

DEPARTMENT OF
ECOLOGY
State of Washington

IAA No. C1500129

**INTERAGENCY AGREEMENT (IAA)
BETWEEN
THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY
AND
CITY OF LAKEWOOD**

THIS INTERAGENCY AGREEMENT is made and entered into by and between the STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, hereinafter referred to as "ECOLOGY," and CITY OF LAKEWOOD hereinafter referred to as the "CITY," pursuant to the authority granted by Chapter 39.34 RCW.

IT IS THE PURPOSE OF THIS AGREEMENT is to provide National Pollutant Discharge Elimination System (NPDES) Municipal permittees with regional information to help improve their business inspection programs by answering the source control effectiveness questions related to stormwater source control activities.

THEREFORE, IT IS MUTUALLY AGREED THAT:

1) STATEMENT OF WORK

The CITY shall furnish the necessary personnel, equipment, material and/or service(s) and otherwise do all things necessary for or incidental to the performance of the work set forth in Appendix A, attached hereto and incorporated herein.

2) PERIOD OF PERFORMANCE

Subject to its other provisions, the period of performance of this IAA shall commence on **May 1, 2015**, or date of final signature, whichever comes later, and be completed by **May 31, 2016**, unless terminated sooner as provided herein. Amendments extending the period of performance, if any, shall be at the sole discretion of ECOLOGY.

3) COMPENSATION

Compensation for the work provided in accordance with this IAA has been established under the terms of Washington state law, and in accordance with Governor's Executive Order 10-07 and RCW 39.26.180(3). This is a performance-based contract, in which payment is based on the successful completion of expected deliverables. The parties have determined that the cost of accomplishing the work herein will not exceed \$283,937.00. Payment for satisfactory performance of the work shall not exceed this amount unless the parties mutually agree to a higher amount. Compensation for services shall be based on the

terms set forth in accordance with the tasks listed in Appendix A, Statement of Work and Budget, which is attached hereto and incorporated herein. ECOLOGY will not make payment until it has reviewed and accepted the completed work.

4) BILLING PROCEDURE

The CITY shall submit state form, Invoice Voucher A19-1A for payment requests. Payment will be made within thirty (30) days of a properly completed invoice, form A19-1A, with supportive documentation. Each invoice shall reference this Agreement (IAA) number and clearly identify the items related to performance under this Agreement. All expenses invoiced shall be supported with copies of invoices paid. Upon expiration of this Agreement, any claim for payment not already made shall be submitted within 30 days after the expiration date or the end of the fiscal year, whichever is earlier.

Invoices are to be sent to:

State of Washington Department of Ecology Attn: Brandi Lubliner P.O. Box 47600 Olympia, WA 98504-7600

Invoices may be submitted on a quarterly basis, as deliverables are completed, or at the completion of the work.

Payment for approved and completed work will be issued through Washington State's Department of Enterprise Services Statewide Payee Desk. To receive payment you must be registered as a state-wide vendor. To register submit a state-wide vendor registration form and an IRS W-9 form at website, <http://www.des.wa.gov/services/ContractingPurchasing/Business/VendorPay/Pages/default.aspx>. If you have questions about the vendor registration process you can contact DES at the Payee Help Desk at (360) 407-8180 or email payeehelpdesk@des.wa.gov.

5) ALTERATIONS AND AMENDMENTS

This Agreement may be amended by mutual agreement of the parties. Such amendments shall not be binding unless they are in writing and signed by personnel authorized to bind each of the parties.

6) SUBCONTRACTORS

The CITY agrees to take complete responsibility for all actions of any Subcontractor used under this Agreement for the performance. When federal funding is involved there will be additional subcontractor requirements and reporting.

Prior to performance, the CITY shall identify subcontractor(s) who will perform services in fulfillment of Agreement requirements, including their name, the nature of services to be performed, address, telephone, WA State Department of Revenue Registration Tax number (UBI), federal tax identification number (TIN), and anticipated dollar value of each subcontract.

