey: by Jan. 30
  - Data Records: by February 6
-

## Western Washington Catch Basin Inspection and Maintenance Effectiveness Study

### DATA FIELDS & DEFINITIONS

CATEGORY	FIELD NAME	DATA TYPE	FIELD DEFINITION
CATCH BASIN INFORMATION	Type of CB	text	Type I, Type II, inlet, other
	Sump in CB?	Y/N	Is there a sump in the catch basin that collects settleable solids?
	Sump size	number	How large is the sump (volume)?
	CB identification	text/number	Unique ID for structure
	Invert elevation	ft	ft above mean sea level of lowest outflowing pipe from structure
	Rim elevation	ft	ft above mean sea level of rim of structure (typically ground elevation)
	Bottom of sump elevation	ft	ft above mean sea level of bottom of CB sump
	CB location coordinates	latitude/longitude	lat/long of structure, in decimal degrees
	CB location, street	address	closest address to structure
CB installation date	date	date of original installation of structure	
INSPECTION INFORMATION	Inspection dates	date	Date of inspection and associated CB identification
	CB Inspection measurements collected	number	Sediment depth to sump or % full
	CB status from inspection	text	Record of inspection outcome (e.g., Pass/fail, >50%, >60%, however recorded)
MAINTENANCE INFORMATION	Maintenance dates	date	dates of maintenance activities by CB, starting 2007
	Maintenance Activity	text	briefly describe maintenance activity by CB for associated date
	Maintenance cost	\$\$	dollar cost of maintenance
DRAINAGE BASIN	Contributing area	ha	hectares of contributing surface runoff area to structure
	Groundwater contribution	text	if known, briefly describe groundwater contribution to drainage area
	Pipe diameter_inflow	ft	diameter of influent pipe to CBs
	Pipe slope_inflow	%	slope of influent pipe of CBs
	Pipe diameter_outflow	ft	diameter of effluent pipe from CB
	Pipe slope_outflow	%	slope of effluent pipe of CBs
	Land Use percentage 1	%	primary land use of drainage area, percent of drainage area (approximate estimate ok)
Land Use percentage 2	%	secondary land use of drainage area, percent of drainage area (approximate estimate ok)	

<b>CATEGORY</b>	<b>FIELD NAME</b>	<b>DATA TYPE</b>	<b>FIELD DEFINITION</b>
	Land Use percentage 3	%	tertiary land use of drainage area, percent of drainage area (approximate estimate ok)
GIS DATA	Digital elevation model (DEM)	raster	GIS layer with DEM for jurisdiction (e.g., LIDAR)
	Roads	lines, vector	GIS layer with lines for roads
	Catch basins	points, vector	GIS layer with points for catch basins
	Flow routing	lines, vector	GIS layer with lines for flow routing
	Drainage basins layer	polygon, vector	GIS layer with polygons for surface drainage basins
	Inspection circuit	lines, vector	GIS layer with lines for inspection routes

## SURVEY of MUNICIPAL CATCH BASIN INSPECTION and MAINTENANCE PROGRAMS

This survey asks questions to assist us in data interpretation and analysis. We do not expect jurisdictions to have all the information or data types provided as options. Nevertheless, your data are still helpful. If you are unsure if you should check a box because the answer is “maybe” or “sometimes”, please opt to check the box. If this information becomes important or needs clarification, we can follow up with your contact during the data transfer step. Questions about GIS data are referring to any data that have been linked to or imported into a GIS layer for mapping purposes. You may not have had any need to create these GIS files. We do not necessarily need you to provide us the GIS data listed in this survey. At this point, we only want to know if you have it. See the Data Request instructions for the specific GIS data we are requesting now. For questions about the survey, please contact Jon Ambrose ([jon.ambrose@cardno.com](mailto:jon.ambrose@cardno.com)).

<b>Jurisdiction/Organization:</b>	
<b>Contact Name:</b>	
<b>Email:</b>	
<b>Zip Code:</b>	<b>Phone:</b>

1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction?  
Check all that apply.

**Phase I Permittees**

- Standard approach for Phase Is: inspect all CBs and inlets annually (permit section S5.C.9.d.i).
- Alternative 1: inspect all CBs more or less frequently than annually to meet maintenance standards based on at least two years of CB inspection records (S5.C.9.d.i(1)).
- Alternative 2: inspect all CBs annually on a “circuit basis” whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.9.d.i(2)).
- Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.9.d.i(3)).
- Other/Notes: \_\_\_\_\_

**Phase II Permittees**

- Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
- Alternative 1: inspect all CBs more or less frequently than every two years to meet maintenance standards based on at least four years of CB inspection records (S5.C.5.d.i).
- Alternative 2: inspect all CBs once by 8/1/17 and every two years thereafter on a “circuit basis” whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.5.d.ii).

- Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.5.d.iii).
- Other/Notes: \_\_\_\_\_

2. What is your jurisdiction’s working definition of a CB? King County has adopted Washington State DOT’s definition for a catch basin of a 12” minimum sump depth. What differentiates a catch basin from an inlet in your jurisdiction?

- 12” or greater sump depth is a catch basin**
- Other:** \_\_\_\_\_

3. What types of catch basins are in your jurisdiction? There are multiple types of CBs and varying definitions in the industry. We have included definitions below based on King County road standards (<http://kingcounty.gov/depts/transportation/roads/road-standards.aspx>). However, if these don’t apply in your jurisdiction, please check “Other” and describe CB types that are included in your jurisdiction’s CB inspection and maintenance program.

- Type I:** inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB.
- Type II:** inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff.
- Inlet:** feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.

- Other:** \_\_\_\_\_

4. Which activities may be included in a catch basin inspection your jurisdiction? Check any that apply.

- Visual/photo inspection
- Field notes of CB status
- Map/GIS updates
- Depth measurement of accumulated solids: units\_\_\_\_\_ precision\_\_\_\_\_

- Other: \_\_\_\_\_

5. What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.

- Pipe cleaning
- Culvert cleaning
- CB cleanout
- Ditch maintenance
- Street cleaning
- Road repair and resurfacing
- Sanding/de-icing
- Other snow and ice control
- Roadside landscape maintenance, including vegetation and application of herbicide/pesticide
- Dust control
- Sediment and erosion control
- Trash and pet waste management
- Repair or replacement of CB grate
- Sealing cracks in below-ground structure and/or pipes
- Other: \_\_\_\_\_  
\_\_\_\_\_

6. How does your jurisdiction determine if a catch basin needs to be cleaned out? Check any that apply.

- Based on inspection data
- Based on a schedule
- Based on traffic volume or other road use factors
- Based on occurrence of an emergency, flooding, or CSO event
- Based on citizen reports/complaints
- Transfer of ownership
- Other: \_\_\_\_\_

7. What type of records do you keep for CB inspection and maintenance? Check all that apply in the available format.

	<b>Inspections</b>	<b>Maintenance</b>	<b>Costs</b>
Microsoft Excel spreadsheet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Non-Excel database	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GIS database	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paper files	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other format (type in)			

8. What GIS data do you have for your jurisdiction? Check any that apply.

- CB type (per definitions in Question 1 above)
- CB dimensions
- CB location
- CB age
- Pipe sizes into and out of CB
- CB elevation (rim and pipe invert)
- System conveyance (e.g., CB connections)
- Stormwater drainage basins delineations
- Flow routing through the system
- Land use
- Presence/absence of curbs vs. ditches
- Average annual daily traffic (AADT)
- Snow removal routes
- Snow days (avg. number of snow removal days per year)
- Street surface material (e.g. paved, gravel, etc.)
- Construction activities in drainage area
- Local precipitation data

9. What GIS data do you have about CB inspection and maintenance? Check all that apply.

- Maintenance routes and schedules
- Inspection dates
- Maintenance or repair dates
- Maintenance activities performed
- Cleaning frequency and dates
- Cleaning routes
- Inspection and maintenance records (pre-2007)

- Circuits with CBs grouped to meet permit option for inspecting on a “circuit basis”
- Street sweeping routes and schedule
- Inspection, maintenance, or cleaning costs

10. Please provide the cost of your program for CB inspections and maintenance (not including disposal) on an annual basis or by average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.

Inspections (program cost per year and/or average cost per CB):

2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	

Maintenance (program cost per year and/or average cost per CB):

2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	

11. If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.

- Yes, example field inspection form sent with data transmittal.
- No, no field inspection form available.

12. If available, please send your jurisdiction’s Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.

- Yes, SOP sent with data transmittal.
- No, SOP not available.

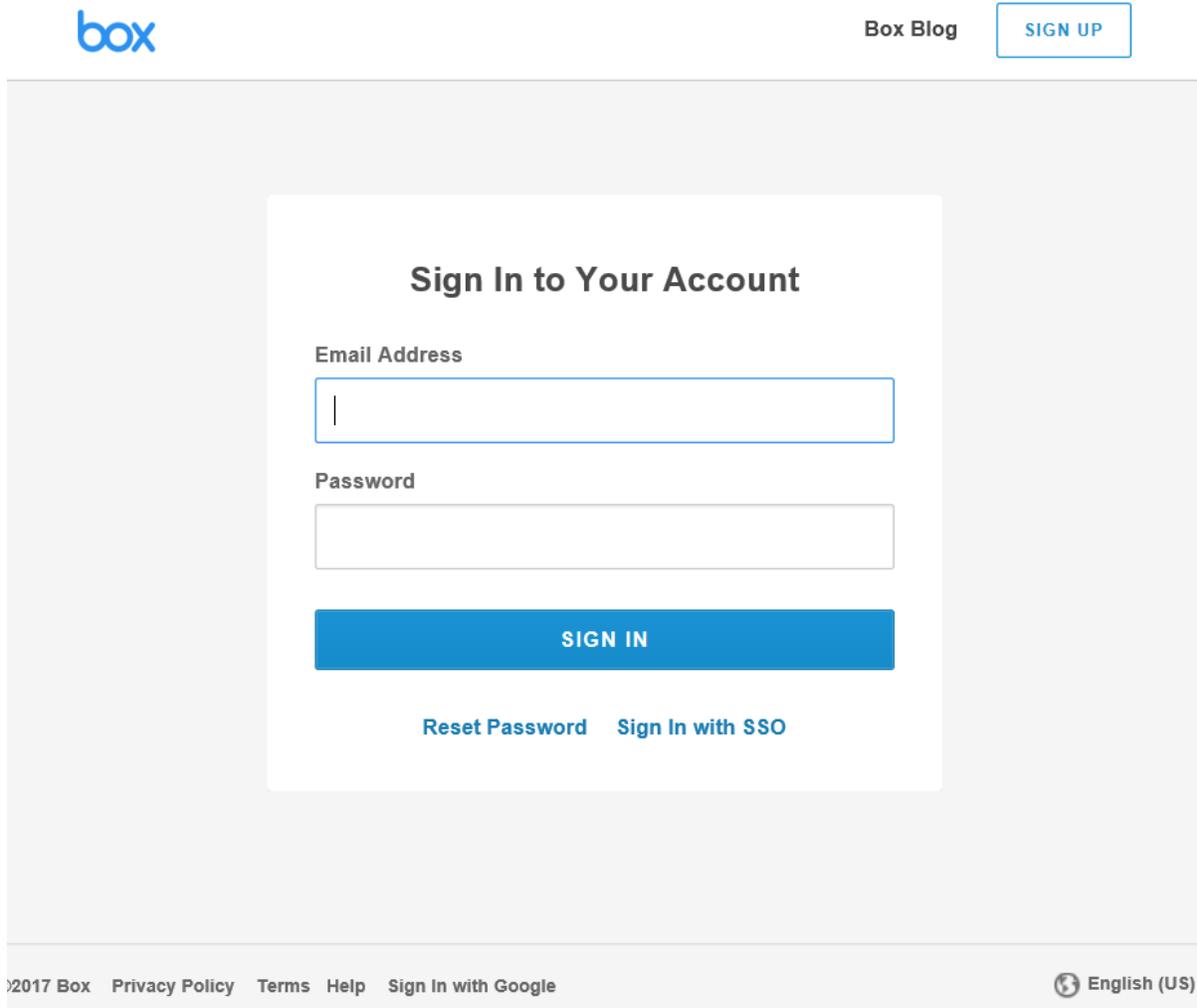
13. Do you have any questions, comments or feedback about this survey?

*Thank you for completing the survey! We appreciate your participation.*

## Upload files for the Catch Basin Study in 5 easy steps

**STEP 1:** Open the Box Folder by following this link: <https://app.box.com/folder/11475654547>

The link will take you to a website that looks like this:



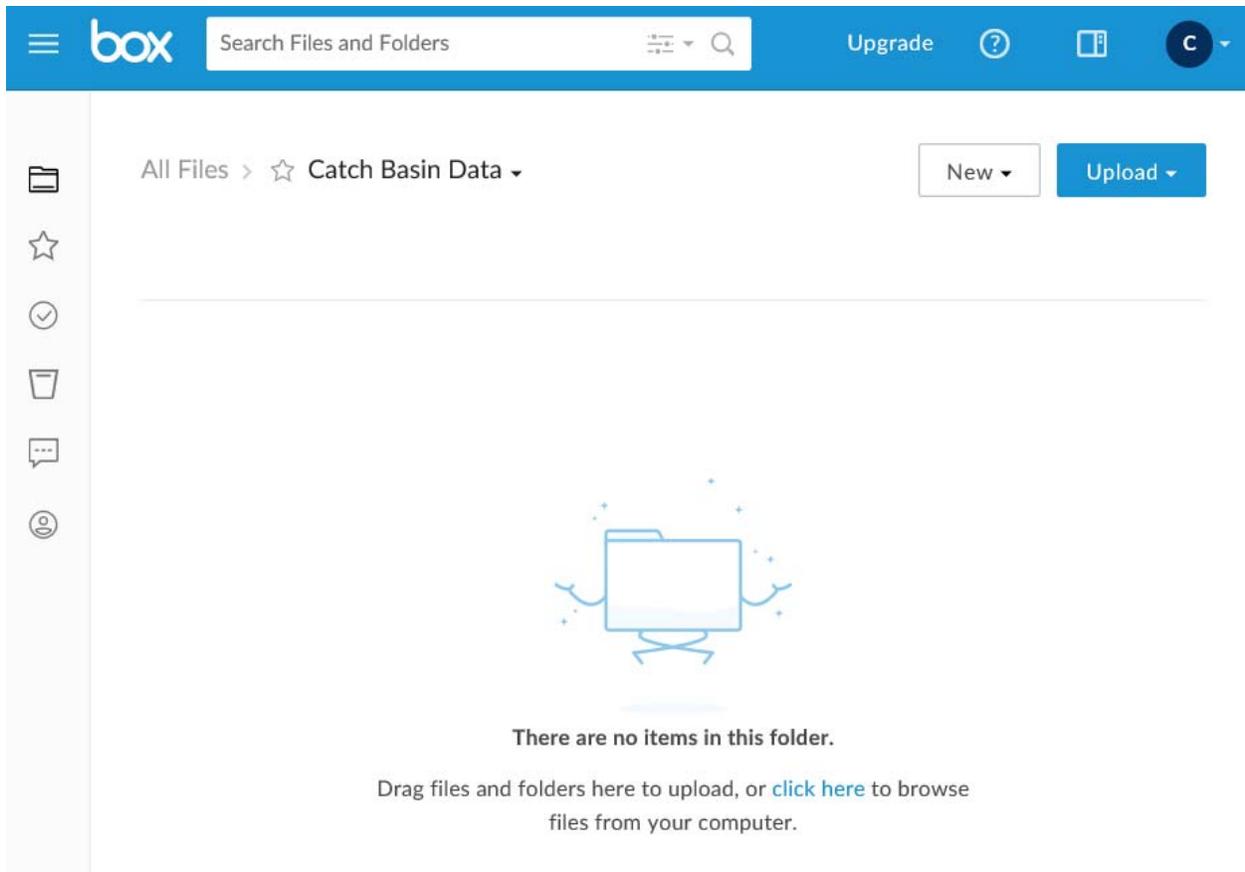
The screenshot shows the Box Sign In page. At the top left is the 'box' logo. At the top right is a 'Box Blog' link and a 'SIGN UP' button. The main content is a white box with the title 'Sign In to Your Account'. Below the title are two input fields: 'Email Address' and 'Password'. Below the 'Password' field is a blue 'SIGN IN' button. At the bottom of the white box are two links: 'Reset Password' and 'Sign In with SSO'. At the bottom of the page, there is a footer with links for '©2017 Box', 'Privacy Policy', 'Terms', 'Help', and 'Sign In with Google'. On the right side of the footer is a language selector showing 'English (US)'.

**STEP 2:** Enter the credentials below to log into the Box folder:

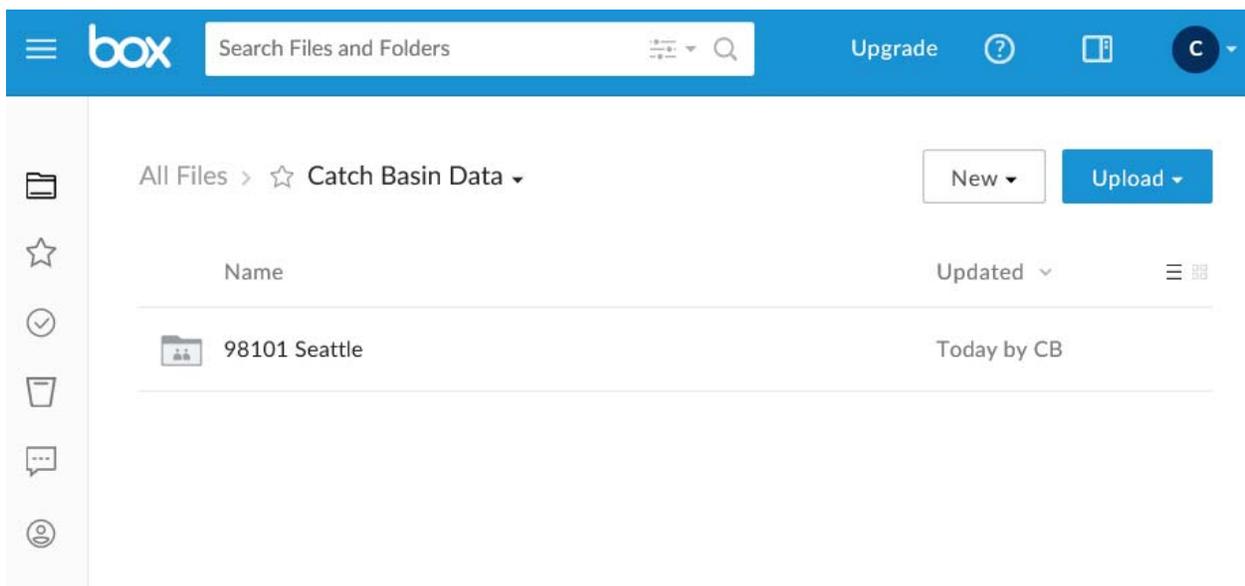
Email address: [catchbasinupload@gmail.com](mailto:catchbasinupload@gmail.com)

Password: 2017catchbasin

Once you are logged in, the website will look like this:

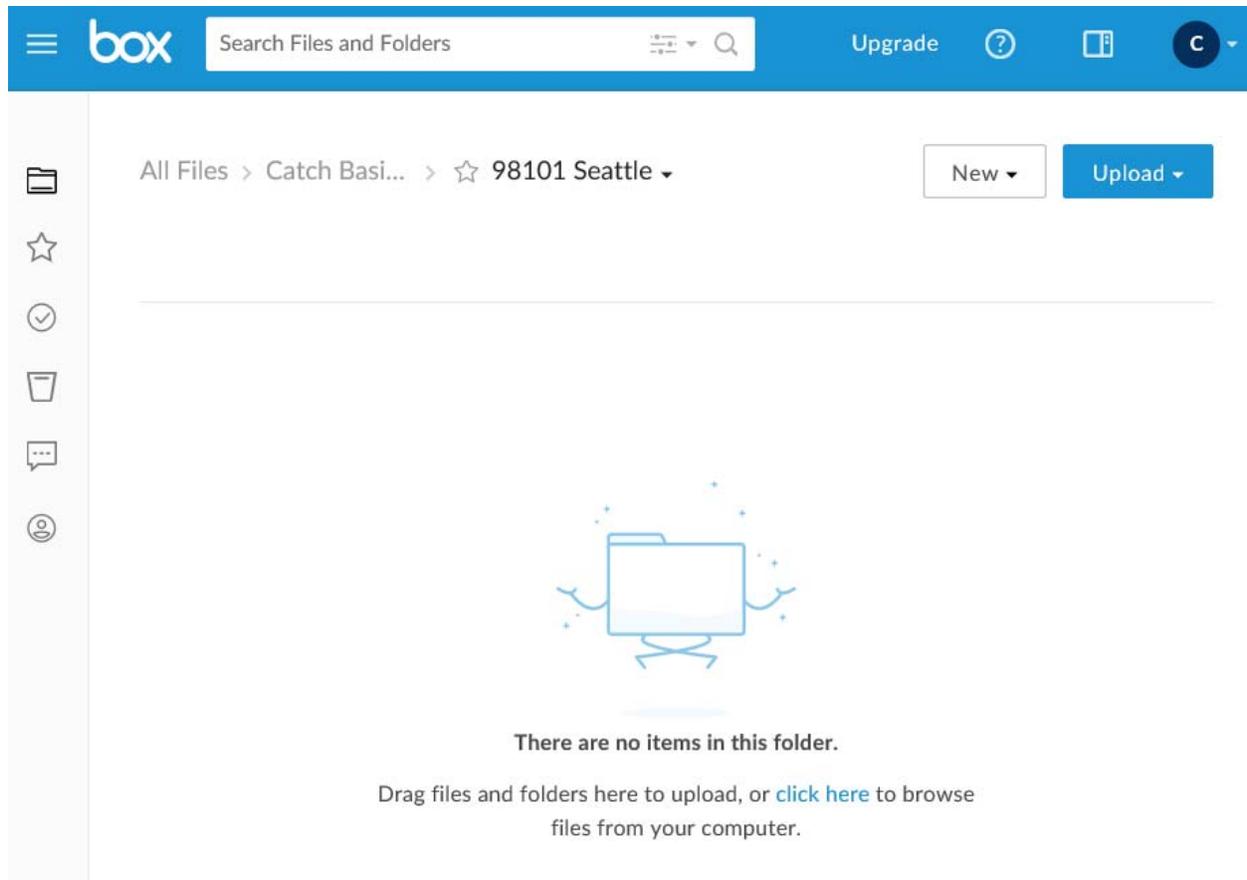


**STEP 3:** Create a folder with your jurisdiction’s main ZIP code and name (i.e. 98101 Kitsap County) by clicking “New” in the top right corner and then selecting “Folder”. The zip code selected is not critical as long as you have a unique folder name. Once you are done it should look like this:



**NOTE:** There may be other folders with data already uploaded in this Box folder. Your upload account is setup to allow only uploading capabilities and therefore it will not grant you access to view previously uploaded content. Although you will be able to see the file names, the content viewing is disabled.

**STEP 4:** Click on the folder you have just created for your jurisdiction:



**STEP 5:** You are now ready to drag and drop the files and folders for your jurisdiction or click browse and navigate to the files on your computer.

Should you run into any issues with the uploading to this folder, please do not hesitate to contact Diana Hasegan for support at [dianah@osbornconsulting.com](mailto:dianah@osbornconsulting.com) | 425.516.7626.

# ATTACHMENT B

## UNPROCESSED SURVEY RESULTS AND DATA

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Contact Name	Title	Email	Phone number	5-digit Zip Code for your office	Permit Phase
1/31/2017 11:30:13	WSDOT	Trett Sutter	Stormwater Compliance Special	suttert@wsdot.wa.gov	360-705-6964	98504	Phase 1
3/15/2017 12:07	King County	Blair Scott	Assistant Municipal NPDES Stormwater Permit Coordinator	blair.scott@kingcounty.gov	206-477-4877	98104	Phase 1
2/17/2017 7:05:16	King County DNRP Parks and Recreation	David Sizemore	Senior Engineer	david.sizemore@kingcounty.gov	206-477-6142	98056	Phase 1
2/23/2017 10:57	King County DOT/Road Services Div/Maintenance Section	Brent Dhoore	Environmental Scientist	brent.dhoore@kingcounty.gov	206-477-2606	98056	Phase 1
3/1/2017 13:59	King County International Airport	Peter Dumaliang	Environmental Scientist/Engineer	peter.dumaliang@kingcounty.gov	2064770212	98108	Phase 1
3/1/2017 17:03	King County Wastewater Treatment Division	Jeff Lafer	NPDES Permit Administrator	jeff.lafer@kingcounty.gov	206-477-6315	98104	Phase 1

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Contact Name	Title	Email	Phone number	5-digit Zip Code for your office	Permit Phase
2/28/2017 15:27	King County/Facilities Management Division	Bill Eckel	Water Quality Compliance Manager	bill.eckel@kingcounty.gov	206-477-9357	98104	Phase 1
2/27/2017 14:29	King County/Metro Transit	Talon Swanson	Environmental Scientist	talon.swanson@kingcounty.gov	(206)477-5569	98168	Phase 1
1/26/2017 11:37:27	City Of Tacoma	Michael A. Rose, P.E.	Professional Engineer	Mrose@Cityoftacoma.org	253-502-2264	98421	Phase 1
2/7/2017 14:33:15	Seattle Public Utilities	Kate Rhoads	Municipal Stormwater Specialist	kate.rhoads@seattle.gov	2066848298	98124	Phase 1
1/19/2017 15:22:33	Highline College	Barry Holldorf	Director of Facilities & Operation	bholldorf@highline.edu	206-870-3793	98198	Phase 2
1/30/2017 17:38:46	Port of Seattle	Jane Dewell	Maritime Stormwater Program Manager	dewell.j@portseattle.org	206-787-4668	98121	Phase 1

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Contact Name	Title	Email	Phone number	5-digit Zip Code for your office	Permit Phase
1/31/2017 9:51:14	Seattle Public School	Shelly Kerby	Environmental Health and Safety coordinator	shkerby@seattleschools.org	2062520703	98124	Phase 1
2/3/2017 8:05:53	WA Military Department	Rowena Valencia-Gica	Environmental Programs Supervisor	Rowena.Valencia-Gica@mil.wa.gov	253-512-8704	98430	Phase 1
1/30/2017 11:48:09	Western Washington/Lower Columbia College	Jeff Moenck	Facilities Operations Maint. Spec.	jmoenck@lcc.ctc.edu	360-442-2261	98632	Phase 2
2/1/2017 8:54:59	Kitsap County	Angela Gallardo	Stormwater Asset Manager	agallard@co.kitsap.wa.us	360-337-7296	98366	Phase 2
1/23/2017 14:51:42	Thurston County	Ryan Langan	Stormwater Operations Manage	langanr@co.thurston.wa.us	360-867-2099	98502	Phase 2
1/30/2017 15:06:09	Whatcom County	Cathy Craver	Senior Planner	ccraver@co.whatcom.wa.us	360-778-6299	98225	Phase 2

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Contact Name	Title	Email	Phone number	5-digit Zip Code for your office	Permit Phase
2/21/2017 15:58:10	City of Algona	Salvador Marez		algonapw@algonawa.gov	253-833-2741	98001	Phase 2
1/23/2017 14:05:12	City of Arlington	Ken Clarke	Stormwater Technician	kclarke@arlingtonwa.gov	360-403-3523	98223	Phase 2
1/17/2017 11:34:39	City of Auburn	Chris Thorn	Water Quality Programs Coordinator	cthorn@auburnwa.gov	(253) 804-5065	98001	Phase 2
1/23/2017 14:42:38	City of Bainbridge Island	Marilyn Guthrie	NPDES Permit Coordinator	mguthrie@bainbridgewa.gov	2067803724	98110	Phase 2
1/27/2017 18:23:26	City of Battle Ground	Kelly Uhacz	Associate Stormwater Engineer	Kelly.Uhacz@cityofbg.org	360-342-5069	98604	Phase 2
2/9/2017 15:50:02	City of Bellevue	Don McQuilliams		DMcQuilliams@bellevuewa.gov	425-452-7865	98004	Phase 2

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Contact Name	Title	Email	Phone number	5-digit Zip Code for your office	Permit Phase
1/27/2017 10:41:03	City of Bellingham	Jason Porter	Storm and Surface Water Mana	jporter@cob.org	360-778-7799	98229	Phase 2
1/30/2017 14:28:18	City of Bremerton	Chance Berthiaume	Stormwater Permit Coordinator	chance.berthiaume@ci.bremerton.wa.us	(360) 473-5929	98312	Phase 2
2/9/2017 16:39:03	City of Brier	RICH MAAG		rmaag@ci.brier.wa.us	425-775-5440	98036	Phase 2
1/30/2017 16:02:02	City of Camas	Anita Ashton	Engineer III	aashton@cityofcamas.us	360-817-7231	98607	Phase 2
2/2/2017 7:19:01	City of Centralia	Fred Chapman	Stormwater Tech	fchapman@cityofcentralia.com	3603307512	98531	Phase 2
2/2/2017 9:42:34	City Of Covington	Ben Parrish	Surface Water Management Program Coordinator	bparrish@covingtonwa.gov	253- 480-2465	98042	Phase 2

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Contact Name	Title	Email	Phone number	5-digit Zip Code for your office	Permit Phase
1/25/2017 10:52:36	City of Des Moines	Tyler Beekley	Water Quality Specialist	tbeekley@desmoineswa.gov	206-870-6869	98198	Phase 2
1/30/2017 16:45:50	City of Edgewood	Jeremy Metzler	Senior Engineer / Surface Water Program Manager	jeremy@cityofedgewood.org	2539523299	98372	Phase 2
1/30/2017 16:18:32	City of Everett	Grant Moen	Senior Engineer	gmoen@everettwa.gov	425 257 8947	98201	Phase 2
1/30/2017 14:57:09	City of Federal Way	Tony Doucette	Surface Water Management Project Engineer	tony.doucette@cityoffederalway.com	(253) 835-2753	98003	Phase 2
1/27/2017 16:14:27	City of Ferndale	Wendy LaRocque	Stormwater Manager	wendylarocque@cityofferndale.org	360-685-2378	98248	Phase 2
1/23/2017 12:12:13	City of Issaquah	Harvey Walker	Manager of Storm and Sewer Operation	harveyw@issaquahwa.gov	425-837-3480	98027	Phase 2

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Contact Name	Title	Email	Phone number	5-digit Zip Code for your office	Permit Phase
1/30/2017 11:05:12	City of Kent	Laura Haren	Environmental Conservation Analyst	lharen@kentwa.gov	253-856-5537	98032	Phase 2
1/31/2017 16:45:08	City of Kirkland	Jenny Gaus	Surface Water Engineering Supervisor	jgaus@kirklandwa.gov	425-587-3850	98033	Phase 2
1/20/2017 14:34:07	City of Lakewood	Greg Vigoren	Surface Water Division Manager	gvigoren@cityoflakewood.us	253-983-7771	98499	Phase 2
1/25/2017 9:59:46	City of Mercer Island	Hartvigson	Right-of-Way Manager	brian.hartvigson@mercergov.org	206275-7809	98040	Phase 2
1/18/2017 7:33:39	City of Mill Creek	Marci Chew	Stormwater Specialist	marcic@cityofmillcreek.com	425-921-5709	98012	Phase 2
1/17/2017 10:38:54	City of Milton	Jamie Carter	Stormwater Compliance Inspector	jcarter@cityofmilton.net	253-517-2708	98354	Phase 2

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Contact Name	Title	Email	Phone number	5-digit Zip Code for your office	Permit Phase
1/19/2017 15:54:23	City of Mount Vernon	Blaine Chesterfield	Engineering Manager	blainec@mountvernonwa.gov	360-336-6204	98273	Phase 2
1/17/2017 13:34:29	City of Mukilteo	Jennifer Adams	Surface Water Programs Manager	jadams@mukilteowa.gov	425-263-8083	98275	Phase 2
1/26/2017 12:03:43	City of Newcastle	Audrie Starsy	Surface Water Program Manager	Audries@ci.newcastle.wa.us	(425) 649-4444 ext. 111	98056	Phase 2
1/23/2017 9:24:31	City of Olympia	Sue Barclift	Sr Program Specialist	sbarclif@ci.olympia.wa.us	360-570-3805	98501	Phase 2
2/3/2017 15:18:03	City of Poulsbo	Anja Hart	Stormwater Program Manager	ahart@cityofpoulsbo.com	360-394-9753	98370	Phase 2
1/17/2017 9:59:19	City of Puyallup	Jon Wikander	Public Works Supervisor	jonathanw@ci.puyallup.wa.us	2537703341	98374	Phase 2

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Contact Name	Title	Email	Phone number	5-digit Zip Code for your office	Permit Phase
1/30/2017 16:07:16	City of Renton	Kristina Lowthian	Civil Engineer I	klowthian@rentonwa.gov	425-430-7249	98057	Phase 2
2/9/2017 16:30:18	City of Sammamish	Tawni Dalziel		tdalziel@sammamish.us	425-295-0562	98075	Phase 2
1/27/2017 18:25:11	City of Shoreline	Uki Dele	Surface Water and Env. Svs. Manager	udele@shorelinewa.gov	2068012451	98133	Phase 2
1/23/2017 11:58:21	City of Sumner	Robert Wright	Local Source Control Specialist	Robertw@sumnerwa.gov	2532995708	98390	Phase 2
1/20/2017 12:19:10	City of Tumwater	Amy Georgeson	Water Resources Specialist	ageorgeson@ci.tumwater.wa.us	360754-4144	98501	Phase 2
3/23/2017 17:03	City of Woodinville	Brian Meyer	Maintenance Supervisor	brianm@ci.woodinville.wa.us	425-489-2700	98072	Phase 2

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.2
1/31/2017 11:30:13	WSDOT	Standard approach for Phase Is: inspect all CBs and inlets annually (permit section S5.C.9.d.i).	
3/15/2017 12:07	King County	Standard approach for Phase Is: inspect all CBs and inlets annually (permit section S5.C.9.d.i), Alternative 1: inspect all CBs more or less frequently than annually to meet maintenance standards based on at least two years of CB inspection records (S5.C.9.d.i(1)).	
2/17/2017 7:05:16	King County DNRP Parks and Recreation	Standard approach for Phase Is: inspect all CBs and inlets annually (permit section S5.C.9.d.i).	
2/23/2017 10:57	King County DOT/Road Services Div/Maintenance Section	Alternative 2: inspect all CBs annually on a "circuit basis" whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.9.d.i(2)).	
3/1/2017 13:59	King County International Airport	Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.9.d.i(3)).	
3/1/2017 17:03	King County Wastewater Treatment Division	Standard approach for Phase Is: inspect all CBs and inlets annually (permit section S5.C.9.d.i), Alternative 2: inspect all CBs annually on a "circuit basis" whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.9.d.i(2)), A combination based on the need of the CBs	

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.2
2/28/2017 15:27	King County/Facilities Management Division	Standard approach for Phase Is: inspect all CBs and inlets annually (permit section S5.C.9.d.i).	
2/27/2017 14:29	King County/Metro Transit	Standard approach for Phase Is: inspect all CBs and inlets annually (permit section S5.C.9.d.i)., Alternative 1: inspect all CBs more or less frequently than annually to meet maintenance standards based on at least two years of CB inspection records (S5.C.9.d.i(1))., Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.9.d.i(3)).	
1/26/2017 11:37:27	City Of Tacoma	Alternative 2: inspect all CBs annually on a "circuit basis" whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.9.d.i(2)).	
2/7/2017 14:33:15	Seattle Public Utilities	Standard approach for Phase Is: inspect all CBs and inlets annually (permit section S5.C.9.d.i).	
1/19/2017 15:22:33	Highline College	Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).	
1/30/2017 17:38:46	Port of Seattle	Standard approach for Phase Is: inspect all CBs and inlets annually (permit section S5.C.9.d.i)., Standard per S6.E.6	

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.2
1/31/2017 9:51:14	Seattle Public School	Standard approach for Phase Is: inspect all CBs and inlets annually (permit section S5.C.9.d.i.), Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.9.d.i(3)).	
2/3/2017 8:05:53	WA Military Department	Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.9.d.i(3)).	
1/30/2017 11:48:09	Western Washington/Lower Columbia College	Alternative 1: inspect all CBs more or less frequently than every two years to meet maintenance standards based on at least four years of CB inspection records (S5.C.5.d.i).	
2/1/2017 8:54:59	Kitsap County	Inspect/clean all cb's every 2 years and inspect/clean cb's with heavy sediment load annually.	
1/23/2017 14:51:42	Thurston County	Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).	
1/30/2017 15:06:09	Whatcom County	Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d), Annual inspection for TMDL watershed	

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.2
2/21/2017 15:58:10	City of Algona		Alternative 1: inspect all CBs more or less frequently than every two years to meet maintenance standards based on at least four years of CB inspection records (S5.C.5.d.i).
1/23/2017 14:05:12	City of Arlington		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/17/2017 11:34:39	City of Auburn		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/23/2017 14:42:38	City of Bainbridge Island		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/27/2017 18:23:26	City of Battle Ground		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
2/9/2017 15:50:02	City of Bellevue		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d)., WE ARE EVALUATING ALTERNATIVE SCHEDULES MOVING FORWARD

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.
1/27/2017 10:41:03	City of Bellingham	Alternative 2: inspect all CBs once by 8/1/17 and every two years thereafter on a "circuit basis" whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.5.d.ii).
1/30/2017 14:28:18	City of Bremerton	Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
2/9/2017 16:39:03	City of Brier	Alternative 2: inspect all CBs once by 8/1/17 and every two years thereafter on a "circuit basis" whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.5.d.ii).
1/30/2017 16:02:02	City of Camas	Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
2/2/2017 7:19:01	City of Centralia	Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
2/2/2017 9:42:34	City Of Covington	Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.
1/25/2017 10:52:36	City of Des Moines	Alternative 2: inspect all CBs once by 8/1/17 and every two years thereafter on a "circuit basis" whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.5.d.ii).
1/30/2017 16:45:50	City of Edgewood	Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/30/2017 16:18:32	City of Everett	Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/30/2017 14:57:09	City of Federal Way	Alternative 1: inspect all CBs more or less frequently than every two years to meet maintenance standards based on at least four years of CB inspection records (S5.C.5.d.i).
1/27/2017 16:14:27	City of Ferndale	Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.5.d.iii).
1/23/2017 12:12:13	City of Issaquah	Alternative 2: inspect all CBs once by 8/1/17 and every two years thereafter on a "circuit basis" whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.5.d.ii).

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.2
1/30/2017 11:05:12	City of Kent		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/31/2017 16:45:08	City of Kirkland		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/20/2017 14:34:07	City of Lakewood		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/25/2017 9:59:46	City of Mercer Island		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/18/2017 7:33:39	City of Mill Creek		Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.5.d.iii).
1/17/2017 10:38:54	City of Milton		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.2
1/19/2017 15:54:23	City of Mount Vernon		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/17/2017 13:34:29	City of Mukilteo		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/26/2017 12:03:43	City of Newcastle		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/23/2017 9:24:31	City of Olympia		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
2/3/2017 15:18:03	City of Poulsbo		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/17/2017 9:59:19	City of Puyallup		Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.5.d.iii).

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.	1. Which permit schedule for routine CB inspection and maintenance is used by your jurisdiction? Check all that apply.2
1/30/2017 16:07:16	City of Renton		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d)., Alternative 2: inspect all CBs once by 8/1/17 and every two years thereafter on a "circuit basis" whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.5.d.ii)., Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.5.d.iii).
2/9/2017 16:30:18	City of Sammamish		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/27/2017 18:25:11	City of Shoreline		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
1/23/2017 11:58:21	City of Sumner		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d)., Alternative 2: inspect all CBs once by 8/1/17 and every two years thereafter on a "circuit basis" whereby 25 percent of CBs and inlets within each circuit are inspected to identify maintenance needs (S5.C.5.d.ii)., Alternative 3: clean all pipes, ditches, CBs, and inlets within a circuit once during the permit term (S5.C.5.d.iii).
1/20/2017 12:19:10	City of Tumwater		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).
3/23/2017 17:03	City of Woodinville		Standard approach for Phase IIs: inspect all CBs and inlets once by 8/1/17 and subsequently every two years thereafter (permit section S5.C.5.d).

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	2.What types of catch basins are in your jurisdiction? There are multiple types of CBs and varying definitions in the industry. We have included definitions below based on King County road standards ( <a href="http://kingcounty.gov/depts/transportation/roads/road-">http://kingcounty.gov/depts/transportation/roads/road-</a>
1/31/2017 11:30:13	WSDOT	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
3/15/2017 12:07	King County	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
2/17/2017 7:05:16	King County DNRP Parks and Recreation	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
2/23/2017 10:57	King County DOT/Road Services Div/Maintenance Section	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
3/1/2017 13:59	King County International Airport	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
3/1/2017 17:03	King County Wastewater Treatment Division	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	2.What types of catch basins are in your jurisdiction? There are multiple types of CBs and varying definitions in the industry. We have included definitions below based on King County road standards ( <a href="http://kingcounty.gov/depts/transportation/roads/road-">http://kingcounty.gov/depts/transportation/roads/road-</a>
2/28/2017 15:27	King County/Facilities Management Division	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
2/27/2017 14:29	King County/Metro Transit	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/26/2017 11:37:27	City Of Tacoma	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
2/7/2017 14:33:15	Seattle Public Utilities	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/19/2017 15:22:33	Highline College	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/30/2017 17:38:46	Port of Seattle	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.

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Timestamp	Jurisdiction/Organization	2.What types of catch basins are in your jurisdiction? There are multiple types of CBs and varying definitions in the industry. We have included definitions below based on King County road standards ( <a href="http://kingcounty.gov/depts/transportation/roads/road-">http://kingcounty.gov/depts/transportation/roads/road-</a>
1/31/2017 9:51:14	Seattle Public School	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB.
2/3/2017 8:05:53	WA Military Department	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/30/2017 11:48:09	Western Washington/Lower Columbia College	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff.
2/1/2017 8:54:59	Kitsap County	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/23/2017 14:51:42	Thurston County	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/30/2017 15:06:09	Whatcom County	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff.

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2/21/2017 15:58:10	City of Algona	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/23/2017 14:05:12	City of Arlington	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/17/2017 11:34:39	City of Auburn	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/23/2017 14:42:38	City of Bainbridge Island	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff.
1/27/2017 18:23:26	City of Battle Ground	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
2/9/2017 15:50:02	City of Bellevue	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.

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1/27/2017 10:41:03	City of Bellingham	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch., Bottomless for infiltration.
1/30/2017 14:28:18	City of Bremerton	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch., Curb inlet: rectangular cast iron inlet that collects street runoff and discharges into a type II manhole that has a sump and floatable controls. Typically this discharges into a stormwater system or the sanitary sewer.
2/9/2017 16:39:03	City of Brier	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/30/2017 16:02:02	City of Camas	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
2/2/2017 7:19:01	City of Centralia	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB.
2/2/2017 9:42:34	City Of Covington	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.

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1/25/2017 10:52:36	City of Des Moines	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/30/2017 16:45:50	City of Edgewood	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/30/2017 16:18:32	City of Everett	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/30/2017 14:57:09	City of Federal Way	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch., Water quality and pre-treatment facilities (Filterra, Contech CDS, etc)
1/27/2017 16:14:27	City of Ferndale	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/23/2017 12:12:13	City of Issaquah	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.

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1/30/2017 11:05:12	City of Kent	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/31/2017 16:45:08	City of Kirkland	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/20/2017 14:34:07	City of Lakewood	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch., Dry wells; Type IIs with direct surface runoff
1/25/2017 9:59:46	City of Mercer Island	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/18/2017 7:33:39	City of Mill Creek	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff.
1/17/2017 10:38:54	City of Milton	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.

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1/19/2017 15:54:23	City of Mount Vernon	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/17/2017 13:34:29	City of Mukilteo	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/26/2017 12:03:43	City of Newcastle	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/23/2017 9:24:31	City of Olympia	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
2/3/2017 15:18:03	City of Poulsbo	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/17/2017 9:59:19	City of Puyallup	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.

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1/30/2017 16:07:16	City of Renton	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
2/9/2017 16:30:18	City of Sammamish	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/27/2017 18:25:11	City of Shoreline	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff.
1/23/2017 11:58:21	City of Sumner	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
1/20/2017 12:19:10	City of Tumwater	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff., Inlet: feeder structure for surface drainage. Underground concrete structure is rectangular and typically includes a shallow sump. Intended to collect runoff directly from surface flow without inflowing pipes to the CB and then send runoff to another CB, a manhole, or ditch.
3/23/2017 17:03	City of Woodinville	Type I: inline or feeder structure for surface drainage with a grated lid that is typically square or rectangular. Underground concrete structure is typically square or rectangular. May include a sump or may contain a riser outflow pipe in lieu of or in addition to a sump. Intended to collect runoff both directly from surface flow and via inflow pipe(s) to the CB., Type II: inline structure for surface drainage with round lid. Sometimes referred to as a manhole or maintenance hole and may have a lockable lid. Underground concrete structure is typically round and may include a sump. Deeper than a Type 1 CB and typically includes a ladder for access. Intended to collect runoff via inflow pipe(s) to the CB only but not via direct surface runoff.