7) ASSIGNMENT

The work to be provided under this Agreement, and any claim arising thereunder, is not assignable or delegable by either party in whole or in part, without the express prior written consent of the other party, which consent shall not be unreasonably withheld.

8) DISPUTES

In the event that a dispute arises under this Agreement, it shall be determined by a Dispute Board in the following manner. Each party to this Agreement shall appoint one member to the Dispute Board. The members so appointed shall jointly appoint an additional member to the Dispute Board. The Dispute Board shall review the facts, agreement terms, and applicable statutes and rules, and then make a determination of the dispute. The determination of the Dispute Board shall be final and binding on the parties hereto. The cost of resolution will be borne by each party paying its own cost. As an alternative to this process, either of the parties may request intervention by the Governor, as provided by RCW 43.17.330, in which event the Governor's process will control.

9) FUNDING AVAILABILITY

ECOLOGY's ability to make payments is contingent on availability of funding. In the event funding from state, federal, or other sources is withdrawn, reduced, or limited in any way after the effective date and prior to completion or expiration date of this Agreement, ECOLOGY, at its sole discretion, may elect to terminate the agreement, in whole or part, for convenience or to renegotiate the agreement subject to new funding limitations and conditions. ECOLOGY may also elect to suspend performance of the agreement until ECOLOGY determines the funding insufficiency is resolved. ECOLOGY may exercise any of these options with no notification restrictions.

10) GOVERNING LAW AND VENUE

This Agreement is entered into pursuant to and under the authority granted by the laws of the state of Washington and any applicable federal laws. The provisions of this Agreement shall be construed to conform to those laws. This Agreement shall be construed and interpreted in accordance with the laws of the state of Washington, and the venue of any action brought hereunder shall be in the Superior Court for Thurston County.

11) INDEPENDENT CAPACITY

The employees or agents of each party who are engaged in the performance of this Agreement shall continue to be employees or agents of that party and shall not be considered for any purpose to be employees or agents of the other party.

12) ORDER OF PRECEDENCE

In the event of an inconsistency in the terms of this Agreement, or between its terms and any applicable statute or rule, the inconsistency shall be resolved by giving precedence in the following order:

- a. Applicable federal and state of Washington statutes, regulations, and rules.
- b. Mutually agreed written amendments to this Agreement.
- c. This Agreement.
- d. Statement of Work and Budget.
- e. Any other provisions of this Agreement, including materials incorporated by reference.

13) RECORDS MAINTENANCE

The parties to this Agreement shall each maintain books, records, documents and other evidence that sufficiently and properly reflect all direct and indirect costs expended by either party in the performance of the service(s) described herein. These records shall be subject to inspection, review or audit by personnel of both parties, other personnel duly authorized by either party, the Office of the State Auditor, and federal

officials so authorized by law. All books, records, documents, and other material relevant to this Agreement will be retained for six years after expiration and the Office of the State Auditor, federal auditors, and any persons duly authorized by the parties shall have full access and the right to examine any of these materials during this period.

Records and other documents, in any medium, furnished by one party to this Agreement to the other party, will remain the property of the furnishing party, unless otherwise agreed. The receiving party will not disclose or make available this material to any third parties without first giving notice to the furnishing party and giving it a reasonable opportunity to respond. Each party will utilize reasonable security procedures and protections to assure that records and documents provided by the other party are not erroneously disclosed to third parties.

14) RIGHTS IN DATA

Unless otherwise provided, data which originates from this Agreement shall be "works for hire" as defined by the U.S. Copyright Act of 1976 and shall be owned by the state of Washington. Data shall include, but not be limited to, reports, documents, pamphlets, advertisements, books, magazines, surveys, studies, computer programs, films, tapes, and/or sound reproductions. Ownership includes the right to copyright, patent, register, and the ability to transfer these rights.

15) SEVERABILITY

If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such remainder conforms to the requirements of applicable law and the fundamental purpose of this agreement, and to this end the provisions of this Agreement are declared to be severable.