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1/31/2017 11:30:13	WSDOT	A drainage structure with a sump that interrupts the flow of rainwater and allows for settling and collection of sediment, debris, detritus, contaminants, etc., prior to transfer to the outlet pipe. The sump should be greater than 12 inches as measured between the flow line of the lowest pipe in the basin and the basin floor.	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
3/15/2017 12:07	King County	Inlets are at the top of a system and have a "flow through" and no sump.	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
2/17/2017 7:05:16	King County DNRP Parks and Recreation	Rectangular basin with a metal grate and a 12" minimum sump depth	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Measure depth of water in sump and then depth of solid in sump
2/23/2017 10:57	King County DOT/Road Services Div/Maintenance Section	See King County Storm water database	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Three measure down measurements taken from top of grate. Sump, outlet pipe invert and sediment level. Calculate sediment % in sump from those three measurements.
3/1/2017 13:59	King County International Airport		Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
3/1/2017 17:03	King County Wastewater Treatment Division	Same	Field notes of CB status

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Timestamp	Jurisdiction/Organization	3. What is your jurisdiction's working definition of a CB? King County has adopted Washington State DOT's definition for a catch basin (>12" minimum sump depth). What differentiates a catch basin from an inlet in your jurisdiction?	4. Which activities may be part of a catch basin inspection your jurisdiction? Check any that apply.
2/28/2017 15:27	King County/Facilities Management Division	Use King County's definition	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), estimated using steel rod probe
2/27/2017 14:29	King County/Metro Transit	We use the standard KC definition of >12" or deeper sump	Visual/photo inspection, Field notes of CB status, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Solids measured using a tape measurer and comparing to a known max depth
1/26/2017 11:37:27	City Of Tacoma	We use the WSDOT definition of catch basins although we do not use a minimum sump depth.	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Tape Measure, Marked Rod, and markings on the vector tubes
2/7/2017 14:33:15	Seattle Public Utilities	12" sump	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), tenths of a foot
1/19/2017 15:22:33	Highline College		Visual/photo inspection, Field notes of CB status
1/30/2017 17:38:46	Port of Seattle	6" or greater sump depth = catch basin; less than 6" sump = inlet	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of

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Timestamp	Jurisdiction/Organization	3. What is your jurisdiction's working definition of a CB? King County has adopted Washington State DOT's definition for a catch basin (>12" minimum sump depth). What differentiates a catch basin from an inlet in your jurisdiction?	4. Which activities may be part of a catch basin inspection your jurisdiction? Check any that apply.
1/31/2017 9:51:14	Seattle Public School	same as King County	Visual/photo inspection
2/3/2017 8:05:53	WA Military Department	Same definition as WA State DOT	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
1/30/2017 11:48:09	Western Washington/Lower Columbia College	Same	Visual/photo inspection, Field notes of CB status, General note of catch basin needing cleaned no measurement
2/1/2017 8:54:59	Kitsap County	WSDOT's definition	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), IDDE screening/testing if necessary
1/23/2017 14:51:42	Thurston County	Use WSDOT's definition	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), 1/10's of foot
1/30/2017 15:06:09	Whatcom County	We look at everything and only really differentiate between Type 1 and 2's.	Visual/photo inspection, Field notes of CB status, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Probe used to estimate in inches amount of sediment accumulated in sump.

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Timestamp	Jurisdiction/Organization	3. What is your jurisdiction's working definition of a CB? King County has adopted Washington State DOT's definition for a catch basin (>12" minimum sump depth). What differentiates a catch basin from an inlet in your jurisdiction?	4. Which activities may be part of a catch basin inspection your jurisdiction? Check any that apply.
2/21/2017 15:58:10	City of Algona	12" or greater sump depth is a catch basin	Visual/photo inspection, Field notes of CB status, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Precision
1/23/2017 14:05:12	City of Arlington	Any catch. (Not defined)	Visual/photo inspection, Photographs of CB, Field notes of CB status
1/17/2017 11:34:39	City of Auburn	Type I or II structure with a grated cover. There is no difference between catch basins and inlets.	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Sediment is probed with pole and sump percentage full estimated.
1/23/2017 14:42:38	City of Bainbridge Island		Visual/photo inspection, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
1/27/2017 18:23:26	City of Battle Ground	Underground concrete structure to collect stormwater runoff and route it through underground pipes. Typically with and 18" sump.	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Map updates are in Google Earth
2/9/2017 15:50:02	City of Bellevue	12" OR GREATER SUMP DEPTH IS A CATCH BASIN. THE INSPECTOR MAKE A DECISION BASED ON STRUCTURE TYPE.	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), ACCUMULATED SOLIDS IN CB ARE MEASURED IN PERCENTAGE. WE HAVE RECENTLY BEEN USING A MOBILE APPLICATION FOR CB INSPECTION.

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Timestamp	Jurisdiction/Organization	3. What is your jurisdiction's working definition of a CB? King County has adopted Washington State DOT's definition for a catch basin (>12" minimum sump depth). What differentiates a catch basin from an inlet in your jurisdiction?	4. Which activities may be part of a catch basin inspection your jurisdiction? Check any that apply.
1/27/2017 10:41:03	City of Bellingham	Any measurable sump within reason, generally 6" or greater sump.	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Document surrounding area, depth of structure, depth of outlet, and cover type.
1/30/2017 14:28:18	City of Bremerton	WADOT is our standard. A stormwater inlet has no sump but discharges into a type II manhole with a sump and floatable controls before entering the stormwater system.	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
2/9/2017 16:39:03	City of Brier	12" OR GREATER SUMP DEPTH IS A CATCH BASIN	Field notes of CB status, Map/GIS updates
1/30/2017 16:02:02	City of Camas		Visual/photo inspection
2/2/2017 7:19:01	City of Centralia	CB catches sediment. has a sump water flows through.	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
2/2/2017 9:42:34	City Of Covington	If it has a sump, its a catch basin. if no sump, its an inlet.	Visual/photo inspection, Field notes of CB status, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), measured by "Vactor" contractor at time of cleaning

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Timestamp	Jurisdiction/Organization	3. What is your jurisdiction's working definition of a CB? King County has adopted Washington State DOT's definition for a catch basin (>12" minimum sump depth). What differentiates a catch basin from an inlet in your jurisdiction?	4. Which activities may be part of a catch basin inspection your jurisdiction? Check any that apply.
1/25/2017 10:52:36	City of Des Moines	The City would typically refer to the KCSWDM for such definitions and in this case would concur with King County's definition.	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Measured with a sediment rod
1/30/2017 16:45:50	City of Edgewood	Same (Pierce County / WSDOT definition)	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Rod probe
1/30/2017 16:18:32	City of Everett	Stormwater structure with a sump depth greater than 0.6'	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Measure depth from sump bottom
1/30/2017 14:57:09	City of Federal Way	Type I CBs and inlets are essentially synonymous.	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
1/27/2017 16:14:27	City of Ferndale	SWMMWW definitione	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates
1/23/2017 12:12:13	City of Issaquah	Issaquah adopted Ecology's Stormwater Management Manual so we use the definition the glossary. A chamber or well, usually built at the curb line of a street, for the admission of surface water to a sewer or subdrain, having at its base a sediment sump designed to retain grit and detritus below the point of overflow.	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), The crew uses a probe to determine the depth of the sediment.

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Timestamp	Jurisdiction/Organization	3. What is your jurisdiction's working definition of a CB? King County has adopted Washington State DOT's definition for a catch basin (>12" minimum sump depth). What differentiates a catch basin from an inlet in your jurisdiction?	4. Which activities may be part of a catch basin inspection your jurisdiction? Check any that apply.
1/30/2017 11:05:12	City of Kent	<p>Inlet - A storm structure with NO SUMP (may have any lid type).</p> <p>Catch Basin Type I - A rectangular shaped storm basin WITH SUMP (may have any lid type).</p> <p>Catch Basin Type II - A barrel shaped storm basin WITH SUMP (may have any lid type). Per City of Kent Construction Standards, steps or a ladder are required if the height between the rim and lowest invert is greater than 4ft.</p> <p>Manhole - An access point into a channeled storm line or storm pipe (neither with sump) (may have any lid type).</p> <p>Control - Any storm basin that has a control structure (flow restrictor or FROP) within it.</p> <p>Access to a Detention Tank, Detention Vault, Detention Pipe, or Storm Filter Vault - A distinct access point into a detention vault, detention tank, detention pipe, or storm filter vault (may have any lid type).</p>	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Probe used to measure the percentage of debris in sump.
1/31/2017 16:45:08	City of Kirkland	Generally speaking, a CB has a sump approximately 12" or greater in depth.	Visual/photo inspection, Field notes of CB status, Map/GIS updates
1/20/2017 14:34:07	City of Lakewood	We follow the WSDOT standard for catch basin types, including a concrete inlet (no sump catch basin).	Visual/photo inspection, Photographs of CB, Field notes of CB status, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), note whether cleaned or not based on accumulated solids
1/25/2017 9:59:46	City of Mercer Island	same	Visual/photo inspection, Field notes of CB status, Map/GIS updates
1/18/2017 7:33:39	City of Mill Creek	Type 1, Type 2, or Control Structures	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Every catch basin in public roads are cleaned once every other year
1/17/2017 10:38:54	City of Milton		Visual/photo inspection, Field notes of CB status, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)

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Timestamp	Jurisdiction/Organization	3. What is your jurisdiction's working definition of a CB? King County has adopted Washington State DOT's definition for a catch basin (>12" minimum sump depth). What differentiates a catch basin from an inlet in your jurisdiction?	4. Which activities may be part of a catch basin inspection your jurisdiction? Check any that apply.
1/19/2017 15:54:23	City of Mount Vernon	Cb has a 12-inch sump. An inlet has no sump or less than a 12 inch sump	Visual/photo inspection, Field notes of CB status, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Visual inspection and measurement
1/17/2017 13:34:29	City of Mukilteo	We have not made a distinction for maintenance purposes	Visual/photo inspection, Field notes of CB status, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), depth measurements for some years
1/26/2017 12:03:43	City of Newcastle		Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
1/23/2017 9:24:31	City of Olympia	Catch basins have a sump below the pipe invert	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates
2/3/2017 15:18:03	City of Poulsbo	Same as King County	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
1/17/2017 9:59:19	City of Puyallup	We consider any structure that is designed, or has the potential, to inlet surface runoff into the stormwater system as an inlet - typically all have sediment sumps. We typically refer to the rest as manholes (maintenance access) and generally provide no benefit other than accessing the system.	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Depth is measured as a percentage of the sumps depth.

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Timestamp	Jurisdiction/Organization	3. What is your jurisdiction's working definition of a CB? King County has adopted Washington State DOT's definition for a catch basin (>12" minimum sump depth). What differentiates a catch basin from an inlet in your jurisdiction?	4. Which activities may be part of a catch basin inspection your jurisdiction? Check any that apply.
1/30/2017 16:07:16	City of Renton	From Renton's Surface Water Design Manual, a catch basin is a chamber typically built at the curb line to collect surface water and retain sediment in a sump below the overflow point. An inlet is a connection between the ground surface and a channel or pipe for admission of surface and stormwater runoff. The difference between a catch basin and an inlet is the presence of a sump.	Visual/photo inspection, Photographs of CB, Map/GIS updates, Cleaning
2/9/2017 16:30:18	City of Sammamish	Any structure that provides inlet for storm catchment and/or provides vertical or horizontal directional change in conveyance	We inspect the frame, grate and structural integrity, ladder, cracks, and sediment load. Check to see if there are any other signs of IDDE and map if unknown. Make a work order if maintenance is required
1/27/2017 18:25:11	City of Shoreline		Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
1/23/2017 11:58:21	City of Sumner	Sump depth	Visual/photo inspection, Photographs of CB, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below), Solids are measured as portion of the Sump. Cb's scheduled for cleaning at 1/3rd depth sediment
1/20/2017 12:19:10	City of Tumwater	Catch basin contains a sump.	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)
3/23/2017 17:03	City of Woodinville	Same as King County's definition.	Visual/photo inspection, Field notes of CB status, Map/GIS updates, Depth measurement of accumulated solids in CB (please describe how the depth of solids is measured in the "Other" box below)

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Timestamp	Jurisdiction/Organization	5.What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.	6.How does your jurisdiction determine if a catch basin needs to be cleaned out? Check all that apply.
1/31/2017 11:30:13	WSDOT	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data
3/15/2017 12:07	King County	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on citizen reports/complaints
2/17/2017 7:05:16	King County DNRP Parks and Recreation	Pipe cleaning, CB cleanout, Ditch maintenance, Street cleaning, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
2/23/2017 10:57	King County DOT/Road Services Div/Maintenance Section	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
3/1/2017 13:59	King County International Airport	Pipe cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
3/1/2017 17:03	King County Wastewater Treatment Division	CB cleanout, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide	Based on inspection data, Based on a schedule

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Timestamp	Jurisdiction/Organization	5.What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.	6.How does your jurisdiction determine if a catch basin needs to be cleaned out? Check all that apply.
2/28/2017 15:27	King County/Facilities Management Division	CB cleanout, Ditch maintenance, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data
2/27/2017 14:29	King County/Metro Transit	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event
1/26/2017 11:37:27	City Of Tacoma	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints, Transfer of ownership
2/7/2017 14:33:15	Seattle Public Utilities	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/19/2017 15:22:33	Highline College	Pipe cleaning, CB cleanout, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/30/2017 17:38:46	Port of Seattle	Pipe cleaning, CB cleanout, Ditch maintenance, Sanding/de-icing, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes, Sweeping program in place for Port-operated properties; pavement repair and resurfacing; no pesticide landscape management	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints, Change in tenants

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Timestamp	Jurisdiction/Organization	5.What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.	6.How does your jurisdiction determine if a catch basin needs to be cleaned out? Check all that apply.
1/31/2017 9:51:14	Seattle Public School	Pipe cleaning, Culvert cleaning, CB cleanout, Sediment and erosion control	Based on a schedule, Based on citizen reports/complaints
2/3/2017 8:05:53	WA Military Department	CB cleanout, Street cleaning, Sediment and erosion control	Based on inspection data
1/30/2017 11:48:09	Western Washington/Lower Columbia College	CB cleanout, Sanding/de-icing, Other snow and ice control, Sediment and erosion control, Repair or replacement of CB grate	Based on inspection data
2/1/2017 8:54:59	Kitsap County	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/23/2017 14:51:42	Thurston County	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data
1/30/2017 15:06:09	Whatcom County	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event

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Timestamp	Jurisdiction/Organization	5.What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.	6.How does your jurisdiction determine if a catch basin needs to be cleaned out? Check all that apply.
2/21/2017 15:58:10	City of Algona	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/23/2017 14:05:12	City of Arlington	Pipe cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide	Based on a schedule, Based on citizen reports/complaints
1/17/2017 11:34:39	City of Auburn	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/23/2017 14:42:38	City of Bainbridge Island	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Sediment and erosion control, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on citizen reports/complaints
1/27/2017 18:23:26	City of Battle Ground	Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
2/9/2017 15:50:02	City of Bellevue	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes, MANY OF THESE ARE PART OF OTHER PROGRAMS OR "AS NEEDED"	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints

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Timestamp	Jurisdiction/Organization	5.What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.	6.How does your jurisdiction determine if a catch basin needs to be cleaned out? Check all that apply.
1/27/2017 10:41:03	City of Bellingham	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate	Based on inspection data, Based on a schedule, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/30/2017 14:28:18	City of Bremerton	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints, All catch basins in the ROW are cleaned annually. Facilities and Parks stormwater systems are cleaned when inspection indicates.
2/9/2017 16:39:03	City of Brier	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data
1/30/2017 16:02:02	City of Camas	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints, Past practice was cleaning all CBs working west to east.
2/2/2017 7:19:01	City of Centralia	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate	Based on inspection data, Based on a schedule, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
2/2/2017 9:42:34	City Of Covington	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate	Based on a schedule, We clean and inspect half of our catch basins every year

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	5.What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.	6.How does your jurisdiction determine if a catch basin needs to be cleaned out? Check all that apply.
1/25/2017 10:52:36	City of Des Moines	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints, Transfer of ownership
1/30/2017 16:45:50	City of Edgewood	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes, Maintenance Contracted through Pierce County Public Works	Based on inspection data, Based on citizen reports/complaints
1/30/2017 16:18:32	City of Everett	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on citizen reports/complaints
1/30/2017 14:57:09	City of Federal Way	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/27/2017 16:14:27	City of Ferndale	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on a schedule, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints, Transfer of ownership
1/23/2017 12:12:13	City of Issaquah	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints, Sanding for snow events generally creates the need for arterial catch basin cleaning.

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	5.What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.	6.How does your jurisdiction determine if a catch basin needs to be cleaned out? Check all that apply.
1/30/2017 11:05:12	City of Kent	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes, CCTV Inspections	Based on inspection data, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints, Transfer of ownership
1/31/2017 16:45:08	City of Kirkland	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/20/2017 14:34:07	City of Lakewood	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes, storm drain system inspection and cleaning is performed by a contracted vendor	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/25/2017 9:59:46	City of Mercer Island	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/18/2017 7:33:39	City of Mill Creek	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	every cb in public row gets cleaned once every other year
1/17/2017 10:38:54	City of Milton	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on citizen reports/complaints

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	5.What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.	6.How does your jurisdiction determine if a catch basin needs to be cleaned out? Check all that apply.
1/19/2017 15:54:23	City of Mount Vernon	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event
1/17/2017 13:34:29	City of Mukilteo	CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data
1/26/2017 12:03:43	City of Newcastle	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/23/2017 9:24:31	City of Olympia	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
2/3/2017 15:18:03	City of Poulsbo	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes, Permeable sidewalks	Based on inspection data, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/17/2017 9:59:19	City of Puyallup	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate	Based on a schedule

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	5.What types of roads and CB maintenance does your jurisdiction perform? Check any that apply.	6.How does your jurisdiction determine if a catch basin needs to be cleaned out? Check all that apply.
1/30/2017 16:07:16	City of Renton	Pipe cleaning, Culvert cleaning, CB cleanout, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes, Rebuild or replace failed precast structure. Repair or replace pipe as needed.	Based on inspection data, Based on a schedule, Based on traffic volume or other road use factors, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
2/9/2017 16:30:18	City of Sammamish	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Dust control, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on a schedule
1/27/2017 18:25:11	City of Shoreline	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Sediment and erosion control, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints
1/23/2017 11:58:21	City of Sumner	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints, Transfer of ownership
1/20/2017 12:19:10	City of Tumwater	Pipe cleaning, Culvert cleaning, CB cleanout, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints, Transfer of ownership
3/23/2017 17:03	City of Woodinville	Pipe cleaning, Culvert cleaning, CB cleanout, Ditch maintenance, Street cleaning, Road repair and resurfacing, Sanding/de-icing, Other snow and ice control, Roadside landscape maintenance, including vegetation and application of herbicide/pesticide, Sediment and erosion control, Trash and pet waste management, Repair or replacement of CB grate, Sealing cracks in below-ground structure and/or pipes	Based on inspection data, Based on a schedule, Based on occurrence of an emergency, flooding, or CSO event, Based on citizen reports/complaints

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	7. What types of records do you keep for CB inspection, maintenance, and costs? Check any that apply in the available format.	Inspection	Maintenance	Costs
1/31/2017 11:30:13	WSDOT		SQL Database	SQL Database	Non-Excel database
3/15/2017 12:07	King County		Non-excel database, GIS database	Non-Excel database, Paper files	Non-Excel database
2/17/2017 7:05:16	King County DNRP Parks and Recreation	Field notes, work order documents	Paper files	Paper files, lucity	Paper files
2/23/2017 10:57	King County DOT/Road Services Div/Maintenance Section		Microsoft excel speadsheet, Non-excel database, GIS database, Paper files	Microsoft Excel spreadsheet, Non-Excel database, GIS database, Paper files	Project/task time entry, RoadWorks MMS
3/1/2017 13:59	King County International Airport	invoices, video, reports	Microsoft excel speadsheet, Paper files	Microsoft Excel spreadsheet, GIS database	Non-Excel database
3/1/2017 17:03	King County Wastewater Treatment Division	All records kept on "Mainsaver" program; other records are supplemental.	Microsoft excel speadsheet, Non-excel database, Paper files	Non-Excel database	Not specifically documented

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	7.What types of records do you keep for CB inspection, maintenance, and costs? Check any that apply in the available format.	Inspection	Maintenance	Costs
2/28/2017 15:27	King County/Facilities Management Division	maintenance deficiencies, inspection date, correction date, aggregate costs	Microsoft excel speadsheet, Paper files, SharePoint	Microsoft Excel spreadsheet, Paper files, SharePoint	Paper files, SharePoint
2/27/2017 14:29	King County/Metro Transit		Microsoft excel speadsheet	Non-Excel database	Non-Excel database
1/26/2017 11:37:27	City Of Tacoma		GIS database, SQL	SQL and SAP(management System)	SAP(management System)
2/7/2017 14:33:15	Seattle Public Utilities		Non-excel database, GIS database	Non-Excel database	Non-Excel database
1/19/2017 15:22:33	Highline College	We keep an excel spreadsheet for call outs of CB's. When a deficiency is noted a work order or repair is created to be corrected. this could merely be a cut back or relabeling to pipe repairs from root intrusions etc... Costs are tracked in a separate excel spreadsheet.	Visual with Word Document guidelines	Microsoft Excel spreadsheet	Microsoft Excel spreadsheet
1/30/2017 17:38:46	Port of Seattle	Maximo database	Microsoft excel speadsheet, Non-excel datab	Microsoft Excel spreadsheet, Non-Excel database, GIS database, Paper files	Microsoft Excel spreadsheet, Non-Excel database

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	7.What types of records do you keep for CB inspection, maintenance, and costs? Check any that apply in the available format.	Inspection	Maintenance	Costs
1/31/2017 9:51:14	Seattle Public School		School Dude	school Dude	School Dude
2/3/2017 8:05:53	WA Military Department		Paper files, PDFs of reports	PDFs of reports	Paper files
1/30/2017 11:48:09	Western Washington/Lower Columbia College		Microsoft excel speadsheet, Paper files, Computer Management Maint. System	Paper files, CMMS	Paper files, CMMS
2/1/2017 8:54:59	Kitsap County		Non-excel database, GIS database	Non-Excel database, GIS database	Microsoft Excel spreadsheet, Non-Excel database
1/23/2017 14:51:42	Thurston County	Asset Management tracks time, equipment, materials	VUEWorks	VUEWorks	VUEWorks
1/30/2017 15:06:09	Whatcom County	MS Access Database	Non-excel database	Non-Excel database	Microsoft Excel spreadsheet, Paper files

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	7.What types of records do you keep for CB inspection, maintenance, and costs? Check any that apply in the available format.	Inspection	Maintenance	Costs
2/21/2017 15:58:10	City of Algona		Paper files	Paper files	
1/23/2017 14:05:12	City of Arlington	Employee/Equipment hours	Non-excel database, Paper files	Non-Excel database, Paper files	Non-Excel database
1/17/2017 11:34:39	City of Auburn		Cartegraph asset management program	Cartegraph asset management program	Cartegraph asset management program
1/23/2017 14:42:38	City of Bainbridge Island	CB inspection, maintenance	Microsoft excel spreadsheet	Microsoft Excel spreadsheet	
1/27/2017 18:23:26	City of Battle Ground		Non-excel database, Paper files	Non-Excel database	Microsoft Excel spreadsheet
2/9/2017 15:50:02	City of Bellevue		Microsoft excel spreadsheet, Non-excel database, GIS database, Paper files	Microsoft Excel spreadsheet, Non-Excel database, GIS database, Paper files	

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	7. What types of records do you keep for CB inspection, maintenance, and costs? Check any that apply in the available format.	Inspection	Maintenance	Costs
1/27/2017 10:41:03	City of Bellingham		Asset work management system and Granite software.	Microsoft Excel spreadsheet, Asset work management system and Granite software.	Microsoft Excel spreadsheet, Paper files, Asset work management system and Granite software.
1/30/2017 14:28:18	City of Bremerton		GIS database, Paper files	GIS database, Paper files, SQL database linked to the GIS system	Microsoft Excel spreadsheet, Non-Excel database, Paper files, Bremerton's Finance Department tracks the Stormwater Utility's maintenance costs with project numbers.
2/9/2017 16:39:03	City of Brier		Microsoft excel speadsheet, GIS database, Paper files	Microsoft Excel spreadsheet, GIS database, Paper files	
1/30/2017 16:02:02	City of Camas		Paper files	Paper files	Cost are not tracked per CB, but lumped in with all stormwater maintenance.
2/2/2017 7:19:01	City of Centralia		lucity	Paper files, lucity	Microsoft Excel spreadsheet, Paper files
2/2/2017 9:42:34	City Of Covington		Microsoft excel speadsheet	Non-Excel database	Non-Excel database

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	7. What types of records do you keep for CB inspection, maintenance, and costs? Check any that apply in the available format.	Inspection	Maintenance	Costs
1/25/2017 10:52:36	City of Des Moines		Non-excel database	Non-Excel database	Non-Excel database
1/30/2017 16:45:50	City of Edgewood		Microsoft excel spreadsheet, GIS database	Microsoft Excel spreadsheet, GIS database	Paper files
1/30/2017 16:18:32	City of Everett		Microsoft excel spreadsheet, Non-excel database, GIS database	Microsoft Excel spreadsheet, Non-Excel database, GIS database	Non-Excel database
1/30/2017 14:57:09	City of Federal Way		Microsoft excel spreadsheet, Paper files	Microsoft Excel spreadsheet, Paper files	Microsoft Excel spreadsheet, Paper files
1/27/2017 16:14:27	City of Ferndale		Paper files	Paper files	
1/23/2017 12:12:13	City of Issaquah		Non-excel database, GIS database, Issaquah Public Works Operations uses a work order data base for all activities that are performed by the division. We have an activity number for cleaning type I catch basins for example. The catch basins have a facility identification number for tracking maintenance. Inspection, inventory and cleaning work is also tracked in the City's GIS program separately. We are very close to integration between the two systems to eliminate double entries by the crew.	Non-Excel database, GIS database, Same as above	Non-Excel database, Same data base. Cost is tracked by the activity and facility ID number.

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UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	7.What types of records do you keep for CB inspection, maintenance, and costs? Check any that apply in the available format.	Inspection	Maintenance	Costs
1/30/2017 11:05:12	City of Kent	Hansen Asset Management Program	Non-excel database, GIS database, Paper files	Non-Excel database, GIS database, Paper files	Non-Excel database
1/31/2017 16:45:08	City of Kirkland		Non-excel database, Paper files	Non-Excel database, Paper files	Non-Excel database, Paper files
1/20/2017 14:34:07	City of Lakewood	Vendor contracted items (inspection and cleaning activities) are tracked via an Excel spreadsheet; minor maintenance is handled by City staff; major repairs are contracted out.	Microsoft excel spreadsheet, Paper files	Microsoft Excel spreadsheet, Non-Excel database	Microsoft Excel spreadsheet, Non-Excel database
1/25/2017 9:59:46	City of Mercer Island	CB ID & inspection reports, work orders and invoices	Paper files	Paper files	Paper files
1/18/2017 7:33:39	City of Mill Creek	data base attached to each catch basin in Autocad	GIS database	GIS database	Paper files
1/17/2017 10:38:54	City of Milton		Microsoft excel spreadsheet, Paper files	Microsoft Excel spreadsheet, GIS database	

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	7.What types of records do you keep for CB inspection, maintenance, and costs? Check any that apply in the available format.	Inspection	Maintenance	Costs
1/19/2017 15:54:23	City of Mount Vernon	Inspection and maintenane records are paper copies but we should transition to GIS data base/asset management records in 2017.	Paper files	Paper files	Eden Database
1/17/2017 13:34:29	City of Mukilteo		GIS database	GIS database	
1/26/2017 12:03:43	City of Newcastle		Microsoft excel speadsheet, GIS database, Paper files	Microsoft Excel spreadsheet, GIS database, Paper files	Paper files
1/23/2017 9:24:31	City of Olympia		GIS database, We use Esri's Collector	Non-Excel database, VUEWorks	Costs aren't separate from overall storm program costs
2/3/2017 15:18:03	City of Poulsbo		Microsoft excel speadsheet, Paper files, futun	Microsoft Excel spreadsheet,Paper files, future: GIS	Non-Excel database,financial software
1/17/2017 9:59:19	City of Puyallup	We track costs but not with a high level of accuracy.	Non-excel database	Non-Excel database	Non-Excel database

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	7.What types of records do you keep for CB inspection, maintenance, and costs? Check any that apply in the available format.	Inspection	Maintenance	Costs
1/30/2017 16:07:16	City of Renton	Service requests and work orders. InforEAM.	Non-excel database, GIS database, Paper files	Non-Excel database, GIS database, Paper files	Non-Excel database, Paper files
2/9/2017 16:30:18	City of Sammamish		Microsoft excel spreadsheet	Microsoft Excel spreadsheet	
1/27/2017 18:25:11	City of Shoreline		Non-excel database, GIS database	Non-Excel database, GIS database	Non-Excel database, GIS database
1/23/2017 11:58:21	City of Sumner	City is upgrading to an electronic program to manage maintenance and inspection data.	Paper files	Paper files	Paper files
1/20/2017 12:19:10	City of Tumwater		Non-excel database, GIS database, Lucity Asset Management System	Non-Excel database, GIS database, Lucity Asset Management System	Non-Excel database, Lucity Asset Management System
3/23/2017 17:03	City of Woodinville		GIS database, Paper files	Paper files	Paper files

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	8.What GIS data do you have for your jurisdiction? Check any that apply.	9.What CB inspection and maintenance data do you have in GIS? Check any that apply.	10. Please provide the cost of your program below for CB inspections and maintenance (not including disposal) on an annual basis or as average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.
1/31/2017 11:30:13	WSDOT	CB type (per definitions in Question 1 above), CB dimensions, CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Presence/absence of curbs vs. ditches, Average annual daily traffic (AADT), Snow removal routes, Street surface material (e.g. paved, gravel, etc.), Local precipitation data	Maintenance routes and schedules, Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates, Cleaning routes, Inspection, maintenance, or cleaning costs	Data is for both inspections and maintenance as work predominately is done at the same time. Our NPDES permit was issued in March of 2009 with requirements on catch basins that began in 2010, numbers provided date back to the beginning our required inspections in 2010.
3/15/2017 12:07	King County	CB type (per definitions in Question 1 above), CB dimensions, CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Land use, Average annual daily traffic (AADT), Snow removal routes		Operations cost per CB: \$622.09 (2016)
2/17/2017 7:05:16	King County DNRP Parks and Recreation	CB type (per definitions in Question 1 above), CB dimensions, CB location, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Flow routing through the system	Paper files	25000
2/23/2017 10:57	King County DOT/Road Services Div/Maintenance Section	CB type (per definitions in Question 1 above), CB dimensions, CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Flow routing through the system, Land use, Presence/absence of curbs vs. ditches, Average annual daily traffic (AADT), Snow removal routes	Inspection dates, Maintenance or repair dates, Maintenance activities performed, Circuits with CBs grouped to meet permit option for inspecting on a "circuit basis"	Variations in asset inventory and maintenance needs
3/1/2017 13:59	King County International Airport	CB type (per definitions in Question 1 above), CB dimensions, CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Street surface material (e.g. paved, gravel, etc.)		
3/1/2017 17:03	King County Wastewater Treatment Division	CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), Flow routing through the system, Only partial for most CBs	None	No specific records maintained

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	8.What GIS data do you have for your jurisdiction? Check any that apply.	9.What CB inspection and maintenance data do you have in GIS? Check any that apply.	10. Please provide the cost of your program below for CB inspections and maintenance (not including disposal) on an annual basis or as average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.
2/28/2017 15:27	King County/Facilities Management Division	check w/ KCWLRD		program started in 2011,
2/27/2017 14:29	King County/Metro Transit	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Flow routing through the system		
1/26/2017 11:37:27	City Of Tacoma	CB type (per definitions in Question 1 above), CB location, CB age, CB elevation (rim and pipe invert), Stormwater drainage basins delineations, Flow routing through the system, Land use, Presence/absence of curbs vs. ditches, Street surface material (e.g. paved, gravel, etc.)	Circuits with CBs grouped to meet permit option for inspecting on a "circuit basis"	275,000 a year which includes cleaning and inspection. We have spent about 275,000 a year on the program fairly consistently for 2014-2016 before 2014 costs were not tracked. If I was to attempt to separate out the costs for cleaning and inspection I would likely super-swag 65%-75% of the cost is cleaning(The cleaning crew completes the inspection).
2/7/2017 14:33:15	Seattle Public Utilities	CB type (per definitions in Question 1 above), CB location, CB age, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Presence/absence of curbs vs. ditches, Snow removal routes, Local precipitation data	Inspection dates	annual
1/19/2017 15:22:33	Highline College	CB location, Pipe sizes into and out of CB, Flow routing through the system	Inspection dates, Maintenance or repair dates, Maintenance activities performed	NA
1/30/2017 17:38:46	Port of Seattle	CB type (per definitions in Question 1 above), CB dimensions, CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Beginning to track many of the above	Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates	We are not able to separate inspection and maintenance costs, so the \$\$ below are annual costs of combined maint & inspect

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UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	8.What GIS data do you have for your jurisdiction? Check any that apply.	9.What CB inspection and maintenance data do you have in GIS? Check any that apply.	10. Please provide the cost of your program below for CB inspections and maintenance (not including disposal) on an annual basis or as average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.
1/31/2017 9:51:14	Seattle Public School	CB location		
2/3/2017 8:05:53	WA Military Department			
1/30/2017 11:48:09	Western Washington/Lower Columbia College	City/County	City/County	Changed 2011, new spill kits,passive skimmers,absorbent socks,car wash kits. 2012 Water sample kits, CESCL training.
2/1/2017 8:54:59	Kitsap County	CB type (per definitions in Question 1 above), CB dimensions, CB location, CB age, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Presence/absence of curbs vs. ditches, Average annual daily traffic (AADT), Snow removal routes, Street surface material (e.g. paved, gravel, etc.), Construction activities in drainage area, Local precipitation data, currently collecting elevations	Maintenance routes and schedules, Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates, Cleaning routes, Street sweeping routes and schedule, Inspection, maintenance, or cleaning costs	
1/23/2017 14:51:42	Thurston County	CB type (per definitions in Question 1 above), CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Flow routing through the system, Land use, Average annual daily traffic (AADT), Snow removal routes, Street surface material (e.g. paved, gravel, etc.)	Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates	
1/30/2017 15:06:09	Whatcom County	CB type (per definitions in Question 1 above), CB dimensions, CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Snow removal routes, Street surface material (e.g. paved, gravel, etc.)	CB inspection and maintenance data is saved in an Access Database that is linked to GIS.	

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UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	8.What GIS data do you have for your jurisdiction? Check any that apply.	9.What CB inspection and maintenance data do you have in GIS? Check any that apply.	10. Please provide the cost of your program below for CB inspections and maintenance (not including disposal) on an annual basis or as average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.
2/21/2017 15:58:10	City of Algona	CB location		
1/23/2017 14:05:12	City of Arlington	CB type (per definitions in Question 1 above), CB dimensions, CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections)		
1/17/2017 11:34:39	City of Auburn	CB type (per definitions in Question 1 above), CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Snow removal routes, Street surface material (e.g. paved, gravel, etc.)	Data is in Cartegraph asset management software	Unknown
1/23/2017 14:42:38	City of Bainbridge Island	CB location, Stormwater drainage basins delineations		This is not tracked seperatly from overall mainteance costs. I only have a total Stormwater team cost.
1/27/2017 18:23:26	City of Battle Ground	Google Earth	Google Earth	
2/9/2017 15:50:02	City of Bellevue	CB type (per definitions in Question 1 above), CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Snow removal routes	Inspection dates, Cleaning frequency and dates, ONLY FOR THE LAST COUPLE YEARS	

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	8.What GIS data do you have for your jurisdiction? Check any that apply.	9.What CB inspection and maintenance data do you have in GIS? Check any that apply.	10. Please provide the cost of your program below for CB inspections and maintenance (not including disposal) on an annual basis or as average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.
1/27/2017 10:41:03	City of Bellingham	CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Presence/absence of curbs vs. ditches, Average annual daily traffic (AADT), Snow removal routes, Street surface material (e.g. paved, gravel, etc.), Construction activities in drainage area, Local precipitation data, Plants	Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning routes, Inspection and maintenance records (pre-2007), Street sweeping routes and schedule, Inspection, maintenance, or cleaning costs	
1/30/2017 14:28:18	City of Bremerton	CB type (per definitions in Question 1 above), CB dimensions, CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Construction activities in drainage area, Local precipitation data	Maintenance routes and schedules, Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates, Cleaning routes	This is not tracked as a separate item
2/9/2017 16:39:03	City of Brier	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system	Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates, Circuits with CBs grouped to meet permit option for inspecting on a "circuit basis"	
1/30/2017 16:02:02	City of Camas	CB location, Pipe sizes into and out of CB, Stormwater drainage basins delineations, Street surface material (e.g. paved, gravel, etc.)		
2/2/2017 7:19:01	City of Centralia	CB type (per definitions in Question 1 above), CB dimensions, CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations	Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates, Cleaning routes, Street sweeping routes and schedule	
2/2/2017 9:42:34	City Of Covington	CB type (per definitions in Question 1 above), CB location, System conveyance (e.g., CB connections), Land use, Presence/absence of curbs vs. ditches, Snow removal routes, Construction activities in drainage area		The inspection and maintenance of our CB's is done through an annual contract. Our "Vactor" Contractor inspects the CB's at the time of Cleaning. The cost of both activities are rolled into one bill so we can separate out the inspection or maintenance costs.

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UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	8.What GIS data do you have for your jurisdiction? Check any that apply.	9.What CB inspection and maintenance data do you have in GIS? Check any that apply.	10. Please provide the cost of your program below for CB inspections and maintenance (not including disposal) on an annual basis or as average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.
1/25/2017 10:52:36	City of Des Moines	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Snow removal routes	Maintenance routes and schedules, Cleaning routes, Circuits will be put into GIS but are not currently	For 2016 - Inspection Avg \$23/basin and Maintenance Avg \$143.01/basin
1/30/2017 16:45:50	City of Edgewood	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, Land use	Inspection dates, Maintenance or repair dates, Maintenance activities performed	Annual costs provided below - number of CBs increased over time, and current CB/structure total is 1725
1/30/2017 16:18:32	City of Everett	CB type (per definitions in Question 1 above), CB dimensions, CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use	Inspection dates, Maintenance or repair dates, Cleaning frequency and dates	\$200,000
1/30/2017 14:57:09	City of Federal Way	CB location, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Average annual daily traffic (AADT), Snow removal routes	Cleaning routes, Street sweeping routes and schedule	Note that inspection costs are an estimate of seasonal staff time and overhead, and may be well under-estimated. Maintenance costs are essentially our annual vactor budget and do not include repair costs (excludes CB rebuilds, high impact riser installations, etc).
1/27/2017 16:14:27	City of Ferndale	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Average annual daily traffic (AADT), Snow removal routes		
1/23/2017 12:12:13	City of Issaquah	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Land use, Snow removal routes, Precipitation data is tracked in our SCADA system. Field inventory data is in Public Works Operations data base under Facilities and will be linked to the GIS system in the near future.	Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates, Circuits with CBs grouped to meet permit option for inspecting on a "circuit basis", Maintenance activities are limited in GIS, just cleaning and non-descriptive repair check box. Cleaning frequency is in the PWO data base and will be linked to GIS at some point. GIS does have a CB needs cleaning and a CB cleaned check box. PWO data base has the inspection, maintenance and cleaning costs.	\$60,000 per year average

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Timestamp	Jurisdiction/Organization	8.What GIS data do you have for your jurisdiction? Check any that apply.	9.What CB inspection and maintenance data do you have in GIS? Check any that apply.	10. Please provide the cost of your program below for CB inspections and maintenance (not including disposal) on an annual basis or as average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.
1/30/2017 11:05:12	City of Kent	CB type (per definitions in Question 1 above), CB dimensions, CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Snow removal routes, Construction activities in drainage area	Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates, Inspection and maintenance records (pre-2007), Inspection, maintenance, or cleaning costs	
1/31/2017 16:45:08	City of Kirkland	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Land use, Presence/absence of curbs vs. ditches, Snow removal routes, Construction activities in drainage area	Maintenance routes and schedules, Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates, Inspection and maintenance records (pre-2007), Street sweeping routes and schedule, Inspection, maintenance, or cleaning costs	Still compiling this data
1/20/2017 14:34:07	City of Lakewood	CB type (per definitions in Question 1 above), CB dimensions, CB location, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Presence/absence of curbs vs. ditches, Snow removal routes	Maintenance routes and schedules, Street sweeping routes and schedule	Costs have changed due to inflation; and we've had two - 6-year contracts since 2007 and the bids varied. Also, price increases or not are based on the Seattle/Tacoma/Bremerton CPI.
1/25/2017 9:59:46	City of Mercer Island	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Flow routing through the system, Presence/absence of curbs vs. ditches, Snow removal routes, Street surface material (e.g. paved, gravel, etc.)	Maintenance or repair dates, Street sweeping routes and schedule	
1/18/2017 7:33:39	City of Mill Creek	CB type (per definitions in Question 1 above), CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Flow routing through the system	notes in Autocad attached to structure. When repaired the note gets removed	Mill Creek started CCTV pipe inspections in 2012 and contractors charge for cleaning catch basins. The inspection areas are outside of catch basin cleaning area.
1/17/2017 10:38:54	City of Milton	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, Stormwater drainage basins delineations		Records of this type have not been kept in the past. We have municipal workers who work on streets, water, and storm. Going forward our Stormwater will be its own utility and we will be employing asset management software, so going forward we could answer a question like this, but not for the past.

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Timestamp	Jurisdiction/Organization	8.What GIS data do you have for your jurisdiction? Check any that apply.	9.What CB inspection and maintenance data do you have in GIS? Check any that apply.	10. Please provide the cost of your program below for CB inspections and maintenance (not including disposal) on an annual basis or as average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.
1/19/2017 15:54:23	City of Mount Vernon	CB type (per definitions in Question 1 above), CB dimensions, CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Snow removal routes, Street surface material (e.g. paved, gravel, etc.), Construction activities in drainage area, Local precipitation data		\$124,000 per year or \$49 per CB
1/17/2017 13:34:29	City of Mukilteo	CB type (per definitions in Question 1 above), CB location, System conveyance (e.g., CB connections), there may be info on elevations & pipe sizes, but its spotty and some is not QC'd	Inspection dates, Cleaning frequency and dates	
1/26/2017 12:03:43	City of Newcastle	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Stormwater drainage basins delineations	Inspection dates, Maintenance or repair dates, Maintenance activities performed	
1/23/2017 9:24:31	City of Olympia	CB type (per definitions in Question 1 above), CB dimensions, CB age, CB elevation (rim and pipe invert), Flow routing through the system, Land use, Presence/absence of curbs vs. ditches, Snow removal routes, Street surface material (e.g. paved, gravel, etc.), Construction activities in drainage area, Local precipitation data, Many fields for above checked are blank	Inspection dates, Cleaning frequency and dates, Cleaning routes	Our program started in 2015
2/3/2017 15:18:03	City of Poulsbo	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Land use		1. Changes based on pay rate adjustments 2. Cost per CB
1/17/2017 9:59:19	City of Puyallup	CB type (per definitions in Question 1 above), CB location, CB age, Pipe sizes into and out of CB, System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Land use, Presence/absence of curbs vs. ditches, Snow removal routes, Snow days (avg. number of snow removal days per year), Street surface material (e.g. paved, gravel, etc.), Local precipitation data	Inspection dates, Maintenance or repair dates, Maintenance activities performed, Cleaning frequency and dates, Cleaning routes, Circuits with CBs grouped to meet permit option for inspecting on a "circuit basis", Street sweeping routes and schedule	We began cost tracking in 2016. No reliable data yet.