16) TERMINATION FOR CAUSE

If for any cause, either party does not fulfill in a timely and proper manner its obligations under this Agreement, or if either party violates any of these terms and conditions, the aggrieved party will give the other party written notice of such failure or violation. The responsible party will be given the opportunity to correct the violation or failure within 15 working days. If failure or violation is not corrected, this Agreement may be terminated immediately by written notice of the aggrieved party to the other.

17) TERMINATION FOR CONVENIENCE

Either party may terminate this Agreement upon thirty (30) days' prior written notification to the other party. If this Agreement is so terminated, the parties shall be liable only for performance rendered or costs incurred in accordance with the terms of this Agreement prior to the effective date of termination.

18) WAIVER

A failure by either party to exercise its rights under this Agreement shall not preclude that party from subsequent exercise of such rights and shall not constitute a waiver of any other rights under this Agreement unless stated to be such in a writing signed by an authorized representative of the party and attached to the original Agreement.

19) AGREEMENT MANAGEMENT

The representative for each of the parties shall be responsible for and shall be the contact person for all communications and billings regarding the performance of this Agreement.

The ECOLOGY Representative is:	The CITY Representative is:
Name: Ms. Brandi Lubliner, P.E. Address: 300 Desmond Dr. SE (USPS) P.O. Box 47600 (FedEx) Olympia, WA 98504-7600 Phone: (360) 407-7140 Email: brwa461@ecy.wa.gov	Name: Mr. Greg Vigoren, P.E. Address: City of Lakewood 6000 Main St. SW Lakewood, WA 98499 Phone: (253) 983-7795 Email: GVigoren@cityoflakewood.us

20) ALL WRITINGS CONTAINED HEREIN

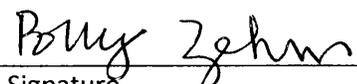
This Agreement contains all the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind any of the parties hereto.

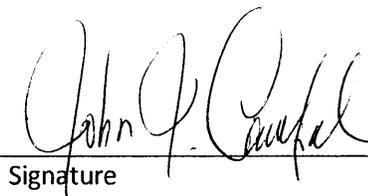
The signatories to this Agreement represent that they have the authority to bind their respective organizations to this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement.

State of Washington
Department of Ecology

City of Lakewood


Signature _____ Date 5/11/15


Signature _____ Date 4/27/2015

Polly Zehm

John J. Caulfield

Deputy Director

City Manager

Approved as to form:
Attorney General's Office

City of Lakewood (cont'd)

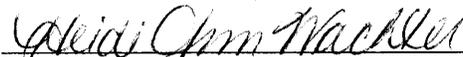
ATTEST:



Alice M. Bush, MMC, City Clerk

4-25-15

APPROVED AS TO FORM:



Heidi Wachter, City Attorney

APPENDIX A: STATEMENT OF WORK

Business Inspection Stormwater Source Control Effectiveness Study and IDDE Data Compilation, Review, and Evaluation for Washington State Department of Ecology Regional Stormwater Monitoring Program City of Lakewood, Washington

Introduction

This scope of work is to implement a regional business inspection stormwater source control effectiveness study as part of the Regional Stormwater Monitoring Program (RSMP). The background of the study and activities associated with developing the scope of work for the study are provided below. An additional task is included in this scope of work at the request of Ecology to compile, review, and (optionally) evaluate illicit discharge detection and elimination (IDDE) data submitted to Ecology by of the Phase I and Phase II Western Washington Municipal NPDES National Pollutant Discharge Elimination System (NPDES) Stormwater permittees. Attached to this document is the cost estimate associated with this scope of work.

Background

This business inspection stormwater source control effectiveness study (source control study) is based on a proposal to Ecology and the Stormwater Work Group (SWG) by the City of Lakewood (Lakewood) to study stormwater source control data and activities at small businesses and on commercial properties in western Washington. The proposal, dated April 28, 2014, was prepared in cooperation with Cardno Government Services environmental consultants (Cardno). The proposal was approved for funding by the SWG and Ecology as one of several effectiveness studies intended to support permittees through the RSMP.