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Timestamp	Jurisdiction/Organization	8.What GIS data do you have for your jurisdiction? Check any that apply.	9.What CB inspection and maintenance data do you have in GIS? Check any that apply.	10. Please provide the cost of your program below for CB inspections and maintenance (not including disposal) on an annual basis or as average cost by catch basin. If this has changed over time since 2007, please indicate how and when cost changed.
1/30/2017 16:07:16	City of Renton	CB type (per definitions in Question 1 above), CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Construction activities in drainage area	Maintenance routes and schedules, Maintenance activities performed, Cleaning frequency and dates, Cleaning routes, Circuits with CBs grouped to meet permit option for inspecting on a "circuit basis", EAM. Maintenance/repair dates and maintenance activities performed are stored in EAM, the current asset management system, where we can join to GIS and view the data geographically. We are in the process of migrating	Not available.
2/9/2017 16:30:18	City of Sammamish	CB type (per definitions in Question 1 above), CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Land use, Snow removal routes, Street surface material (e.g. paved, gravel, etc.)		
1/27/2017 18:25:11	City of Shoreline	CB type (per definitions in Question 1 above), CB dimensions, CB location, CB age, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Land use, Presence/absence of curbs vs. ditches, Average annual daily traffic (AADT), Snow removal routes, Street surface material (e.g. paved, gravel, etc.)	Inspection and Maintenance are captured in Cityworks	
1/23/2017 11:58:21	City of Sumner	CB type (per definitions in Question 1 above), CB dimensions, CB location, CB elevation (rim and pipe invert)	Inspection dates	35000 for 2016 maintenance. In house work isn't tracked
1/20/2017 12:19:10	City of Tumwater	CB location, System conveyance (e.g., CB connections), Flow routing through the system, Land use, Snow removal routes, Street surface material (e.g. paved, gravel, etc.)	This type of information is maintained in Lucity	Data not readily available
3/23/2017 17:03	City of Woodinville	CB type (per definitions in Question 1 above), CB dimensions, CB location, Pipe sizes into and out of CB, CB elevation (rim and pipe invert), System conveyance (e.g., CB connections), Stormwater drainage basins delineations, Flow routing through the system, Presence/absence of curbs vs. ditches, Snow removal routes	Maintenance routes and schedules	

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Timestamp	Jurisdiction/Organization	Inspection Costs 2008	Inspection Costs 2009	Inspection Costs 2010	Inspection Costs 2011	Inspection Costs 2012	Inspection Costs 2013	Inspection Costs 2014	Inspection Costs 2015
1/31/2017 11:30:13	WSDOT				\$2,608,623	\$3,031,784	\$5,114,773	\$3,727,603	\$4,783,966
3/15/2017 12:07	King County						\$50 per CB	\$50 per CB	\$50 per CB
2/17/2017 7:05:16	King County DNRP Parks and Recreation								
2/23/2017 10:57	King County DOT/Road Services Div/Maintenance Section	N/A	N/A	Need time to gather data	Need time to gather data	Need time to gather data	~\$20.00/CB	Need time to gather data	Need time to gather data
3/1/2017 13:59	King County International Airport								
3/1/2017 17:03	King County Wastewater Treatment Division								

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Timestamp	Jurisdiction/Organization	Inspection Costs 2008	Inspection Costs 2009	Inspection Costs 2010	Inspection Costs 2011	Inspection Costs 2012	Inspection Costs 2013	Inspection Costs 2014	Inspection Costs 2015
2/28/2017 15:27	King County/Facilities Management Division								2016: \$24,578 \$62/CB
2/27/2017 14:29	King County/Metro Transit								
1/26/2017 11:37:27	City Of Tacoma								
2/7/2017 14:33:15	Seattle Public Utilities	433,949	697,336	474,130	337,329	340,158	220,626	435,700	429,337
1/19/2017 15:22:33	Highline College	NA	NA	Program started NA (Really don't track this labor hour cost)	\$500 Labeling and identifying CB's/ yr	\$0	\$0	\$50 re-labeling	NA
1/30/2017 17:38:46	Port of Seattle	Not available	\$195,203	\$210,342	\$272,192	\$305,898	\$333,267	\$282,838	\$444,261

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Timestamp	Jurisdiction/Organization	Inspection Costs 2008	Inspection Costs 2009	Inspection Costs 2010	Inspection Costs 2011	Inspection Costs 2012	Inspection Costs 2013	Inspection Costs 2014	Inspection Costs 2015
1/31/2017 9:51:14	Seattle Public School								
2/3/2017 8:05:53	WA Military Department								
1/30/2017 11:48:09	Western Washington/Lower Columbia College	\$900.00	SAME	SAME	SAME	SAME	SAME	SAME	\$900.00
2/1/2017 8:54:59	Kitsap County								
1/23/2017 14:51:42	Thurston County					210000	317000	357000	
1/30/2017 15:06:09	Whatcom County								

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Timestamp	Jurisdiction/Organization	Inspection Costs 2008	Inspection Costs 2009	Inspection Costs 2010	Inspection Costs 2011	Inspection Costs 2012	Inspection Costs 2013	Inspection Costs 2014	Inspection Costs 2015
2/21/2017 15:58:10	City of Algona								
1/23/2017 14:05:12	City of Arlington								
1/17/2017 11:34:39	City of Auburn	Unknown							
1/23/2017 14:42:38	City of Bainbridge Island								
1/27/2017 18:23:26	City of Battle Ground	0	0	0	0	0	0	0	0
2/9/2017 15:50:02	City of Bellevue								

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Timestamp	Jurisdiction/Organization	Inspection Costs 2008	Inspection Costs 2009	Inspection Costs 2010	Inspection Costs 2011	Inspection Costs 2012	Inspection Costs 2013	Inspection Costs 2014	Inspection Costs 2015
1/27/2017 10:41:03	City of Bellingham								
1/30/2017 14:28:18	City of Bremerton	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item
2/9/2017 16:39:03	City of Brier								
1/30/2017 16:02:02	City of Camas								
2/2/2017 7:19:01	City of Centralia								
2/2/2017 9:42:34	City Of Covington	\$62,265 Inspection and Maintenance	\$68,598 Inspection and Maintenance	\$42,843 Inspection and Maintenance	\$19,107 Inspection and Maintenance	\$41,967 Inspection and Maintenance	\$92,573 Inspection and Maintenance	\$50,308 inspection and Maintenance	\$55,916 Inspection and Maintenance

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Timestamp	Jurisdiction/Organization	Inspection Costs 2008	Inspection Costs 2009	Inspection Costs 2010	Inspection Costs 2011	Inspection Costs 2012	Inspection Costs 2013	Inspection Costs 2014	Inspection Costs 2015
1/25/2017 10:52:36	City of Des Moines								
1/30/2017 16:45:50	City of Edgewood	Included with Maintenance totals							
1/30/2017 16:18:32	City of Everett			\$50,000	\$50,000	\$50,000	\$40,000	\$40,000	\$40,000
1/30/2017 14:57:09	City of Federal Way	\$8,500	\$8,700	\$8,900	\$9,200	\$9,500	\$9,800	\$10,100	\$10,500
1/27/2017 16:14:27	City of Ferndale								
1/23/2017 12:12:13	City of Issaquah	Not available	Catch basin inspections are conducted independently at times but more often in conjunction with other related activities. PWO has emphasized completing a field inventory of Issaquah's catch basins and recording the data in the PWO data base. All the field workers are trained to conduct catch basin inspections when performing any catch basin activity. Consequently, separating the cost of the inspection from other catch basin work is not readily						

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Timestamp	Jurisdiction/Organization	Inspection Costs 2008	Inspection Costs 2009	Inspection Costs 2010	Inspection Costs 2011	Inspection Costs 2012	Inspection Costs 2013	Inspection Costs 2014	Inspection Costs 2015
1/30/2017 11:05:12	City of Kent	Not Tracked	Not Tracked	Not Tracked	Not Tracked	\$12.75 / CB	\$12.96 / CB	\$20.50 / CB	\$32.06 / CB
1/31/2017 16:45:08	City of Kirkland								
1/20/2017 14:34:07	City of Lakewood	\$18.02/Type I and Drywell; \$24.02/Type II and manhole	No change from 2008 (CPI was zero or negative)	No change from 2008 (CPI was zero or negative)	\$20.74/Type I and Drywell; \$36.84/Type II and manhole (increased to account for CPI increase and an increase in prevailing wage rate for operator position)	\$25.00/HR (new contract separated inspection and cleaning as separate bid items)	\$25.40/HR (CPI increase)	\$25.90/HR (CPI increase)	\$26.31/HR (CPI increase)
1/25/2017 9:59:46	City of Mercer Island								est. \$30 per CB
1/18/2017 7:33:39	City of Mill Creek	30,000	25,000	25,000	30,000	60,000	56,000	45,000	40,000
1/17/2017 10:38:54	City of Milton	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

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Timestamp	Jurisdiction/Organization	Inspection Costs 2008	Inspection Costs 2009	Inspection Costs 2010	Inspection Costs 2011	Inspection Costs 2012	Inspection Costs 2013	Inspection Costs 2014	Inspection Costs 2015
1/19/2017 15:54:23	City of Mount Vernon								
1/17/2017 13:34:29	City of Mukilteo								
1/26/2017 12:03:43	City of Newcastle								
1/23/2017 9:24:31	City of Olympia								Unknown
2/3/2017 15:18:03	City of Poulsbo	7.82	8.22	8.22	8.3	8.53	8.66	8.82	9
1/17/2017 9:59:19	City of Puyallup								

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Inspection Costs 2008	Inspection Costs 2009	Inspection Costs 2010	Inspection Costs 2011	Inspection Costs 2012	Inspection Costs 2013	Inspection Costs 2014	Inspection Costs 2015
1/30/2017 16:07:16	City of Renton								
2/9/2017 16:30:18	City of Sammamish								
1/27/2017 18:25:11	City of Shoreline								
1/23/2017 11:58:21	City of Sumner								
1/20/2017 12:19:10	City of Tumwater								
3/23/2017 17:03	City of Woodinville	Not available	\$3261.25/year	\$4219.23/year	\$5371.65/year	\$7,020.27/year	\$6,222.41/year	\$4,647.0/year	\$6,744.75/year

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Maintenance Costs 2008	Maintenance Costs 2009	Maintenance Costs 2010	Maintenance Costs 2011	Maintenance Costs 2012	Maintenance Costs 2013	Maintenance Costs 2014	Maintenance Costs 2015
1/31/2017 11:30:13	WSDOT								
3/15/2017 12:07	King County						\$553.61 per CB	\$553.84 per CB	\$571.94 per CB
2/17/2017 7:05:16	King County DNRP Parks and Recreation								
2/23/2017 10:57	King County DOT/Road Services Div/Maintenance Section	N/A	N/A	Need time to gather data	Need time to gather data	Need time to gather data	~\$136.00/CB	Need time to gather data	Need time to gather data
3/1/2017 13:59	King County International Airport	\$50K / year	\$50K / year	\$50K / year	\$50K / year	\$50K / year	\$50K / year	\$50K / year	\$100K year
3/1/2017 17:03	King County Wastewater Treatment Division								

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Maintenance Costs 2008	Maintenance Costs 2009	Maintenance Costs 2010	Maintenance Costs 2011	Maintenance Costs 2012	Maintenance Costs 2013	Maintenance Costs 2014	Maintenance Costs 2015
2/28/2017 15:27	King County/Facilities Management Division	All maintenance costs are aggregated							
2/27/2017 14:29	King County/Metro Transit								
1/26/2017 11:37:27	City Of Tacoma								
2/7/2017 14:33:15	Seattle Public Utilities	605,886	1,062,039	861,536	648,879	756,259	650,224	674,647	719,794
1/19/2017 15:22:33	Highline College	NA	NA	NA	\$0	\$50/CB	\$54.55/CB	\$0	\$52.94/CB
1/30/2017 17:38:46	Port of Seattle	Not available	see above						

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Maintenance Costs 2008	Maintenance Costs 2009	Maintenance Costs 2010	Maintenance Costs 2011	Maintenance Costs 2012	Maintenance Costs 2013	Maintenance Costs 2014	Maintenance Costs 2015
1/31/2017 9:51:14	Seattle Public School								
2/3/2017 8:05:53	WA Military Department								
1/30/2017 11:48:09	Western Washington/Lower Columbia College	0	0	0	\$2,809.37/yr	\$1,242.93/yr	\$133.92/yr	\$180.00	\$88.97
2/1/2017 8:54:59	Kitsap County								
1/23/2017 14:51:42	Thurston County						480000	510000	340000
1/30/2017 15:06:09	Whatcom County								

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Maintenance Costs 2008	Maintenance Costs 2009	Maintenance Costs 2010	Maintenance Costs 2011	Maintenance Costs 2012	Maintenance Costs 2013	Maintenance Costs 2014	Maintenance Costs 2015
2/21/2017 15:58:10	City of Algona								
1/23/2017 14:05:12	City of Arlington								Estimated \$30000
1/17/2017 11:34:39	City of Auburn	Unknown							
1/23/2017 14:42:38	City of Bainbridge Island								
1/27/2017 18:23:26	City of Battle Ground	Unknown	\$684	\$27,930	\$37,449	\$456	\$18,810	\$17,214	\$4,389
2/9/2017 15:50:02	City of Bellevue								

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Maintenance Costs 2008	Maintenance Costs 2009	Maintenance Costs 2010	Maintenance Costs 2011	Maintenance Costs 2012	Maintenance Costs 2013	Maintenance Costs 2014	Maintenance Costs 2015
1/27/2017 10:41:03	City of Bellingham								
1/30/2017 14:28:18	City of Bremerton	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item	This is not tracked as a separate item
2/9/2017 16:39:03	City of Brier				20K	17K	5K	2K	2K
1/30/2017 16:02:02	City of Camas								
2/2/2017 7:19:01	City of Centralia								
2/2/2017 9:42:34	City Of Covington	N/A							

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Maintenance Costs 2008	Maintenance Costs 2009	Maintenance Costs 2010	Maintenance Costs 2011	Maintenance Costs 2012	Maintenance Costs 2013	Maintenance Costs 2014	Maintenance Costs 2015
1/25/2017 10:52:36	City of Des Moines								
1/30/2017 16:45:50	City of Edgewood	17033	19941	21292	22175	23284	24448	134780	245111
1/30/2017 16:18:32	City of Everett			\$220,000	\$220,000	\$220,000	\$90,000	\$90,000	\$90,000
1/30/2017 14:57:09	City of Federal Way	\$108,000	\$140,000	\$140,000	\$140,000	\$140,000	\$154,250	\$150,500	\$166,500
1/27/2017 16:14:27	City of Ferndale								
1/23/2017 12:12:13	City of Issaquah						\$15,224.00	\$52,515.00	\$49,543.00

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Maintenance Costs 2008	Maintenance Costs 2009	Maintenance Costs 2010	Maintenance Costs 2011	Maintenance Costs 2012	Maintenance Costs 2013	Maintenance Costs 2014	Maintenance Costs 2015
1/30/2017 11:05:12	City of Kent	\$171.20 /CB	\$151.13 / CB	\$174.49 / CB	\$98.20 / CB	\$165.96 / CB	\$276.77 / CB (Frame and lid change out project included))	\$261.01 / CB (CB locate project included)	\$254.61 / CB
1/31/2017 16:45:08	City of Kirkland								
1/20/2017 14:34:07	City of Lakewood	Maintenance (cleaning) and inspection costs are one in the same	Same as above	Same as above	Same as above	\$21.00/Type I and Drywell; \$37.00/Type II and manhole (new contract separated cleaning and inspection as separate bid items)	\$21.33/Type I and Drywell; \$37.59 Type II and manhole (CPI increase)	\$21.75/Type I and Drywell; \$38.34/Type II and manhole (CPI increase)	\$22.10/Type I and Drywell; \$38.95/Type II and manhole (CPI increase)
1/25/2017 9:59:46	City of Mercer Island								est. \$30 per CB
1/18/2017 7:33:39	City of Mill Creek								
1/17/2017 10:38:54	City of Milton	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Maintenance Costs 2008	Maintenance Costs 2009	Maintenance Costs 2010	Maintenance Costs 2011	Maintenance Costs 2012	Maintenance Costs 2013	Maintenance Costs 2014	Maintenance Costs 2015
1/19/2017 15:54:23	City of Mount Vernon								
1/17/2017 13:34:29	City of Mukilteo								
1/26/2017 12:03:43	City of Newcastle								
1/23/2017 9:24:31	City of Olympia								Unknown
2/3/2017 15:18:03	City of Poulsbo	62.73	65.25	65.25	65.75	67.24	68.03	69.1	70.2
1/17/2017 9:59:19	City of Puyallup								

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	Maintenance Costs 2008	Maintenance Costs 2009	Maintenance Costs 2010	Maintenance Costs 2011	Maintenance Costs 2012	Maintenance Costs 2013	Maintenance Costs 2014	Maintenance Costs 2015
1/30/2017 16:07:16	City of Renton								
2/9/2017 16:30:18	City of Sammamish								
1/27/2017 18:25:11	City of Shoreline								
1/23/2017 11:58:21	City of Sumner							17000	
1/20/2017 12:19:10	City of Tumwater								
3/23/2017 17:03	City of Woodinville	Not available	\$9,783.75/year	\$12,657.68/year	\$16,114.95/year	\$21,060.81/year	\$18,667.23/year	\$13,941/year	\$20,234.25/year

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	11.If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.	12.If available, please send your jurisdiction's Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.	13. Do you have any questions, comments, or feedback about the study or survey?	The next step is to upload your files. We will send a link and instructions on how to upload files to the e-mail addresses that you provide below. Please include anyone you would like to have access.
1/31/2017 11:30:13	WSDOT	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		
3/15/2017 12:07	King County	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.	We use Appendix A of the King County Stormwater design manual.	Mark.Preszler@kingcounty.gov
2/17/2017 7:05:16	King County DNRP Parks and Recreation	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		
2/23/2017 10:57	King County DOT/Road Services Div/Maintenance Section	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.		brent.dhoore@kingcounty.gov
3/1/2017 13:59	King County International Airport	No, no field inspection form available.	Yes, SOP will be sent with data transmittal.	No	
3/1/2017 17:03	King County Wastewater Treatment Division	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	11.If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.	12.If available, please send your jurisdiction's Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.	13. Do you have any questions, comments, or feedback about the study or survey?	The next step is to upload your files. We will send a link and instructions on how to upload files to the e-mail addresses that you provide below. Please include anyone you would like to have access.
2/28/2017 15:27	King County/Facilities Management Division	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		bill.eckel@kingcounty.gov; alexander.jones@kingcounty.gov
2/27/2017 14:29	King County/Metro Transit	No, no field inspection form available.	No, SOP not available.		talon.swanson@kingcounty.gov
1/26/2017 11:37:27	City Of Tacoma	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.		
2/7/2017 14:33:15	Seattle Public Utilities	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.		david.shin@seattle.gov
1/19/2017 15:22:33	Highline College	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.	No	
1/30/2017 17:38:46	Port of Seattle	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.		dewell.j@portseattle.org; silcox.s@portseattle.org; mprasek@eaest.com; ecrumbaker@aspectconsulting.com

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	11.If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.	12.If available, please send your jurisdiction's Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.	13. Do you have any questions, comments, or feedback about the study or survey?	The next step is to upload your files. We will send a link and instructions on how to upload files to the e-mail addresses that you provide below. Please include anyone you would like to have access.
1/31/2017 9:51:14	Seattle Public School	No, no field inspection form available.	No, SOP not available.		
2/3/2017 8:05:53	WA Military Department				
1/30/2017 11:48:09	Western Washington/Lower Columbia College	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		none
2/1/2017 8:54:59	Kitsap County	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.	I'll send cost data with other data.	agallard@co.kitsap.wa.us
1/23/2017 14:51:42	Thurston County	No, no field inspection form available.	No, SOP not available.		
1/30/2017 15:06:09	Whatcom County	Yes, example field inspection form will be sent with data transmittal.			ccraver@co.whatcom.wa.us

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	11.If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.	12.If available, please send your jurisdiction's Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.	13. Do you have any questions, comments, or feedback about the study or survey?	The next step is to upload your files. We will send a link and instructions on how to upload files to the e-mail addresses that you provide below. Please include anyone you would like to have access.
2/21/2017 15:58:10	City of Algona	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.		
1/23/2017 14:05:12	City of Arlington	No, no field inspection form available.	No, SOP not available.		
1/17/2017 11:34:39	City of Auburn	No, no field inspection form available.	No, SOP not available.		mmay@auburnwa.gov
1/23/2017 14:42:38	City of Bainbridge Island	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		dberry@bainbridgewa.gov ; Ray Navarette (navarette@bainbridgewa.gov)
1/27/2017 18:23:26	City of Battle Ground	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		Kelly.Uhacz@cityofbg.org
2/9/2017 15:50:02	City of Bellevue	No, no field inspection form available.	Yes, SOP will be sent with data transmittal.		

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	11.If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.	12.If available, please send your jurisdiction's Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.	13. Do you have any questions, comments, or feedback about the study or survey?	The next step is to upload your files. We will send a link and instructions on how to upload files to the e-mail addresses that you provide below. Please include anyone you would like to have access.
1/27/2017 10:41:03	City of Bellingham	No, no field inspection form available.	No, SOP not available.		
1/30/2017 14:28:18	City of Bremerton	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.	Our operations and maintenance tasks, such as: cleaning catch basins and ditches; and green infrastructure maintenance, are not individually tracked in our Stormwater Program financial system. For catch basin maintenance, we clean all catch basins annually for right-of-way systems. We have tracking numbers for the main Permit components and details can be broken out of the records with effort if needed. Street sweeping is tracked with its own number. Sweeping and catch basin cleaning spoils are collected in the same pile and disposed of under the same waste permit at the landfill. Our stormwater system GIS files have varying degrees of detail for the individual catch basin, or manholes in the system, and are continuously updated and expanded.	chance.berthiaume@ci.bremerton.wa.us
2/9/2017 16:39:03	City of Brier				
1/30/2017 16:02:02	City of Camas	No, no field inspection form available.	No, SOP not available.		Steve Wall swall@cityofcamas.us
2/2/2017 7:19:01	City of Centralia	No, no field inspection form available.	No, SOP not available.	no	
2/2/2017 9:42:34	City Of Covington	No, no field inspection form available.	No, SOP not available.	N/A	bparrish@covingtonwa.gov

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	11.If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.	12.If available, please send your jurisdiction's Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.	13. Do you have any questions, comments, or feedback about the study or survey?	The next step is to upload your files. We will send a link and instructions on how to upload files to the e-mail addresses that you provide below. Please include anyone you would like to have access.
1/25/2017 10:52:36	City of Des Moines	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.		tbeekley@desmoineswa.gov
1/30/2017 16:45:50	City of Edgewood	No, no field inspection form available.	No, SOP not available.		
1/30/2017 16:18:32	City of Everett	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		
1/30/2017 14:57:09	City of Federal Way	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		tony.doucette@cityoffederalway.com
1/27/2017 16:14:27	City of Ferndale	No, no field inspection form available.	No, SOP not available.		
1/23/2017 12:12:13	City of Issaquah	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.	Was this survey intended to include the private stormwater inspection program? In Issaquah, private inspections are conducted by Public Works Engineering and I completed this survey with the data from Public Works Operations for the public stormwater system.	Frank Reinart <frankr@issaquahwa.gov>, Evan Brumfield <EvanB@issaquahwa.gov>

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

Timestamp	Jurisdiction/Organization	11.If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.	12.If available, please send your jurisdiction's Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.	13. Do you have any questions, comments, or feedback about the study or survey?  The next step is to upload your files. We will send a link and instructions on how to upload files to the e-mail addresses that you provide below. Please include anyone you would like to have access.
1/30/2017 11:05:12	City of Kent	No, no field inspection form available.	No, SOP not available.	lharen@kentwa.gov ccouvillion@kentwa.gov
1/31/2017 16:45:08	City of Kirkland	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.	wesayers@kirklandwa.gov; jplattner@kirklandwa.gov; jgaus@kirklandwa.gov
1/20/2017 14:34:07	City of Lakewood	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.	The term "maintenance" is a little confusing in the context of this survey. I'm thinking more in terms of cleaning. Maintenance to me means replacing a grate or repairing grout inside a catch basin. I answered question #10 more focused on the cleaning of catch basins vs. maintenance of catch basins. gvigoren@cityoflakewood.us; dhalat@cityoflakewood.us; tschlepp@cityoflakewood.us
1/25/2017 9:59:46	City of Mercer Island	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.	
1/18/2017 7:33:39	City of Mill Creek	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.	was unsure of what costs were for catch basins annually. We conduct spot repairs and group up catch basin repairs and they are not done annually. Please send this request to Marci Chew
1/17/2017 10:38:54	City of Milton	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.	jcarter@cityofmilton.net

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

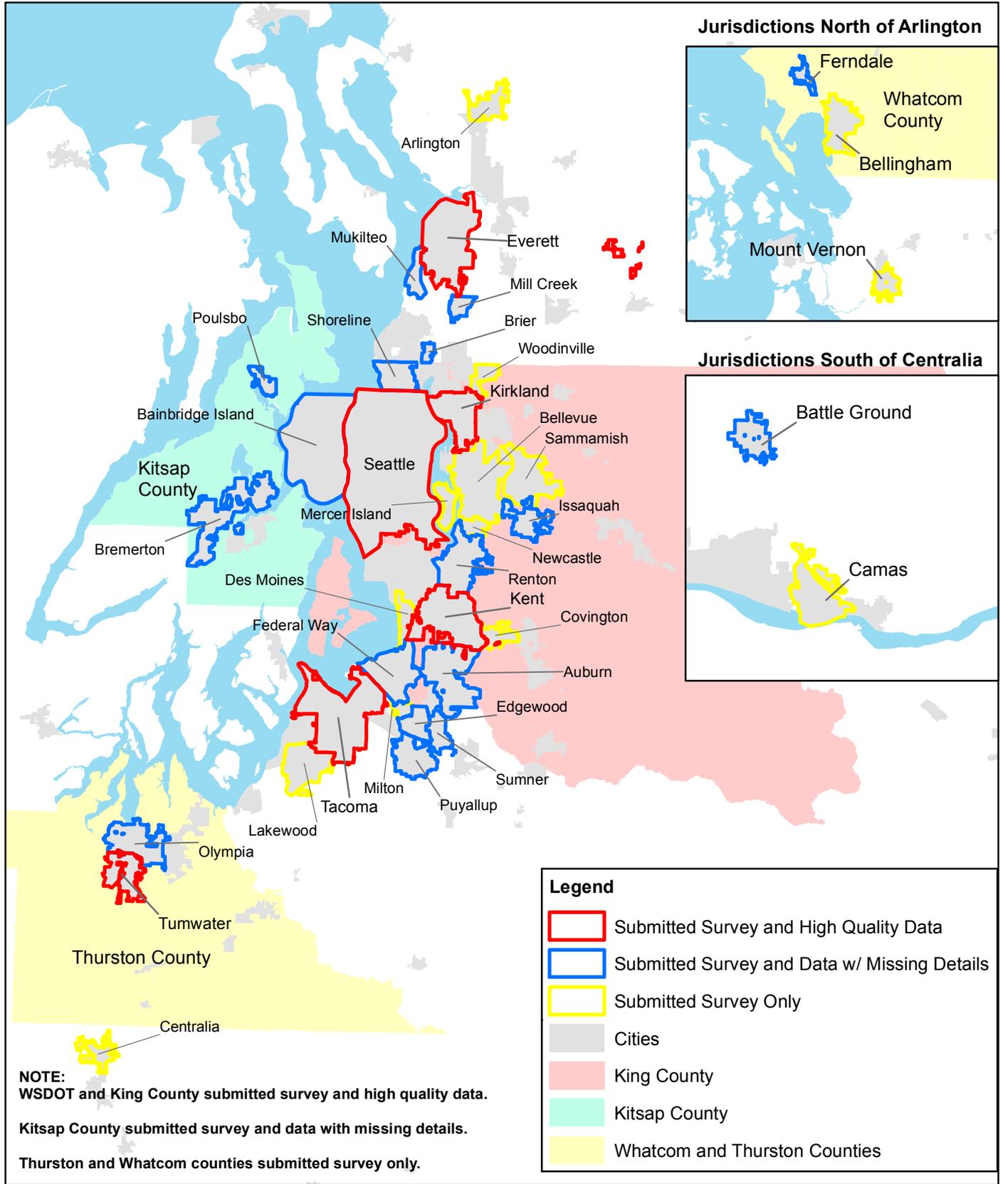
Timestamp	Jurisdiction/Organization	11.If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.	12.If available, please send your jurisdiction's Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.	13. Do you have any questions, comments, or feedback about the study or survey?	The next step is to upload your files. We will send a link and instructions on how to upload files to the e-mail addresses that you provide below. Please include anyone you would like to have access.
1/19/2017 15:54:23	City of Mount Vernon	No, no field inspection form available.	No, SOP not available.	none	
1/17/2017 13:34:29	City of Mukilteo	No, no field inspection form available.	No, SOP not available.		
1/26/2017 12:03:43	City of Newcastle	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		
1/23/2017 9:24:31	City of Olympia	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.	I felt uncomfortable checking some of the choices in this survey due to the fact that we have very limited data. We have fields for information but we don't have the resources to fill in the data.	sbarclif@ci.olympia.wa.us
2/3/2017 15:18:03	City of Poulsbo	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.		Anja Hart ahart@cityofpoulsbo.com; Jordan Schager jschager@cityofpoulsbo.com
1/17/2017 9:59:19	City of Puyallup	No, no field inspection form available.	No, SOP not available.		jgrbich@ci.puyallup.wa.us

ATTACHMENT B  
UNPROCESSED SURVEY RESULTS

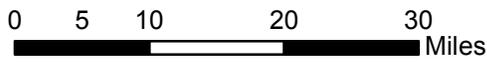
Timestamp	Jurisdiction/Organization	11.If available, please send an example field inspection form(s) used by your jurisdiction for catch basin inspection and maintenance.	12.If available, please send your jurisdiction's Standard Operating Procedures (SOP) document(s) for catch basin inspection and maintenance.	13. Do you have any questions, comments, or feedback about the study or survey?	The next step is to upload your files. We will send a link and instructions on how to upload files to the e-mail addresses that you provide below. Please include anyone you would like to have access.
1/30/2017 16:07:16	City of Renton	No, no field inspection form available.	No, SOP not available.		
2/9/2017 16:30:18	City of Sammamish	No, no field inspection form available.	Yes, SOP will be sent with data transmittal.		
1/27/2017 18:25:11	City of Shoreline	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		
1/23/2017 11:58:21	City of Sumner	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.		
1/20/2017 12:19:10	City of Tumwater	Yes, example field inspection form will be sent with data transmittal.	Yes, SOP will be sent with data transmittal.		ageorgeson@ci.tumwater.wa.us
3/23/2017 17:03	City of Woodinville	Yes, example field inspection form will be sent with data transmittal.	No, SOP not available.	No	Asha D'Souza - ashad@ci.woodinville.wa.us

# ATTACHMENT C

## SURVEY RESULTS SUMMARY



Prepared by: 6/15/2017



**Western Washington Catch Basin Study**  
**Summary of Responses**  
 Washington State **Figure C-1**

TABLE C-1  
Summary of Survey and Data Submissions

Phase	Type	Jurisdiction/Organization	Contact Name	Survey Submitted	Data Submitted	No. of Data Files
Phase 1	Individual	WSDOT	Trett Sutter	X	X	25 (15.2 MB)
Phase 1	Primary	King County	Blair Scott	X	X	1 (9.96 MB)
Phase 1	Primary - CA	King County DNRP Parks and Recreation	David Sizemore	X	X	9 (10.1 MB)
Phase 1	Primary - CA	King County DOT/Road Services Div/Maintenance Section	Brent Dhoore	X		
Phase 1	Primary - CA	King County International Airport	Peter Dumaliang	X		
Phase 1	Primary - CA	King County Wastewater Treatment Division	Jeff Lafer	X		
Phase 1	Primary - CA	King County/Facilities Management Division	Bill Eckel	X	X	4 (902 KB)
Phase 1	Primary - CA	King County/Metro Transit	Talon Swanson	X	X	1 (760 KB)
Phase 1	Primary	City Of Tacoma	Michael A. Rose, P.E.	X	X	145 (3.31 GB)
Phase 1	Primary	Pierce County			X	48 (3.7 MB)
Phase 1	Primary	Seattle Public Utilities	Kate Rhoads	X	X	11 (74.7 MB)
Phase 1	Secondary	Highline College	Barry Holldorf	X	X	15 (37.6 MB)
Phase 1	Secondary	Port of Seattle	Jane Dewell	X	X	2 (5.5 MB)
Phase 1	Secondary	Seattle Public School	Shelly Kerby	X		
Phase 1	Secondary	WA Military Department	Rowena Valencia-Gica	X		
Phase 1	Secondary	Western Washington/Lower Columbia College	Jeff Moenck	X	X	6 (4.69 MB)
Phase 2	--	Kitsap County	Angela Gallardo	X	X	41 (43 MB)
Phase 2	--	Thurston County	Ryan Langan	X		
Phase 2	--	Whatcom County	Cathy Craver	X		
Phase 2	--	City of Algona	Salvador Marez	X	X	1 (246 KB)
Phase 2	--	City of Arlington	Ken Clarke	X		
Phase 2	--	City of Auburn	Chris Thorn	X	X	1(7.8 MB)
Phase 2	--	City of Bainbridge Island	Marilyn Guthrie	X	X	2 (2.4 MB)
Phase 2	--	City of Battle Ground	Kelly Uhacz	X	X	4 (2.76 MB)
Phase 2	--	City of Bellevue	Don McQuilliams	X		
Phase 2	--	City of Bellingham	Jason Porter	X		
Phase 2	--	City of Bremerton	Chance Berthiaume	X	X	1(1.72 MB)
Phase 2	--	City of Brier	Rich Maag	X	X	1(304 KB)
Phase 2	--	City of Camas	Anita Ashton	X		
Phase 2	--	City of Centralia	Fred Chapman	X		
Phase 2	--	City Of Covington	Ben Parrish	X		
Phase 2	--	City of Des Moines	Tyler Beekley	X		
Phase 2	--	City of Edgewood	Jeremy Metzler	X	X	1 (1 MB)
Phase 2	--	City of Everett	Grant Moen	X	X	8 (159 MB)
Phase 2	--	City of Federal Way	Tony Doucette	X	X	228 (183 MB)
Phase 2	--	City of Ferndale	Wendy LaRocque	X	X	33 (50.8 MB)
Phase 2	--	City of Issaquah	Harvey Walker	X	X	1 (5.86 MB)
Phase 2	--	City of Kent	Laura Haren	X	X	2 (42.9 MB)
Phase 2	--	City of Kirkland	Jenny Gaus	X	X	3 (36.5 MB)
Phase 2	--	City of Lakewood	Greg Vigoren	X		
Phase 2	--	City of Mercer Island	Hartvigson	X		
Phase 2	--	City of Mill Creek	Marci Chew	X	X	1 (193 KB)

TABLE C-1  
Summary of Survey and Data Submissions

Phase	Type	Jurisdiction/Organization	Contact Name	Survey Submitted	Data Submitted	No. of Data Files
Phase 2	--	City of Milton	Jamie Carter	X		
Phase 2	--	City of Mount Vernon	Blaine Chesterfield	X		
Phase 2	--	City of Mukilteo	Jennifer Adams	X	X	1 (37.2 MB)
Phase 2	--	City of Newcastle	Audrie Starsy	X		
Phase 2	--	City of Olympia	Sue Barclift	X	X	2(1.9 MB)
Phase 2	--	City of Poulsbo	Anja Hart	X	X	1 (362 KB)
Phase 2	--	City of Puyallup	Jon Wikander	X	X	4 (1.1 MB)
Phase 2	--	City of Renton	Kristina Lowthian	X	X	88 (1.87 GB)
Phase 2	--	City of Sammamish	Tawni Dalziel	X		
Phase 2	--	City of Shoreline	Uki Dele	X	X	3 (55.8 MB)
Phase 2	--	City of Sumner	Robert Wright	X	X	12 (10.7 MB)
Phase 2	--	City of Tumwater	Amy Georgeson	X	X	199 (387 MB)
Phase 2	--	City of Woodinville	Brian Meyer	X		
<b>TOTAL</b>				<b>54</b>	<b>34</b>	

NOTES:

Primary - CA = Primary - Custodial Agency of King County

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	Contact Name	Survey Submitted	Data Submitted	CB Inspection Schedule				CB Types				CB Inspection Activities			
						Std	Alt 1	Alt 2	Alt 3	Type I	Type II	Inlet	Other	Visual/Photo	Field Notes	Map/GIS	Depth
1	Phase 1	WSDOT	Trett Sutter	X	X	X				X	X	X		X	X	X	X
2	Phase 1	King County	Blair Scott	X	X	X	X			X	X	X		X	X	X	X
3	Phase 1	King County DNRP Parks and Recreation	David Sizemore	X	X	X				X	X	X		X	X	X	X
4	Phase 1	King County DOT/Road Services Div/Maintenance Section	Brent Dhoore	X				X		X	X	X		X	X	X	X
5	Phase 1	King County International Airport	Peter Dumaliang	X					X	X	X			X	X	X	X
6	Phase 1	King County Wastewater Treatment Division	Jeff Lafer	X		X		X		X	X	X			X		
7	Phase 1	King County/Facilities Management Division	Bill Eckel	X	X	X				X	X	X		X	X	X	X
8	Phase 1	King County/Metro Transit	Talon Swanson	X	X	X	X		X	X	X	X		X	X		X
9	Phase 1	City Of Tacoma	Michael A. Rose, P.E.	X	X			X		X	X	X		X	X	X	X
10	Phase 1	Pierce County			X												
11	Phase 1	Seattle Public Utilities	Kate Rhoads	X	X	X				X	X	X		X	X	X	X
12	Phase 1	Highline College	Barry Holldorf	X	X	X				X	X	X		X	X		
13	Phase 1	Port of Seattle	Jane Dewell	X	X	X				X	X	X		X	X	X	X
14	Phase 1	Seattle Public School	Shelly Kerby	X		X			X	X				X			
15	Phase 1	WA Military Department	Rowena Valencia-Gica	X					X	X		X		X	X	X	X
16	Phase 1	Western Washington/Lower Columbia College	Jeff Moenck	X	X		X			X	X			X	X		
17	Phase 2	Kitsap County	Angela Gallardo	X	X					X	X	X		X	X	X	X
18	Phase 2	Thurston County	Ryan Langan	X		X				X	X	X		X	X	X	X
19	Phase 2	Whatcom County	Cathy Craver	X		X				X	X			X	X		X
20	Phase 2	City of Algona		X	X		X			X	X	X		X	X		X

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	Contact Name	Survey Submitted	Data Submitted	CB Inspection Schedule				CB Types				CB Inspection Activities			
						Std	Alt 1	Alt 2	Alt 3	Type I	Type II	Inlet	Other	Visual/Photo	Field Notes	Map/GIS	Depth
21	Phase 2	City of Arlington	Ken Clarke	X		X				X	X	X		X	X		
22	Phase 2	City of Auburn	Chris Thorn	X	X	X				X		X		X	X	X	X
23	Phase 2	City of Bainbridge Island	Marilyn Guthrie	X	X	X				X	X			X			X
24	Phase 2	City of Battle Ground	Kelly Uhacz	X	X	X				X		X		X	X	X	X
25	Phase 2	City of Bellevue	Don McQuilliams	X		X				X	X	X		X	X	X	X
26	Phase 2	City of Bellingham	Jason Porter	X				X		X	X	X		X	X	X	X
27	Phase 2	City of Bremerton	Chance Berthiaume	X	X	X				X	X	X	X	X	X	X	X
28	Phase 2	City of Brier	Rich Maag	X	X			X		X	X	X			X	X	
29	Phase 2	City of Camas	Anita Ashton	X		X				X	X	X		X			
30	Phase 2	City of Centralia	Fred Chapman	X		X				X				X	X	X	X
31	Phase 2	City Of Covington	Ben Parrish	X		X				X	X	X		X	X		X
32	Phase 2	City of Des Moines	Tyler Beekley	X				X		X		X		X	X	X	X
33	Phase 2	City of Edgewood	Jeremy Metzler	X	X	X				X	X	X		X	X	X	X
34	Phase 2	City of Everett	Grant Moen	X	X	X				X	X	X		X	X	X	X
35	Phase 2	City of Federal Way	Tony Doucette	X	X			X		X	X	X	X	X	X	X	X
36	Phase 2	City of Ferndale	Wendy LaRocque	X	X				X	X	X	X		X	X	X	
37	Phase 2	City of Issaquah	Harvey Walker	X	X			X		X	X	X		X	X	X	X
38	Phase 2	City of Kent	Laura Haren, Chris Couvillion	X	X	X				X	X	X	X	X	X	X	
39	Phase 2	City of Kirkland	Jenny Gaus	X	X	X				X	X	X		X	X	X	
40	Phase 2	City of Lakewood	Greg Vigoren	X		X				X	X	X	X	X	X		X
41	Phase 2	City of Mercer Island	Hartvigson	X		X				X	X	X		X	X	X	
42	Phase 2	City of Mill Creek	Marci Chew	X	X				X	X				X	X	X	
43	Phase 2	City of Milton	Jamie Carter	X		X				X	X	X		X	X		X
44	Phase 2	City of Mount Vernon	Blaine Chesterfield	X		X				X	X	X		X	X		X
45	Phase 2	City of Mukilteo	Jennifer Adams	X	X	X				X	X	X		X	X		X

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	Contact Name	Survey Submitted	Data Submitted	CB Inspection Schedule				CB Types				CB Inspection Activities			
						Std	Alt 1	Alt 2	Alt 3	Type I	Type II	Inlet	Other	Visual/Photo	Field Notes	Map/GIS	Depth
46	Phase 2	City of Newcastle	Audrie Starsy	X		X				X	X	X		X	X	X	X
47	Phase 2	City of Olympia	Sue Barclift	X	X	X				X	X	X		X	X	X	
48	Phase 2	City of Poulsbo	Anja Hart	X	X	X				X	X	X		X	X	X	X
49	Phase 2	City of Puyallup	Jon Wikander	X	X				X	X	X	X		X	X	X	X
50	Phase 2	City of Renton	Kristina Lowthian	X	X	X		X	X	X	X	X		X		X	
51	Phase 2	City of Sammamish	Tawni Dalziel	X		X				X	X	X					
52	Phase 2	City of Shoreline	Uki Dele	X	X	X				X	X				X	X	X
53	Phase 2	City of Sumner	Robert Wright	X	X	X		X	X	X	X	X		X	X	X	X
54	Phase 2	City of Tumwater	Amy Georgeson	X	X	X				X	X	X		X	X	X	X
55	Phase 2	City of Woodinville	Brian Meyer	X		X				X	X			X	X	X	X
		TOTAL		54	34	39	5	9	9	54	48	46	4	50	49	38	39

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	CB Maintenance Records													CB Cleaning Decision								
			Pipe Cleaning	Culvert Cleaning	CB Cleanout	Ditch Maint.	Street Cleaning	Road Repair/Resurf	Sanding/de-icing	Other snow/ice control	Landscaping Maint.	Dust Control	Sediment/Erosion Control	Trash/pet waste	Repair of CB grate	Crack sealing	Inspection Data	Schedule	Traffic Volume/Road Factors	Emergency	Complaints	Transfer ownership		
1	Phase 1	WSDOT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
2	Phase 1	King County	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X			
3	Phase 1	King County DNRP Parks and Recreation	X		X	X	X				X	X	X	X	X	X	X			X	X			
4	Phase 1	King County DOT/Road Services Div/Maintenance Section	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X		
5	Phase 1	King County International Airport	X		X	X	X	X	X	X	X	X		X	X	X	X	X			X	X		
6	Phase 1	King County Wastewater Treatment Division			X						X						X	X						
7	Phase 1	King County/Facilities Management Division			X	X									X	X	X							
8	Phase 1	King County/Metro Transit	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X			
9	Phase 1	City Of Tacoma	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X		X
10	Phase 1	Pierce County																						
11	Phase 1	Seattle Public Utilities	X	X	X	X	X	X	X		X	X	X		X	X	X			X	X			
12	Phase 1	Highline College	X		X				X	X		X		X	X		X			X	X			
13	Phase 1	Port of Seattle	X		X	X				X				X	X	X	X			X	X			
14	Phase 1	Seattle Public School	X	X	X									X				X				X		
15	Phase 1	WA Military Department			X		X							X				X						
16	Phase 1	Western Washington/Lower Columbia College			X					X	X			X		X		X						
17	Phase 2	Kitsap County	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X		
18	Phase 2	Thurston County	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
19	Phase 2	Whatcom County	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X			
20	Phase 2	City of Algona	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X		

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	CB Maintenance Records													CB Cleaning Decision						
			Pipe Cleaning	Culvert Cleaning	CB Cleanout	Ditch Maint.	Street Cleaning	Road Repair/Resurf	Sanding/de-icing	Other snow/ice control	Landscaping Maint.	Dust Control	Sediment/Erosion Control	Trash/pet waste	Repair of CB grate	Crack sealing	Inspection Data	Schedule	Traffic Volume/Road Factors	Emergency	Complaints	Transfer ownership
21	Phase 2	City of Arlington	X		X	X	X	X	X		X							X			X	
22	Phase 2	City of Auburn	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	
23	Phase 2	City of Bainbridge Island	X	X	X	X	X	X	X				X		X	X	X	X			X	
24	Phase 2	City of Battle Ground		X	X	X	X	X	X	X	X		X	X	X	X	X			X	X	
25	Phase 2	City of Bellevue	X	X	X	X	X	X	X		X	X	X	X	X	X	X			X	X	
26	Phase 2	City of Bellingham	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	
27	Phase 2	City of Bremerton	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	
28	Phase 2	City of Brier	X	X	X	X	X	X	X		X		X	X	X	X	X					
29	Phase 2	City of Camas	X	X	X	X	X	X		X	X	X	X	X	X	X				X	X	
30	Phase 2	City of Centralia	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	
31	Phase 2	City Of Covington	X	X	X	X	X	X	X		X		X	X	X			X				
32	Phase 2	City of Des Moines	X	X	X	X	X	X	X		X		X	X	X	X	X			X	X	X
33	Phase 2	City of Edgewood	X	X	X	X	X	X	X		X		X	X	X	X	X				X	
34	Phase 2	City of Everett	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	
35	Phase 2	City of Federal Way	X	X	X	X	X	X	X	X	X		X	X	X	X	X			X	X	
36	Phase 2	City of Ferndale	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
37	Phase 2	City of Issaquah	X	X	X	X	X	X	X	X	X		X	X	X	X	X			X	X	
38	Phase 2	City of Kent	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X
39	Phase 2	City of Kirkland	X	X	X	X	X	X	X		X		X	X	X	X	X			X	X	
40	Phase 2	City of Lakewood	X	X	X	X	X	X	X	X	X		X	X	X	X	X			X	X	
41	Phase 2	City of Mercer Island	X	X	X	X	X	X	X		X		X	X	X	X	X			X	X	
42	Phase 2	City of Mill Creek	X	X	X	X	X	X	X		X	X	X	X	X	X						
43	Phase 2	City of Milton	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	
44	Phase 2	City of Mount Vernon	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X		
45	Phase 2	City of Mukilteo			X	X	X	X	X		X		X	X	X	X	X					