The source control study was presented in three parts in the proposal. Ecology as the RSMP administrator is seeking to contract this effectiveness study in phases; thus, the focus of this scope is part one - analysis of existing data. Scoping and estimating costs for the other two study components – developing a coordinated inspection framework and publishing and presenting the results – will occur at a later stage. The objective and study design of part one are as follows.

Part 1 Objective: Provide NPDES Municipal permittees with regional information to help improve their business inspection programs by answering the source control effectiveness questions related to stormwater source control activities. Topics include focusing on commercial property owners versus business owners, compliance rates, inspection frequency of stormwater treatment and control facilities, use of best management practices (BMP), and barriers to BMP implementation.

Part 1 Study Design: Compile and analyze data from existing NPDES permittees' inspection programs that include stormwater source control information from businesses and on commercial properties in western Washington.

The source control effectiveness questions referred to in the objective are from the SWG's Effectiveness Studies subgroup. The questions are in the table below and include two main questions and four sub-questions related to stormwater source control at existing sites in western Washington:

Source Control Effectiveness Questions from the Stormwater Work Group

Topic	Recommended questions for 2014-2108 RSMP effectiveness studies
<p>Source control: inspections of existing sites</p>	<ul style="list-style-type: none"> • What is the optimum frequency of inspections to maintain the functionality of stormwater treatment and control facilities and ensure the proper use of source control BMPs at businesses? <ul style="list-style-type: none"> ○ Which is more effective for specific high value BMPs: focusing on the property owners or focusing on the business owners, or a combination of the two? <ul style="list-style-type: none"> ▪ Target both structural and operational BMP types, and situations where a business owner is and is not cooperative and willing. ○ Which required BMPs were implemented based upon follow up inspection? Which optional BMPs were installed based upon follow up inspection? ○ What were the primary barriers to not adopting or installing BMPs? ○ Address the connection between in-person visits and source control BMPs, and identify situations where technical assistance and/or follow-up inspections are needed to ensure required BMPs are implemented. <ul style="list-style-type: none"> ▪ Gather data about percent compliance. Partner with LSC to do this study. • Are stormwater source control inspections more effective if combined with other types of inspections? How can coordination of inspections be improved or better organized regionally for referral of issues to the correct entity?

Task 1. Identify Data Requirements, Prepare Survey, Assemble Technical Advisory Committee

Task 1 is for identifying the likely data available for the project, preparing a survey and an initial data analysis plan, and requesting data from western Washington jurisdictions about their small business and private facility stormwater inspection programs. Data received will be organized and securely stored on a computer network. In addition, jurisdictional representatives will be invited to participate in a technical advisory committee (TAC) to provide input and review of project work.

1. Subtasks

- 1.1. Write description for the study's TAC, including purview, anticipated activities, and schedule. In coordination with Ecology, invite jurisdictional representatives to participate in the TAC. Follow-up with jurisdictions and identify members of TAC.
- 1.2. Prepare a draft study design and data analysis plan to help ensure that compiled data can be properly analyzed for answering the effectiveness questions. The design will include a list of likely data available from permittees (based on permit requirements and preliminary information known about regional and local jurisdiction's inspection programs), expected

ranges of values, data quality objectives (DQOs), a draft database design, and draft data analysis procedures to address the effectiveness questions.

- 1.3. Prepare draft survey for permittees with approximately 20 questions about municipal stormwater inspection programs. Survey questions will be designed to align with the draft study design and data analysis plan.
- 1.4. Prepare letter (to accompany survey) to explain the study background and goals and request stormwater source control data from western Washington permittees.
- 1.5. Coordinate with Ecology to obtain contact information for municipal NPDES permittees in western Washington who have inspection programs that include stormwater source control assessment.
- 1.6. Arrange for a review of the draft study design and data analysis plan, draft survey, and draft cover letter by the TAC and approval by Ecology.
- 1.7. Prepare revised study design and data analysis plan.
- 1.8. Prepare final survey and cover letter.