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	CB Maintenance Records													CB Cleaning Decision						
			Pipe Cleaning	Culvert Cleaning	CB Cleanout	Ditch Maint.	Street Cleaning	Road Repair/Resurf	Sanding/de-icing	Other snow/ice control	Landscaping Maint.	Dust Control	Sediment/Erosion Control	Trash/pet waste	Repair of CB grate	Crack sealing	Inspection Data	Schedule	Traffic Volume/Road Factors	Emergency	Complaints	Transfer ownership
46	Phase 2	City of Newcastle	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X	
47	Phase 2	City of Olympia	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	
48	Phase 2	City of Poulsbo	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X		X	X	
49	Phase 2	City of Puyallup	X	X	X	X	X	X	X	X	X	X	X	X	X			X				
50	Phase 2	City of Renton	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
51	Phase 2	City of Sammamish	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				
52	Phase 2	City of Shoreline	X	X	X	X	X	X	X				X		X	X	X			X	X	
53	Phase 2	City of Sumner	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X
54	Phase 2	City of Tumwater	X	X	X		X	X	X	X	X		X	X	X	X	X	X		X	X	X
55	Phase 2	City of Woodinville	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
		TOTAL	48	44	54	47	48	46	49	29	47	24	50	44	50	43	46	27	12	35	39	6

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	Inspection Data Format					Maintenance Data Format					Cost Data Format				
			Excel	Other DB	GIS	Paper	Other	Excel	Other DB	GIS	Paper	Other	Excel	Other DB	GIS	Paper	Other
1	Phase 1	WSDOT					X					X		X			
2	Phase 1	King County		X	X				X		X			X			
3	Phase 1	King County DNRP Parks and Recreation				X	X				X	X				X	
4	Phase 1	King County DOT/Road Services Div/Maintenance Section	X	X	X	X		X	X	X	X						X
5	Phase 1	King County International Airport	X			X	X	X		X				X			
6	Phase 1	King County Wastewater Treatment Division	X	X		X	X		X								
7	Phase 1	King County/Facilities Management Division	X			X	X	X			X					X	X
8	Phase 1	King County/Metro Transit	X						X					X			
9	Phase 1	City Of Tacoma			X							X					X
10	Phase 1	Pierce County															
11	Phase 1	Seattle Public Utilities		X	X				X					X			
12	Phase 1	Highline College					X	X					X				
13	Phase 1	Port of Seattle	X	X	X	X	X	X	X	X	X		X	X			
14	Phase 1	Seattle Public School					X					X					X
15	Phase 1	WA Military Department				X										X	
16	Phase 1	Western Washington/Lower Columbia College	X			X	X				X	X				X	X
17	Phase 2	Kitsap County		X	X				X	X			X	X			
18	Phase 2	Thurston County					X					X					
19	Phase 2	Whatcom County		X			X		X				X			X	
20	Phase 2	City of Algona				X					X						

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	Inspection Data Format					Maintenance Data Format					Cost Data Format				
			Excel	Other DB	GIS	Paper	Other	Excel	Other DB	GIS	Paper	Other	Excel	Other DB	GIS	Paper	Other
21	Phase 2	City of Arlington		X		X	X		X		X			X			
22	Phase 2	City of Auburn					X					X					X
23	Phase 2	City of Bainbridge Island	X					X									
24	Phase 2	City of Battle Ground		X		X			X				X				
25	Phase 2	City of Bellevue	X	X	X	X		X	X	X	X						
26	Phase 2	City of Bellingham					X	X				X	X		X	X	
27	Phase 2	City of Bremerton			X	X				X	X	X	X	X		X	X
28	Phase 2	City of Brier	X		X	X		X		X	X						
29	Phase 2	City of Camas				X					X						
30	Phase 2	City of Centralia					X				X	X	X			X	
31	Phase 2	City Of Covington	X						X					X			
32	Phase 2	City of Des Moines		X					X					X			
33	Phase 2	City of Edgewood	X		X			X		X					X		
34	Phase 2	City of Everett	X	X	X			X	X	X				X			
35	Phase 2	City of Federal Way	X			X		X			X		X			X	
36	Phase 2	City of Ferndale				X					X						
37	Phase 2	City of Issaquah		X	X		X		X	X				X			X
38	Phase 2	City of Kent		X	X	X	X		X	X	X	X		X			X
39	Phase 2	City of Kirkland		X		X			X		X			X		X	
40	Phase 2	City of Lakewood	X			X	X	X	X				X	X			
41	Phase 2	City of Mercer Island				X	X				X				X		
42	Phase 2	City of Mill Creek			X		X			X					X		
43	Phase 2	City of Milton	X			X		X		X							
44	Phase 2	City of Mount Vernon				X	X				X						X
45	Phase 2	City of Mukilteo			X					X							

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	Inspection Data Format					Maintenance Data Format					Cost Data Format				
			Excel	Other DB	GIS	Paper	Other	Excel	Other DB	GIS	Paper	Other	Excel	Other DB	GIS	Paper	Other
46	Phase 2	City of Newcastle	X		X	X		X		X	X					X	
47	Phase 2	City of Olympia			X				X			X					
48	Phase 2	City of Poulsbo	X		X	X		X		X	X			X			X
49	Phase 2	City of Puyallup		X			X		X					X			
50	Phase 2	City of Renton		X	X	X	X		X	X	X			X		X	
51	Phase 2	City of Sammamish	X					X									
52	Phase 2	City of Shoreline		X	X				X	X				X	X		
53	Phase 2	City of Sumner				X	X				X					X	
54	Phase 2	City of Tumwater		X	X		X		X	X		X		X			X
55	Phase 2	City of Woodinville			X	X					X					X	
		TOTAL	19	19	22	28	26	17	23	19	24	13	10	21	1	17	13

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	GIS Data Available															
			CB type	CB dimension	CB age	Pipe sizes	CB elevation	System conveyance	basins delineations	Flow routing	Land use	Presence/absence of curbs vs. ditches	AADT	Snow removal routes	Snow days	Street surface material	Construction activities	Local precipitation
1	Phase 1	WSDOT	X	X	X	X	X	X	X	X	X	X	X	X		X		X
2	Phase 1	King County	X	X	X	X	X	X	X		X		X	X				
3	Phase 1	King County DNRP Parks and Recreation	X	X		X		X		X								
4	Phase 1	King County DOT/Road Services Div/Maintenance Section	X	X		X	X	X		X	X	X	X	X				
5	Phase 1	King County International Airport	X	X		X	X	X	X	X	X					X		
6	Phase 1	King County Wastewater Treatment Division				X	X			X								
7	Phase 1	King County/Facilities Management Division																
8	Phase 1	King County/Metro Transit	X			X		X		X								
9	Phase 1	City Of Tacoma	X		X		X		X	X	X	X				X		
10	Phase 1	Pierce County																
11	Phase 1	Seattle Public Utilities	X		X	X		X	X	X	X	X	X	X				X
12	Phase 1	Highline College				X				X								
13	Phase 1	Port of Seattle	X	X		X	X	X	X	X								
14	Phase 1	Seattle Public School																
15	Phase 1	WA Military Department																
16	Phase 1	Western Washington/Lower Columbia College																
17	Phase 2	Kitsap County	X	X	X	X		X	X	X	X	X	X	X		X	X	X
18	Phase 2	Thurston County	X		X	X	X	X		X	X		X	X		X		
19	Phase 2	Whatcom County	X	X		X	X	X	X	X	X		X		X			
20	Phase 2	City of Algona																

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	GIS Data Available															
			CB type	CB dimension	CB age	Pipe sizes	CB elevation	System conveyance	basins delineations	Flow routing	Land use	Presence/absence of curbs vs. ditches	AADT	Snow removal routes	Snow days	Street surface material	Construction activities	Local precipitation
21	Phase 2	City of Arlington	X	X		X	X	X										
22	Phase 2	City of Auburn	X		X	X	X	X	X	X			X		X			
23	Phase 2	City of Bainbridge Island							X									
24	Phase 2	City of Battle Ground																
25	Phase 2	City of Bellevue	X		X	X	X	X	X	X			X					
26	Phase 2	City of Bellingham			X	X	X	X	X	X	X	X	X		X	X	X	
27	Phase 2	City of Bremerton	X	X	X	X	X	X	X	X						X	X	
28	Phase 2	City of Brier	X			X	X	X	X									
29	Phase 2	City of Camas				X			X						X			
30	Phase 2	City of Centralia	X	X		X	X	X	X									
31	Phase 2	City Of Covington	X					X		X	X	X		X		X		
32	Phase 2	City of Des Moines	X			X	X	X	X	X			X					
33	Phase 2	City of Edgewood	X			X				X								
34	Phase 2	City of Everett	X	X	X	X	X	X	X	X								
35	Phase 2	City of Federal Way				X		X	X	X			X	X				
36	Phase 2	City of Ferndale	X			X		X	X	X			X	X				
37	Phase 2	City of Issaquah	X			X	X	X	X	X			X					
38	Phase 2	City of Kent	X	X	X	X	X	X	X				X			X		
39	Phase 2	City of Kirkland	X			X		X	X	X	X	X	X			X		
40	Phase 2	City of Lakewood	X	X		X		X	X	X	X	X	X					
41	Phase 2	City of Mercer Island	X			X		X		X		X	X		X			
42	Phase 2	City of Mill Creek	X		X	X	X	X		X								
43	Phase 2	City of Milton	X			X			X									
44	Phase 2	City of Mount Vernon	X	X		X	X	X	X	X			X		X	X	X	
45	Phase 2	City of Mukilteo	X					X										

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	GIS Data Available															
			CB type	CB dimension	CB age	Pipe sizes	CB elevation	System conveyance	basins delineations	Flow routing	Land use	Presence/absence of curbs vs. ditches	AADT	Snow removal routes	Snow days	Street surface material	Construction activities	Local precipitation
46	Phase 2	City of Newcastle	X			X		X	X									
47	Phase 2	City of Olympia	X	X	X		X			X	X	X		X		X	X	X
48	Phase 2	City of Poulsbo	X			X	X	X			X							
49	Phase 2	City of Puyallup	X		X	X		X	X		X	X		X	X	X		X
50	Phase 2	City of Renton	X		X	X	X	X	X	X	X						X	
51	Phase 2	City of Sammamish	X			X	X	X			X			X		X		
52	Phase 2	City of Shoreline	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
53	Phase 2	City of Sumner	X	X			X											
54	Phase 2	City of Tumwater						X		X	X			X		X		
55	Phase 2	City of Woodinville	X	X		X	X	X	X	X		X		X				
		TOTAL	41	19	17	41	29	39	31	32	30	14	9	26	1	16	9	8

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	GIS Inspection and Maintenance Data Available										Field Inspection Form	SOP for Inspection and Maintenance
			Maintenance routes and schedules	Inspection dates	Maintenance or repair dates	Maintenance activities performed	Cleaning frequency and dates	Cleaning routes	Inspection and maintenance records (pre-2007)	circuit basis	Street sweeping routes and schedule	Inspection, maintenance or cleaning costs		
1	Phase 1	WSDOT	X	X	X	X	X	X					X	X
2	Phase 1	King County											X	
3	Phase 1	King County DNRP Parks and Recreation											X	X
4	Phase 1	King County DOT/Road Services Div/Maintenance Section		X	X	X				X			X	
5	Phase 1	King County International Airport												X
6	Phase 1	King County Wastewater Treatment Division											X	X
7	Phase 1	King County/Facilities Management Division											X	X
8	Phase 1	King County/Metro Transit												
9	Phase 1	City Of Tacoma								X			X	
10	Phase 1	Pierce County												
11	Phase 1	Seattle Public Utilities		X									X	
12	Phase 1	Highline College		X	X	X							X	X
13	Phase 1	Port of Seattle		X	X	X	X						X	
14	Phase 1	Seattle Public School												
15	Phase 1	WA Military Department												
16	Phase 1	Western Washington/Lower Columbia College											X	X
17	Phase 2	Kitsap County	X	X	X	X	X	X				X	X	X
18	Phase 2	Thurston County		X	X	X	X							
19	Phase 2	Whatcom County											X	
20	Phase 2	City of Algona											X	

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	GIS Inspection and Maintenance Data Available										Field Inspection Form	SOP for Inspection and Maintenance	
			Maintenance routes and schedules	Inspection dates	Maintenance or repair dates	Maintenance activities performed	Cleaning frequency and dates	Cleaning routes	Inspection and maintenance records (pre-2007)	circuit basis	Street sweeping routes and schedule	Inspection, maintenance or cleaning costs			
21	Phase 2	City of Arlington													
22	Phase 2	City of Auburn													
23	Phase 2	City of Bainbridge Island											X	X	
24	Phase 2	City of Battle Ground											X	X	
25	Phase 2	City of Bellevue		X				X						X	
26	Phase 2	City of Bellingham		X	X	X			X			X			
27	Phase 2	City of Bremerton	X	X	X	X	X	X					X	X	
28	Phase 2	City of Brier		X	X	X	X			X					
29	Phase 2	City of Camas													
30	Phase 2	City of Centralia		X	X	X	X	X				X			
31	Phase 2	City Of Covington													
32	Phase 2	City of Des Moines	X						X				X		
33	Phase 2	City of Edgewood		X	X	X									
34	Phase 2	City of Everett		X	X			X					X	X	
35	Phase 2	City of Federal Way							X			X	X	X	
36	Phase 2	City of Ferndale													
37	Phase 2	City of Issaquah		X	X	X	X			X			X		
38	Phase 2	City of Kent		X	X	X	X		X						
39	Phase 2	City of Kirkland	X	X	X	X	X		X			X	X	X	
40	Phase 2	City of Lakewood	X									X	X	X	
41	Phase 2	City of Mercer Island			X							X	X		
42	Phase 2	City of Mill Creek											X		
43	Phase 2	City of Milton											X		
44	Phase 2	City of Mount Vernon													
45	Phase 2	City of Mukilteo		X				X							

TABLE C-2  
SURVEY RESULTS SUMMARY

No.	Phase	Jurisdiction/Organization	GIS Inspection and Maintenance Data Available										Field Inspection Form	SOP for Inspection and Maintenance
			Maintenance routes and schedules	Inspection dates	Maintenance or repair dates	Maintenance activities performed	Cleaning frequency and dates	Cleaning routes	Inspection and maintenance records (pre-2007)	circuit basis	Street sweeping routes and schedule	Inspection, maintenance or cleaning costs		
46	Phase 2	City of Newcastle		X	X	X							X	X
47	Phase 2	City of Olympia		X				X	X				X	X
48	Phase 2	City of Poulsbo											X	
49	Phase 2	City of Puyallup		X	X	X	X	X	X	X	X			
50	Phase 2	City of Renton	X			X	X	X		X				
51	Phase 2	City of Sammamish												X
52	Phase 2	City of Shoreline											X	X
53	Phase 2	City of Sumner		X									X	
54	Phase 2	City of Tumwater											X	X
55	Phase 2	City of Woodinville	X										X	
		TOTAL	8	22	18	17	16	10	3	6	8	0	33	21

TABLE C-2  
SURVEY RESULTS SUMMARY

DATA SUBMITTED SUMMARY								
No.	Phase	Jurisdiction/Organization	CB Data in Excel	CB Data in GIS	Inspection & Maintenance Data in Excel	Inspection & Maintenance Data in GIS	Field Inspection Form	SOP for Inspection and Maintenance
1	Phase 1	WSDOT	Provided	Missing	Provided	Not Available		Provided: CB Inspection Criteria
2	Phase 1	King County	Not Available	Provided	Provided missing maintenance data, only has task detail from inspection	Not Available	Not Available	Not Available
3	Phase 1	King County DNRP Parks and Recreation	Not Available	Missing	Not Available	Not Available	Missing	Provided
4	Phase 1	King County DOT/Road Services Div/Maintenance Section						
5	Phase 1	King County International Airport						
6	Phase 1	King County Wastewater Treatment Division						
7	Phase 1	King County/Facilities Management Division	Missing	Not available	Missing	Not Available	Provided	Provided
8	Phase 1	King County/Metro Transit						
9	Phase 1	City Of Tacoma	Not Available	Provided;Missing fields: basins delineations landuse Presence/absence of curbs vs. ditches Street surface material	Provided: CB Inspection Spreadsheet	Not Available	Missing	Not Available
10	Phase 1	Pierce County	Not Available		Not Available	Provided : Inspection and Maintenance data for the year 2016. Inspection dates, Maintenance dates and Maintenance activities performed	Not Available	Not Available
11	Phase 1	Seattle Public Utilities	Provided	Missing no GIS data was provided	Provided inspection & maintenance data from 2008-2016	Missing	Missing	Not Available
12	Phase 1	Highline College	Missing CB location	Missing	Missing inspection data & result	Not Available	Provided	Provided
13	Phase 1	Port of Seattle	Not Available	Provided; Missing fields: CB dimention	Provided	Provided	Provided	Provided
14	Phase 1	Seattle Public School						
15	Phase 1	WA Military Department						
16	Phase 1	Western Washington/Lower Columbia College	Not Available	Not Available	Missing	Not Available	Provided	Missing
17	Phase 2	Kitsap County	Provided: Only type and as built date	Provided; Missing fields: pipe sizes, system conveyance,land use, AADT, snow removal routes, street surface material, construction activities,local precipitation	Provided	Missing	Missing	Missing
18	Phase 2	Thurston County						
19	Phase 2	Whatcom County						
20	Phase 2	City of Algona						

TABLE C-2  
SURVEY RESULTS SUMMARY

DATA SUBMITTED SUMMARY								
No.	Phase	Jurisdiction/Organization	CB Data in Excel	CB Data in GIS	Inspection & Maintenance Data in Excel	Inspection & Maintenance Data in GIS	Field Inspection Form	SOP for Inspection and Maintenance
21	Phase 2	City of Arlington						
22	Phase 2	City of Auburn	Provided:CB dimensions, location, basin ID, street surface material, flow routing through the system etc in the inspection summary	Missing	Provided: CB inspection summary with inspection date, cleaning routes etc	Not Available	Not Available	Not Available
23	Phase 2	City of Bainbridge Island	Not Available	Missing	Provided: CB inspection and maintenance summary,street sweeping summary(2011-2017), Ditching ffotage/Time tracker( 2011-2017), Culvert Installation and cleaning summary( 2012-2016)	Not Available	Provided: Manual	Provided : O/M manual
24	Phase 2	City of Battle Ground	Not Available	Not Avaialble	Provided: Inspection data with date	Not Available	Provided	Provided
25	Phase 2	City of Bellevue						
26	Phase 2	City of Bellingham						
27	Phase 2	City of Bremerton	Not Available	Missing	Not Avaialable	Missing	Provided: Manual	Provided: manual
28	Phase 2	City of Brier	Not Available	Missing	Missing	Missing	Not Available	Not Available
29	Phase 2	City of Camas						
30	Phase 2	City of Centralia						
31	Phase 2	City Of Covington						
32	Phase 2	City of Des Moines						
33	Phase 2	City of Edgewood	Not Available	Provided;Missing fields: Landuse	Missing	Provided	Not Available	Not Available
34	Phase 2	City of Everett	Not Available	Provided & Completed	Provided	Provided	Mlissing	Missing
35	Phase 2	City of Federal Way	Not Available	Provided;Missing fields: basins delineations, snow removal routes, AADT	Provided CB type and percentage of sediment	Not Available	Missing	Missing
36	Phase 2	City of Ferndale	Not Available	Missing	Provided: CB Inspection findings (2006-2016). CB cleaning date provided in a pdf.	Not Available	Not Available	Not Available
37	Phase 2	City of Issaquah	Not Available	Provided; Missing fields: CB type, CB elevation, Land use, snow removal routes	Not Avaialable	Provided	Missing	Not Available
38	Phase 2	City of Kent	Not Available	Provided;Missing fields: Flow routing, snow removal routes, street surface material,land use	Missing: Inspection dates, cleaning frequency Maintenance records only after 2007 provided	Provided	Not Available	Not Available
39	Phase 2	City of Kirkland	Not Available	Provided; Missing fields: Landuse, snow removal routes, construction activities	Not Avaialable	Not Available	Provided	Provided
40	Phase 2	City of Lakewood						
41	Phase 2	City of Mercer Island						
42	Phase 2	City of Mill Creek	Not Available	Missing	Not Avaialable	Missing	Missing	Not Available
43	Phase 2	City of Milton						
44	Phase 2	City of Mount Vernon						
45	Phase 2	City of Mukilteo	Not Available	Provided. Also available basin delineations	Not Avaialable	Provided. Also available maintenance activities record	Not Available	Not Available

TABLE C-2  
SURVEY RESULTS SUMMARY

DATA SUBMITTED SUMMARY								
No.	Phase	Jurisdiction/Organization	CB Data in Excel	CB Data in GIS	Inspection & Maintenance Data in Excel	Inspection & Maintenance Data in GIS	Field Inspection Form	SOP for Inspection and Maintenance
46	Phase 2	City of Newcastle						
47	Phase 2	City of Olympia	Provided: data on CB type, CB location, elevation, in snow route or not	Missing	Provided: CB Inspection data with date and work performed	Not Available	Missing	Missing
48	Phase 2	City of Poulsbo	Not Available	Missing	Spreadsheet only has % of sediment and inspection date and performed maintenance or not	Missing	Provided	Not Available
49	Phase 2	City of Puyallup	Provided: CB type, sump depth, street address and year installed	Missing. Provided Contact for GIS person on	Provided: CB inspection data	Not Available	Not Available	Not Available
50	Phase 2	City of Renton	Not Available	Provided: Need clarification on construction activity refers to	Provided: CB cleaning and inspection data	Missing	Not Available	Not Available
51	Phase 2	City of Sammamish						
52	Phase 2	City of Shoreline	same as CB inspection	Provided & Completed	Provided & Completed	Missing	Missing	Missing
53	Phase 2	City of Sumner	Not Available	Manholes, Storm lines and CB's provided in google earth	Not Available	CB's inspection roads, Cb's cleaned provided in google earth	Provided	Not Available
54	Phase 2	City of Tumwater	Not Available	Provided: Only storm conduit, structure and street data. Landuse, street surface material info provided in storm structure inventory master report.	Structure inventory and inspection summary report provided in a pdf and csv file	Missing	Storm structure inventory master report provided	Storm structure inventory master report provided
55	Phase 2	City of Woodinville						
		TOTAL						