Deliverables	Subtasks Included	Cost	Target date
1.1 Description of TAC and list of TAC members.	1.1	\$2,026.42	5/22/15
1.2 Draft study design and data analysis plan.	1.2	\$3,686.42	6/2/15
1.3 Draft survey and cover letter.	1.3, 1.4, 1.5, 1.6	\$7,785.69	6/2/15
1.4 Revised study design and data analysis plan.	1.7	\$2,366.42	7/3/15
1.5 Final survey and cover letter.	1.8	\$2,346.42	7/3/15
	Total Cost	\$18,211.38	

Assumptions

- The proposed schedule assumes consultant work on project begins by May 4, 2015.
- Ecology will provide input on identifying TAC members.
- A member of the TAC will be identified to be a third party liaison to the SWG to report on the project’s progress and provide review comments on content deliverables to the RSMP coordinator.
- Review of draft study design and data analysis plan, draft survey, and draft cover letter by TAC and Ecology will take up to two weeks.
- The draft study design and data analysis plan will be revised per comments by the TAC and Ecology. The final data analysis procedures will be prepared after reviewing the data (see Task 3).

Task 2. Request and Compile Data

Task 2 is for transmitting the final survey and cover letter with the request for data to the NPDES permittees, tracking the receipt of data and survey results, and transmitting the survey results and raw data files to Ecology.

2. Subtasks

- 2.1. Transmit survey and cover letter with data request to each permittee in western Washington with an inspection program that includes stormwater source control assessment.

- 2.2. Track data receipt progress and follow-up with jurisdictions by phone and email. Confirm receipt of survey, encourage delivery of data for study, and ask questions about data received.
- 2.3. Organize and store all transmitted data received in response to survey on secure computer network.

Deliverables	Subtasks Included	Cost	Target date
2. Completed survey results in spreadsheet format with list of survey respondents and a copy of the raw data files transmitted by permittees (digital copy of permittee datasets).	2.1, 2.2, 2.3	\$9,405.78	8/31/15

Assumptions

- Data sent by permittees in response to the data request will be in electronic format from existing databases (preferred) and/or scanned files of field notes or other forms completed during source control assessments.

Task 3. Create Database, Review Data, Update Data Analysis Procedure

Task 3 is for reviewing permittees’ data received in response to the data request, transforming data as needed to be comparable across jurisdictions, and creating and populating a database to facilitate data analysis. This task will also include preparing a technical memo that will describe the data quality, the data review process, the database parameters, and a final data analysis plan.

3. Subtasks

- 3.1. Review data sent by jurisdictions and identify issues and unexpected fields or data values.
- 3.2. Where applicable, transform data (i.e. qualitative information to quantitative values) for comparable numerical analysis.
- 3.3. Assemble comprehensive dataset from data sent by permittees.
- 3.4. Create and populate a database in Microsoft Access®. Database development will include:
 - 3.4.1. Consistent set of data fields with clear definitions (data key).
 - 3.4.2. Tables to logically group like data together and organize tables around useful fields for addressing the effectiveness questions.
 - 3.4.3. Data entry/import form to transcribe qualitative data and metadata from survey.
 - 3.4.4. Queries based on proposed data analysis procedures.
- 3.5. Verify functionality of database and test associated reports, queries, and tables.
- 3.6. Update the description of the data analysis procedures (from Task 1) based on information learned from reviewing the data and creating the database.
- 3.7. Prepare a draft technical memo that summarizes the process of reviewing the data, preparing the database, the final data analysis procedures, and issues encountered. The memo will be reviewed by the TAC and Ecology.
- 3.8. Prepare final database and technical memo.

Deliverables	Subtasks Included	Cost	Target date
3.1 Draft technical memo about the data review process, the database, and the updated data analysis procedures.	3.1, 3.2, 3.6, 3.7	\$21,705.69	10/16/15
3.2 Access database.	3.3, 3.4, 3.5	\$18,179.27	11/30/15
3.3 Final technical memo.	3.8	\$5,806.42	11/20/15
	Total Cost	\$45,691.38	

Assumptions

- A robust dataset will be obtained through the participation of the vast majority of western Washington permittees who have data on stormwater source control.
- Final selection of data fields will be based on available data, data quality, and the source control effectiveness questions.
- Review of technical memo by TAC and Ecology will take up to two weeks.

Task 4. Analyze and Summarize Data

Task 4 is for analyzing the data received from western Washington NPDES permittees. Data analysis will focus on addressing the source control effectiveness questions.

4. Subtasks

- 4.1. Write R scripts for statistical evaluation of data based on the final data analysis procedures identified in Task 3.
- 4.2. Prepare data for statistical analysis, run statistical analysis, and organize results.
- 4.3. Prepare graphs, tables, and diagrams to summarize the data analysis and trends observed.
- 4.4. Write technical memo to briefly explain the preliminary data results. The memo will be reviewed by the TAC and Ecology.

Deliverables	Subtasks Included	Cost	Target date
4. Technical memo with preliminary graphs, tables, and diagrams summarizing the data analysis results.	4.1,4.2, 4.3, 4.4	\$29,386.13	1/8/16

Assumptions

- Review of technical memo by TAC and Ecology will take up to two weeks.
- The results of revisions to the data analysis steps (from comments on the technical memo) will be transmitted to Ecology and the TAC as part of the draft report (see Task 5).

Task 5. Write Report

Task 5 is for preparing a report that summarizes the final data analysis procedures and results, addresses the data quality, and articulates answers to the effectiveness questions to the extent possible from the data analysis. The draft report will be reviewed by the TAC and Ecology, and a final report will be prepared

incorporating the review comments. The final report will be transmitted to Ecology as the final deliverable for this phase of the project.

5. Subtasks

- 5.1. Revise and/or add data analysis steps based on comments on technical memo.
- 5.2. Evaluate results of data analysis and identify answers to effectiveness questions.
- 5.3. Write draft report. Update graphs, tables, and diagrams to summarize the final data analysis performed. The draft report will be reviewed by the TAC and Ecology.
- 5.4. Edit report into final stage and submit to Ecology.

Deliverables	Subtasks Included	Cost	Target date
5.1 Draft report.	5.1, 5.2, 5.3	\$23,747.49	2/15/16
5.2 Final report.	5.4	\$7,695.83	3/21/16
	Total Cost	\$31,443.33	

Assumptions

- Review of draft report by the TAC and Ecology will take up to two weeks.

Task 6. Coordinate Technical Advisory Committee

Task 6 is for coordinating the activities and meetings of the project Technical Advisory Committee (TAC). Up to four meetings of the TAC are expected to occur to discuss comments on deliverables in Tasks 1 through 5 and to provide general guidance and input on the project progress.

6. Subtasks

- 6.1. Coordinate, facilitate, and attend up to four TAC meetings to discuss project progress, review comments on deliverables, and provide adaptive guidance to project design.
- 6.2. Prepare and distribute agendas and meeting materials prior to TAC meetings and minutes following each meeting.

Deliverables	Subtasks Included	Cost	Target date
6.1 Agenda and minutes for first TAC meeting.	¼ of 6.1 and 6.2	\$3,961.47	6/16/15
6.2 Agenda and minutes for second TAC meeting.	¼ of 6.1 and 6.2	\$3,961.47	11/2/15
6.3 Agenda and minutes for third TAC meeting.	¼ of 6.1 and 6.2	\$3,961.47	1/25/16
6.4 Agenda and minutes for fourth TAC meeting.	¼ of 6.1 and 6.2	\$3,961.47	2/2/16
	Total Cost	\$15,845.86	

Assumptions

- TAC meetings are likely to occur at City of Lakewood offices, although TAC members will be requested to host meetings to get broader participation.
- It is expected that TAC meetings will occur in person but some may occur by conference call if possible depending on TAC members' availability and the agenda for each meeting.