TABLE C-3  
INTERVIEWS SUMMARY

No.	Phase	Jurisdiction/Organization	Contact Name	Survey Submitted	Data Submitted	Interview			Comments
						Interview Priority Level	OCI Comments	Questions to ask during Interview	
1	Phase 1	WSDOT	Trett Sutter	X	X	Level 2 - May need inspection dates and results or CB locations	Missing CB data		Emailed 4/18/17 to request additional missing data and followed up with clarification requests.
2	Phase 1	King County	Blair Scott	X	X	No Interview - too little data available			
3	Phase 1	King County DNRP Parks and Recreation	David Sizemore	X	X	No Interview - too little data available	missing CB data & inspection & maintenance data		Maintenance checklist and surface water design manual provided
4	Phase 1	King County DOT/Road Services Div/Maintenance Section	Brent Dhoore	X		Level 4 - Interview possible when data arrives; important permittee	waiting for data		
5	Phase 1	King County International Airport	Peter Dumaliang	X		No Interview - too little data available			
6	Phase 1	King County Wastewater Treatment Division	Jeff Lafer	X		Not applicable - no data submitted.			
7	Phase 1	King County/Facilities Management Division	Bill Eckel	X	X	No Interview - too little data available	missing CB location, inspection data, cost and cost data		
8	Phase 1	King County/Metro Transit	Talon Swanson	X	X	No Interview - too little data available			
9	Phase 1	City Of Tacoma	Michael A. Rose, P.E.	X	X	Level 3 - Cost Data or SOP needed.	no SOP & cost data ( in SQL and SAP database that the city is using), no field inspection form		Additional information from 1/30 email: "Question 3 answer which I need to add to the survey: We use the WSDOT definition of catch basins although we do not use a minimum sump depth. Question 10: 275,000 a year which includes cleaning and inspection. Question 11 I believe was a cost breakdown by year?: We have spent about 275,000 a year on the program fairly consistently for 2014-2016 before 2014 costs were not tracked. If I was to attempt to separate out the costs for cleaning and inspection I would likely super-swag 65%-75% of the cost is cleaning(The cleaning crew completes the inspection)."  Emailed 4/18 to follow-up on data gaps in database fields and schedule in depth interview on cost efficiencies.
10	Phase 1	Pierce County			X	No Interview - too little data available			Contacted to provide additional information on 4/4/17.
11	Phase 1	Seattle Public Utilities	Kate Rhoads	X	X	Level 4 - Interview possible when data arrives; important permittee	Missing GIS data, SOP and cost data. CB data provided by excel change color code to green inspection and maintenance data provided between 2008 and 2016	asking for GIS data, SOP and cost data	Requested clarification on data uploads via email on 4/21/2017 and followed up with phone conversations.
12	Phase 1	Highline College	Barry Holdorf	X	X	No Interview - too little data available	missing cb location, inspection result and cost might not need to interview since too little data available		
13	Phase 1	Port of Seattle	Jane Dewell	X	X	Level 1 - Inspection dates and results and/or CB locations needed	Port of Seattle uses Maxmo as its database for CB and Inspection data	# of CB from date files ask for SOP verify if Maximo contains inspection dates, result and CB data.	Interviewed 3/14/17 and discussed additional data needs. Submitted additional data 4/7. Still need additional inspection and maintenance data from Maximo. Additional questions sent on 4/18/17. No additional data available.
14	Phase 1	Seattle Public School	Shelly Kerby	X		Not applicable - no data submitted.			
15	Phase 1	WA Military Department	Rowena Valencia-Gica	X		Not applicable - no data submitted.			
16	Phase 1	Western Washington/Lower Columbia College	Jeff Moenck	X	X	No Interview - too little data available			CB data with CB type, pipe size and year of CB inspection provided in a pdf
17	Phase 2	Kitsap County	Angela Gallardo	X	X	Level 3 - Cost Data or SOP needed.	missing SOP and cost		Emailed 3/8/17 to request additional data. Interviewed on 5/8/17.
18	Phase 2	Thurston County	Ryan Langan	X		Level 4 - Interview possible when data arrives; important permittee	waiting for data		
19	Phase 2	Whatcom County	Cathy Craver	X		Level 4 - Interview possible when data arrives; important permittee	waiting for data		

TABLE C-3  
INTERVIEWS SUMMARY

No.	Phase	Jurisdiction/Organization	Contact Name	Survey Submitted	Data Submitted	Interview			Comments
						Interview Priority Level	OCI Comments	Questions to ask during Interview	
20	Phase 2	City of Algona		X	X	No Interview - too little data available			
21	Phase 2	City of Arlington	Ken Clarke	X		Not applicable - no data submitted.			
22	Phase 2	City of Auburn	Chris Thorn	X	X	Level 2 - May need inspection dates and results or CB locations	Has all four critical information from the inspection records. Change to level 3 since no SOP and no cost.		Requested clarification on data uploads via email on 4/19/2017.
23	Phase 2	City of Bainbridge Island	Marilyn Guthrie	X	X	Level 2 - May need inspection dates and results or CB locations	only has location for inspected CBs		Provided O/M manual
24	Phase 2	City of Battle Ground	Kelly Uhacz	X	X	Level 2 - May need inspection dates and results or CB locations	move to Level 3, missing Cost and SOP		Requested clarification on data uploads via email on 4/19/2017.
25	Phase 2	City of Bellevue	Don McQuilliams	X		Not applicable - no data submitted.			
26	Phase 2	City of Bellingham	Jason Porter	X		Not applicable - no data submitted.			
27	Phase 2	City of Bremerton	Chance Berthiaume	X	X	Level 1 - Inspection dates and results and/or CB locations needed	missing CB data & inspection & maintenance data Provided storm water facility manual	request for GIS data since their SQL database is linked to GIS verify if the SQL database contains the CB location, inspection data & result and maintenance data	Interviewed 3/14/17. Program has a dedicated crew that inspects and cleans the catch basins on a circuit basis for 6 months out of each year. No tracking of individual CB inspection results or costs associated with the inspection and maintenance.
28	Phase 2	City of Brier	Rich Maag	X	X	No Interview - too little data available			Given the number of CB's inspected, rebuilt, CB's that require maintenance and cleaned in a pdf
29	Phase 2	City of Camas	Anita Ashton	X		Not applicable - no data submitted.			
30	Phase 2	City of Centralia	Fred Chapman	X		Not applicable - no data submitted.			
31	Phase 2	City Of Covington	Ben Parrish	X		Not applicable - no data submitted.			
32	Phase 2	City of Des Moines	Tyler Beekley	X		Not applicable - no data submitted.			
33	Phase 2	City of Edgewood	Jeremy Metzler	X	X	Level 3 - Cost Data or SOP needed.	missing SOP and cost		Emailed 3/8/17 to request additional data.
34	Phase 2	City of Everett	Grant Moen	X	X	Level 4 - Interview possible when data arrives; important permittee	missing SOP and cost, change color code to green	Ask for 1) field inspection form, 2) what kind of data base is used for cost? 3)SOP is missing however, the inspection and maintenance data provided were very detailed	Requested clarification on data uploads via email on 4/19/2017 and followed up with clarifications requests.
35	Phase 2	City of Federal Way	Tony Doucette	X	X	Level 3 - Cost Data or SOP needed.	missing SOP and cost		Emailed 3/8/17 to request additional data.
36	Phase 2	City of Ferndale	Wendy LaRocque	X	X	Level 2 - May need inspection dates and results or CB locations	missing CB location and inspection data		
37	Phase 2	City of Issaquah	Harvey Walker	X	X	Level 1 - Inspection dates and results and/or CB locations needed	CB data provided in GIS, PWO and NPDES inspection date & results provided in GIS.	ask for SOP data and cost data	Left a message on 3/14 and 3/17. Interviewed on 4/03/17. Dates available on GIS only for those CBs inspected. No additional data available. No additional SOP or cost data available.
38	Phase 2	City of Kent	Laura Haren, Chris Couvillion	X	X	Level 1 - Inspection dates and results and/or CB locations needed	CB data provided in GIS, Inspection/Maintenance date & result provided in Excel	verify if Hanes Asset management Program has cost for inspection ask for SOP data	Interviewed 3/31/17. Resolved multiple survey submission. Second survey is the correct one. No additional data available. Don't have SOP as it is being revised.
39	Phase 2	City of Kirkland	Jenny Gaus	X	X	Level 1 - Inspection dates and results and/or CB locations needed	missing CB inspection date & result	Missing Inspection data and result Ask for cost data	Interviewed 3/30/17. Will look into what additional information they can provide. They have costs for inspection, dates and metrics. May be a good candidate for in-person interviews to extract program efficiencies because they changed their program in the last few years and could compare the inspect+clean at once version inspect first and only CBs with sediment accumulation. Emailed 4/18/17 to request additional missing data.
40	Phase 2	City of Lakewood	Greg Vigoren	X		Not applicable - no data submitted.			Interviewed 5/5/17.

TABLE C-3  
INTERVIEWS SUMMARY

No.	Phase	Jurisdiction/Organization	Contact Name	Survey Submitted	Data Submitted	Interview			Comments
						Interview Priority Level	OCI Comments	Questions to ask during Interview	
41	Phase 2	City of Mercer Island	Hartvigson	X		Not applicable - no data submitted.			
42	Phase 2	City of Mill Creek	Marci Chew	X	X	Level 1 - Inspection dates and results and/or CB locations needed	missing CB location & CB inspection date & result stated database attached to each catch basin in AutoCAD did not see data	ask for CB data, inspection data and result, maintainance data ask for maintenacne cost ask for SOP data	Interviewed 4/10/17. Provided additional details about the CB inspection schedule.
43	Phase 2	City of Milton	Jamie Carter	X		Not applicable - no data submitted.			
44	Phase 2	City of Mount Vernon	Blaine Chesterfield	X		Not applicable - no data submitted.			
45	Phase 2	City of Mukilteo	Jennifer Adams	X	X	No Interview - too little data available			
46	Phase 2	City of Newcastle	Audrie Starsy	X		Not applicable - no data submitted.			Connected about data upload request, but no data was uploaded due to lack of required details.
47	Phase 2	City of Olympia	Sue Barclift	X	X	Level 3 - Cost Data or SOP needed.	Missing SOP and cost, has CB coordinate location from the CB inspection data		Emailed 3/8/17 to request additional data.
48	Phase 2	City of Poulsbo	Anja Hart	X	X	Level 1 - Inspection dates and results and/or CB locations needed	missing CB location	Ask for CB data/ location, inspection data & result, & maintainace askf ro cost data and SOP	Interviewed 4/09/17. Requested clarification on data uploads via email on 4/19/2017.
49	Phase 2	City of Puyallup	Jon Wikander	X	X	Level 1 - Inspection dates and results and/or CB locations needed	missing CB location /Data	Ask for CB location/data ask for SOP and CB inspection cost	Contact number provided to get GIS data. Talked Josh Girbich on 4/19/2017 about data availability. Submitted everything they have available at the moment.
50	Phase 2	City of Renton	Kristina Lowthian	X	X	Level 3 - Cost Data or SOP needed.	missing SOP and cost		Emailed 3/8/17 to request additional data.
51	Phase 2	City of Sammamish	Tawni Dalziel	X		Not applicable - no data submitted.			
52	Phase 2	City of Shoreline	Uki Dele	X	X	Level 3 - Cost Data or SOP needed.	missing SOP and cost		Emailed 3/8/17 to request additional data.
53	Phase 2	City of Sumner	Robert Wright	X	X	Level 1 - Inspection dates and results and/or CB locations needed	missing CB inspection date & result	Assume CB location is provided via google earth ask for inspection data/result and maintenance data ask for SOP	
54	Phase 2	City of Tumwater	Amy Georgeson	X	X	Level 2 - May need inspection dates and results or CB locations			Requested clarification on data uploads via email on 4/19/2017. Received additional data on 4/20/17.
55	Phase 2	City of Woodinville	Brian Meyer	X		Not applicable - no data submitted.			
		TOTAL		54	34				

# ATTACHMENT D

## DATABASE INFORMATION

TABLE D-1  
Data Completeness for Selected Jurisdictions

Jurisdiction	Catchbasin Data Completeness (%)		Inspection Data Completeness(%)		Maintenance Data Completeness(%)		Location Data	
	Database Fields	Excluding Missing Data	Database Fields	Excluding Missing Data	Database Fields	Excluding Missing Data	XY Data	Data Format
Tacoma	89	44	100	80	100	80	Yes	GIS
Port of Seattle	55	55	40	20	40	0	Yes	GIS
SPU	27	27	80	80	100	100	Yes	Excel
WSDOT	40	33	80	80	100	100	Yes( Lat/Long)	Excel
Kent	54	46	80	80	100	100	Yes	GIS
Kirkland	78	78	100	60	100	100	Yes( Lat/Long)	Excel
Auburn	78	78	100	60	40	40	No	Excel
Battle Ground	45	27	80	40	100	80	Yes( Lat/Long)	Excel
Tumwater	70	70	80	80	100	100	Yes	GIS
Puyallup	58	42	60	60	80	80	Yes	Excel
Poulsbo	27	27	80	60	60	60	Yes	GIS
Everett	60	60	100	100	100	100	Yes	GIS
King County	93	93	100	100	100	100	No	Excel



ATTACHMENT D  
WSDOT DATABASE NOTES

King County Database		WSDOT	
Inspection Table		Database Fields	Has Data?
Database Fields	Type of Field	Database Fields	Has Data?
OBJECTID			
InspectionID	Primary	Eventid	Yes
SedimentDepth	Primary		
PercentFill	Primary	Percent full	Yes
RepairRequired		Need Repair	Yes
SourceControl			
StructuralRating			
FunctionalRating			
ConditionRating			
InspectionDate	Primary	Date	Yes
AssetID	Primary	Feature Number	Yes
Status		Comments	Yes
# Fields	5	4	4
% Data Complete		80	80

King County Database		WSDOT	
Maintenance Table		Database Fields	Has Data?
Database Fields	Type of Field	Database Fields	Has Data?
OBJECTID			
MaintID	Primary	Eventid	Yes
Activity	Primary	Activity	Yes
StartDate	Primary	Date	Yes
EndDate	Primary		
Cost			
Notes		Maintenance Notes	Yes
AssetID	Primary	Feature Number	Yes
# Fields	5	5	5
% Data Complete		100	100

Legend

	Fields present
Missing	Fields present but data missing
	Fields calculated based on other information
NC	Non critical fields
Primary - NC	Primary Field Not Critical

Primary Fields Not Filled In	
Diameter	Data not provided
WidthA	Data not provided
WidthB	Data not provided
StructureShape	Data not provided
OutletDepth	Data not provided
SumpDepth	Data not provided
SumpVolume	Data not provided
CoverElevation	Data not provided
OutletElevation	Data not provided
SumpBtmElevation	Data not provided
OwnerEntity	Data not provided
SedimentDepth	Data not provided

Calculated/Filled Fields	
Component	Filled in
EndDate	Same as StartDate







ATTACHMENT D  
SEATTLE PUBLIC UTILITIES DATABASE NOTES

King County Database		WSDOT	
Inspection Table		Database Fields	Has Data?
Database Fields	Type of Field	Database Fields	Has Data?
OBJECTID			
InspectionID	Primary	POINTNUM	Yes
SedimentDepth	Primary	MEASUREMENTVALUE	Yes
PercentFill	Primary		
RepairRequired			
SourceControl			
StructuralRating			
FunctionalRating			
ConditionRating			
InspectionDate	Primary	MEASUREDATE	Yes
AssetID	Primary	ASSETNUM	Yes
Status		Description	Yes
# Fields	5	4	4
% Data Complete		80	80

Primary Fields Not Filled In	
Diameter	Data not provided
WidthA	Data not provided
WidthB	Data not provided
OutletDepth	Data not provided
SumpDepth	Data not provided
SumpVolume	Data not provided
Sump	Data not provided
TotalDepth	Data not provided
CoverElevation	Data not provided
OutletElevation	Data not provided
SumpBtmElevation	Data not provided
PercentFill	Sump Depth data not provided, Unable to Calculate

Calculated/Filled Fields	
StartDate	Same as EndDate

King County Database		WSDOT	
Maintenance Table		Database Fields	Has Data?
Database Fields	Type of Field	Database Fields	Has Data?
OBJECTID			
MaintID	Primary	WONUM	Yes
Activity	Primary	INSP/MAINT	Yes
StartDate	Primary		
EndDate	Primary	ACTFINISH	Yes
Cost		WorkOrder_Costs	Yes
Notes		WODESC	Yes
AssetID	Primary	ASSETNUM	Yes
# Fields	5	5	5
% Data Complete		100	100

Legend

	Fields present
Missing	Fields present but data missing
	Fields calculated based on other information
NC	Non critical fields
Primary - NC	Primary Field Not Critical



ATTACHMENT D  
TACOMA DATABASE NOTES

King County Database		Tacoma	
Inspection Table			
Database Fields	Type of Field	Database Fields	Has Data?
OBJECTID			
InspectionID	Primary		
SedimentDepth	Primary	SedimentDepth	Yes
PercentFill	Primary		
RepairRequired		Repair	Yes
SourceControl		SourceControl	Yes
StructuralRating			
FunctionalRating			
ConditionRating			
InspectionDate	Primary	CBAmtDate	Yes
AssetID	Primary	SAPID	Yes
Status			
# Fields	5	5	4
% Data Complete		100	80

King County Database		Tacoma	
Maintenance Table			
Database Fields	Type of Field	Database Fields	Has Data?
OBJECTID			
MaintID	Primary		
Activity	Primary		
StartDate	Primary	CleaningDate	Yes
EndDate	Primary	CleaningDate	Yes
Cost			
Notes		Comments	Yes
AssetID	Primary	SAPID	Yes
# Fields	5	5	4
% Data Complete		100	80

Legend

	Fields present
Missing	Fields present but data missing
	Fields calculated based on other information
NC	Non critical fields
Primary - NC	Primary Field Not Critical

Assumptions
StructureShape is filled in as "Round" for the ones with diameter > 0 in the data provided.
It is assumed to have a sump when the SumpDepth is > 0 in the data provided.
Maintenance End date is assumed to be same as Start date.
SourceControl 0-No and 1-Yes
Status field in Inspection Table and Activity field in Maintenance table filled in based on Cleaning date. If the cleaning date is NULL it means its not cleaned.

Primary Fields Not Filled In	
WidthA	Not provided in the data
WidthB	Not provided in the data
OutletDepth	Not provided in the data
Total Depth	Not provided in the data
Component	Not provided in the data
OutletElevation	Not provided in the data

Calculated/Filled Fields	
Sump Volume	Calculated only for the CB's with both diameter and sump depth given.
Sump	Filled in
Percent Fill	Calculated based on sump depth and sediment depth.
Status	Filled in based on CleaningDate
Activity	Filled in based on CleaningDate



ATTACHMENT D  
EVERETT DATABASE NOTES

King County Database		Everett	
Inspection Table		Everett	
Database Fields	Type of Field	Database Fields	Has Data?
OBJECTID			
InspectionID	Primary	InspectionID	Yes
SedimentDepth	Primary	Sediment Depth	Yes
PercentFill	Primary	SEDIMENTPERC	Yes
RepairRequired		DAMAGE	Yes
SourceControl			
StructuralRating			
FunctionalRating			
ConditionRating			
InspectionDate	Primary	Inspection Started	Yes
AssetID	Primary	TUMMS_ID	Yes
Status		Comments	Yes
# Fields	5	5	5
% Data Complete		100	100

Primary Fields Not Filled In	
OutletDepth	Data not provided
Sump	Data not provided
TotalDepth	Data not provided
OutletElevation	Data not provided
SumpBtmElevation	Data not provided

Calculated/Filled Fields	
Component	Filled in
StartDate	Same as EndDate

King County Database		Everett	
Maintenance Table		Everett	
Database Fields	Type of Field	Database Fields	Has Data?
OBJECTID			
MaintID	Primary	Work Order Number	Yes
Activity	Primary	ACTIVITY_CODE	Yes
StartDate	Primary		
EndDate	Primary	COMPLETED_DATE	Yes
Cost		TOTAL_COST	Yes
Notes		Remarks	Yes
AssetID	Primary	STRUCT_1	Yes
# Fields	5	5	5
% Data Complete		100	100

**Legend**

	Fields present
Missing	Fields present but data missing
	Fields calculated based on other information
NC	Non critical fields
Primary - NC	Primary Field Not Critical







ATTACHMENT D  
KIRKLAND DATABASE NOTES

King County Database		Kirkland	
Database Fields	Type of Field	Database Fields	Has Data?
OBJECTID			
InspectionID	Primary	WorkOrderNum	Yes
SedimentDepth	Primary	SedimentDepth	Missing
PercentFill	Primary		Missing
RepairRequired			
SourceControl			
StructuralRating			
FunctionalRating			
ConditionRating			
InspectionDate	Primary	StartDate	Yes
AssetID	Primary	UnitID	Yes
Status		CB_Inspection_Status	Yes
# Fields	5	5	3
% Data Complete		100	60

King County Database		Kirkland	
Database Fields	Type of Field	Database Fields	Has Data?
OBJECTID			
MaintID	Primary	WO_NUMBER	Yes
Activity	Primary	Maint_Activity	Yes
StartDate	Primary	WO_Date	Yes
EndDate	Primary		
Cost		Maintenance_Cost	Yes
Notes			
AssetID	Primary	UnitID	Yes
# Fields	5	5	5
% Data Complete		100	100

Legend

	Fields present
Missing	Fields present but data missing
	Fields calculated based on other information
NC	Non critical fields
Primary - NC	Primary Field Not Critical

Primary Fields Not Filled In	
Component	No information in the data provided
WidthA	No information in the data provided
WidthB	No information in the data provided
OutletDepth	No information in the data provided
Sump	No information in the data provided
TotalDepth	No information in the data provided
SedimentDepth	All zeros in the data

Calculated/Filled Fields	
SumpVolume	Sump Volume is calculated using sump depth and diameter.
StructureShape	StructureShape filled in based on City of Kirkland catchbasin specifications. StructureShape not known for design types OTHER,IWSDOT and INLET.
Percent Fill	
EndDate	Same as StartDate



ATTACHMENT D  
TUMWATER DATABASE NOTES

King County Database		Tumwater		
Inspection Table		Database Fields	Has Data?	Notes
Database Fields	Type of Field			
OBJECTID				
InspectionID	Primary	Inspection Type Text	Yes	
SedimentDepth	Primary	Debris Depth	Yes	
PercentFill	Primary			
RepairRequired		Cleaning	Yes	
SourceControl				
StructuralRating				
FunctionalRating				
ConditionRating				
InspectionDate	Primary	Date Inspected	Yes	
AssetID	Primary	Assest Number	Yes	
Status				
# Fields	5	4	4	
% Data Complete		80	80	

King County Database		Tumwater		
Maintenance Table		Database Fields	Has Data?	Notes
Database Fields	Type of Field			
OBJECTID				
MaintID	Primary	Work Order Number	Yes	
Activity	Primary	Activity	Yes	
StartDate	Primary	Start Dt	Yes	
EndDate	Primary	Completed Date	Yes	
Cost		*TotalCost	Yes	
Notes				
AssetID	Primary	Structure #	Yes	
# Fields	5	5	5	
% Data Complete		100	100	

Legend

	Fields present
Missing	Fields present but data missing
	Fields calculated based on other information
NC	Non critical fields
Primary - NC	Primary Field Not Critical

Primary Fields Not Filled In	
WidthA	Data not provided
WidthB	Data not provided
OutletDepth	Data not provided
SumpDepth	Data not provided
SumpVolume	Sump Depth data not provided, Unable to Calculate
Sump	Data not provided
OutletElevation	Data not provided
SumpBtmElevation	Data not provided
PercentFill	Sump Depth data not provided, Unable to Calculate

Calculated/Filled Fields	
Component	Filled in
StartDate	Same as EndDate

**ATTACHMENT E**  
**DATABASE FILES**  
**(DIGITAL FILES ONLY)**