Task 7. Compile, Review, and Evaluate Illicit Discharge Detection and Elimination (IDDE) Data from Permittees

Task 7 is for a separate task not associated with the source control study and the effectiveness questions. This task is included in this scope of work at the request of the SWG Source Identification Information Repository (SIDIR) to compile, review, and evaluate data received by Ecology of IDDE incident tracking as reported by NPDES Municipal Stormwater permittees (per Phase I section S5C.8 and Phase II section S5.C.3). The data compilation and review will focus on the quality and usability of the data submitted by permittees in the 2014 annual reports (question 48 for Phase Is and question 20 for Phase IIs) for conducting regional analyses to inform stormwater management programs. The questions to be answered for the data compilation and review efforts include:

- How is Ecology receiving this data?
- What methods are people using to report this information?
- How many permittees submitted their data in spreadsheet or database output format that is easily incorporated in a single database for regional analysis?
- How many submitted pdfs or other formats that will require hand entry and what level of effort will be required to enter those data into the regional database?

The data compilation and review will result in a report on the metadata and describe a plan for completing the dataset and conducting the ensuing data evaluation. A report of the findings from the data compilation and review will be prepared for review by Ecology and the SIDIR committee.

An additional set of optional subtasks for data evaluation will be approved dependent upon the outcome of the initial data compilation and assessment. The optional data evaluation subtasks will include analysis of the data and presenting findings at a workshop for permittees on a date to be determined (estimated to occur in late 2015).

7. Subtasks: Review and Compile Data, Create Database, Summarize Data, and Prepare Data Summary Report

- 7.1 Download and compile the IDDE data submitted by permittees as spreadsheet or character-delimited files. Data will be obtained via Ecology's permit and reporting information system (PARIS) using a filter developed by Ecology (personal communication, K. Dinicola, 3/3/15).
- 7.2 Create and populate an Access database based on the data fields available in the submitted data.
- 7.3 Identify and list datasets with inconsistent data types and formats that cannot be easily imported into the database.
- 7.4 Identify the number of permittees and records for which data would need to be entered by hand from scanned field notes or other raw data sources.
- 7.5 Determine the number of respondents and number of incidents reported.
- 7.6 Identify recommendations for further data compilation and evaluation.
- 7.7 Write a draft memo of the data compilation and review tasks and submit to Ecology for review. The memo will describe how data is being provided by permittees, the methods permittees are using the report the IDDE information, the overall completeness of the dataset, and the

estimated level of effort required to complete the dataset with inclusion of hand-entered records. The memo will also provide recommendations for further data review and evaluation, including statistical analysis (as part of the optional subtasks below).

- 7.8 Meet with the SIDIR subgroup to discuss the draft report findings and ideas of how the data could be further evaluated to support the SIDIR activities.
- 7.9 Write final memo of the data compilation and initial review based on comments from Ecology and the SIDIR subgroup on the draft memo and from discussion at the meeting with the SIDIR subgroup.

7.10 Optional Subtasks: Evaluate Data, Prepare Report, and Present Findings at Workshop

The RSMP Coordinator will notify Lakewood by email to move forward with Optional Task 7.10 based upon the SIDIR subgroup committee decisions.

- 7.10.1 Compare data fields reported by permittees to Ecology's online Western Washington IDDE Incident Tracking Form and associated (offline) spreadsheet. Determine a percent completeness and gaps in the data submitted relative to the Incident Tracking Form and associated instructions.
- 7.10.2 Contact permittees to try to fill data gaps in the reported data.
- 7.10.3 Compile additional data received from data gaps request to permittees. Import data into database.
- 7.10.4 Enter by hand into the database the data submitted in PDF format. Create database form to expedite data entry.
- 7.10.5 Summarize metadata, including the number and types of data fields available: qualitative, quantitative, geographic, date range, and number and type of data package formats.
- 7.10.6 Tabulate the range of responses for each quantitative data field.
- 7.10.7 Categorize the IDDE issues reported in terms of frequency of occurrence, potential severity of impact, and location.
- 7.10.8 Compare IDDE methods used with type of issue (discharge or connection) and water body affected.
- 7.10.9 Perform statistical evaluation of data based on recommendations in the memo for the data compilation and review tasks above.
- 7.10.10 Write a draft report with the results of the data evaluation. Discussion in the report will include the applicability of findings to the NPDES stormwater management program, the usability of the data for the Status and Trends monitoring program, and the consistency of data reporting with the IDDE Field Screening Manual (King CITY 2013). Report will be reviewed by Ecology and the SIDIR subgroup.
- 7.10.11 Prepare final report based on comments on draft report.
- 7.10.12 Prepare a presentation of up to one hour of the data evaluation findings for a workshop for permittees. The RSMP coordinator will notify Lakewood in the fall of 2015 with a range of appropriate dates for workshop planning. Attend workshop and give presentation.

Deliverables for Subtasks 7.1-7.12	Subtasks Included	Cost	Target date
7.1 Preliminary database composed of permittee data not requiring entry by hand and with data gaps from initial permittee submittal of IDDE data.	7.1, 7.2	\$13,072.68	6/22/15
7.2 Draft memo from data compilation and initial review.	7.3-7.7	\$12,261.70	7/20/15
7.3 Meeting with SIDIR subgroup.	7.8	\$1,488.40	8/7/15
7.4 Final memo from data compilation and initial review.	7.9	\$3,206.34	8/21/15
Total for tasks 7.1-7.9		\$30,029.12	
Deliverables for Optional Subtask 7.13			
7.5 Complete database including data entered by hand and additional data provided by permittees from data gaps request.	7.10.1-7.10.4	\$45,825.36	10/16/15
7.6 Draft report on data evaluation.	7.10.5-7.10.10	\$23,428.04	11/13/15
7.7 Final report on data evaluation.	7.10.11	\$3,956.34	12/11/15
7.8 Presentation at workshop or SWG meeting.	7.10.12	\$4,016.34	TBD
Total for task 7.10		\$77,226.08	
Total Cost		\$107,255.20	

Assumptions:

- It is unknown exactly how much and what quality of data will be received by Ecology. For purposes of this scope and cost estimate, it is assumed there will be up to 10,000 records, 1,000 of which would need to be entered by hand at 15 minutes per record on average.
- Proposed schedule assumes contracting will be completed and work will begin by May 4, 2015.
- Ecology and the SWG will organize and facilitate the workshop at which the findings will be presented.
- Ecology's review of the draft memo and draft report will take up to two weeks each.

Task 8. Manage Project

Task 8 is for managing the project, which will include tracking and reporting project costs, managing and adjusting the project schedule as needed, preparing monthly progress reports and invoices, and general project communications and coordination.

8. Subtasks

- 8.1. Prepare monthly invoices and status reports with summary of deliverables completed and TAC activities.
- 8.2. Track and manage project budget with calculation of percent project completion. Identify expenditure issues and make recommendations for their remedy.
- 8.3. General communication by email and phone with project team, TAC, and Ecology.

Deliverables	Subtasks Included	Cost	Target date
8.1. 1 st status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	2 nd month of project
8.2. 2 nd status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	3 rd month of project
8.3. 3 rd status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	4 th month of project
8.4. 4 th status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	5 th month of project

Deliverables	Subtasks Included	Cost	Target date
8.5. 5 th status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	6 th month of project
8.6. 6 th status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	7 th month of project
8.7. 7 th status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	8 th month of project
8.8. 8 th status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	9 th month of project
8.9. 9 th status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	10 th month of project
8.10. 10 th status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	11 th month of project
8.11. 11 th status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	12 th month of project
8.12. 12 th status report.	1/12 th of 8.1, 8.2, and 8.3	\$2,224.82	13 th month of project
	Total Cost	\$26,697.88	

Assumptions

- This phase of the project will be completed within 13 months.
- Invoices and status reports will be prepared using a standard template and following reporting requirements of the agreement between Ecology and Lakewood.