

**INTERLOCAL AGREEMENT  
BETWEEN THURSTON COUNTY  
AND THE CITIES OF LACEY, OLYMPIA AND TUMWATER  
REGARDING JOINT STORM AND SURFACE WATER MONITORING**

This agreement ("Agreement") is made and entered into by and between Thurston County, a subdivision of the State of Washington, hereinafter, "County" and the Cities of Lacey, Olympia and Tumwater, municipal corporations, hereinafter, "Cities".

WHEREAS, the mission of the joint storm and surface water monitoring program is to assess the health of regional water resources to inform the development of programs, policies and capital facility plans to protect those water resources for beneficial uses in perpetuity; and

WHEREAS, the County and Cities have jointly developed and implemented a coordinated monitoring program of water quality, stream flows, lake levels and precipitation known as the Interlocal Monitoring Program continuously since 1991; and

WHEREAS, the County and Cities have intended to renew the agreement for the Interlocal Monitoring Program once the monitoring requirements of the new Western Washington Phase II Municipal Stormwater Permit (NPDES permit) were issued in final form; and

WHEREAS, RCW 39.34.010 permits local governmental units to make the most efficient use of their powers by enabling them to cooperate with other localities on the basis of mutual advantage; and

WHEREAS, the monitoring requirement of the new NPDES permit has been delayed by the State of Washington until the year 2013 but the County and Cities require a completed interlocal agreement to continue the establishment of benefits and obligations of the parties as set forth in the agreement,

NOW, THEREFORE, IT IS HEREBY AGREED BETWEEN THE PARTIES AS FOLLOWS:

1. In consideration of the mutual benefits to be derived by all parties, the County agrees to perform the work set forth herein in cooperation with the Cities.
2. **RELATIONSHIP OF THE PARTIES.** The Cities and the County agree that they intend to act cooperatively pursuant to the authority of Chapter 39.34 RCW to accomplish the purposes recited herein. No separate legal entity is created by this Agreement. This Agreement shall be administered jointly by the Cities and the County through the Thurston Regional Stormwater Technical Advisory Committee (TAC).

### **3. SCOPE OF PROGRAM:**

- Data collection and data management of stream flow, precipitation, biologic, and chemical metrics for water resources located in the County and Cities' jurisdictions.
- Reporting of raw and interpreted data collected in the form of reporting on the County's web page and in the form of an annual report.
- Special projects as agreed upon by the Cities.

### **4. PROGRAM ELEMENTS:**

The storm and surface water monitoring elements generally include the activities below. The specific program activities are detailed in Appendix A:

#### **4.1 Stream Flow Monitoring**

Stream flow monitoring will generally provide data to: 1) develop and update regional drainage models; 2) quantify hydrologic changes in monitored streams; 3) assist in evaluating the effectiveness of stormwater Best Management Practices (BMPs) on a basin or sub-basin level; and 4) facilitate the development of adaptive management policies, programs, and capital facility projects.

#### **4.2 Precipitation Monitoring**

Precipitation monitoring will generally provide data to: 1) assess trends and recurrence intervals; 2) assist each jurisdiction in evaluating the effectiveness of stormwater BMPs on a basin or sub-basin level; 3) facilitate the development of adaptive management policies, programs, and capital facility projects; and 4) aid in the development of regional hydraulic models.

#### **4.3 Macroinvertebrate Monitoring**

Macroinvertebrate monitoring will assess the biologic health of streams using the Index of Biologic Integrity (IBI) or a similar aggregating measure. The IBI is a measurement of the biota present in the stream reach, and provides information on the health of the reach being monitored.

#### **4.4 Ambient Water Quality Monitoring**

Ambient monitoring assesses water quality trends over time. Ambient monitoring data may indicate the need for special projects where ambient data suggest discrete pollution sources are degrading a local water resource.

#### **4.5 Water Resources Monitoring Report**

The Water Resources Monitoring Report will generally contain water quality data, stream flow records, lake level data, and precipitation records collected in conjunction with the above program elements. The report generally tracks historical trends in both water quality and flow.

The report will cover two (2) consecutive Water Years, beginning in October, with the final report covering two years of data collection. Collection of pertinent data will continue throughout the remainder of the year and continue until September of the year following. The County will post raw data after completion of quality assurance and control procedures. The final report will be made available according to the following schedule:

<u>Task</u>	2011 & 2012 Water Year	2013 & 2014 Water Year
Data collection:	10/1/11 – 9/30/13	10/1/13-12/31/14
Report production:	10/1/13 – 3/31/14	
Date of Final Publication:	4/30/14	

The final report will be published electronically and posted on the Thurston County Department of Resource Stewardship website.

#### **4.6 Special Project Monitoring**

Special project monitoring provides the TAC flexibility to address emerging issues. Special project budgets cannot be determined until an emerging issue creates the need for a special project.

### **5. ESTIMATED COST AND FINANCING**

For consideration of this Agreement, the County and Cities shall plan activities under the abovementioned Program Elements, such that estimated total costs do not exceed the Maximum Annual Cost Allocation identified below:

<u>Cooperating Agency</u>	<u>Maximum Annual Cost Allocation</u>
Thurston County	\$80,000
Lacey	\$20,000
Olympia	\$49,000
Tumwater	\$20,000

For purposes of this Agreement, the approval and adoption of the respective annual stormwater program budgets by the County and Cities will serve as the commitment to fund each party's prorata share of the program elements and/or special projects, as defined by the worksheets included in Appendix A and any amendments thereto prior to such approval and adoption.

Costs contained in this Agreement may be reduced if additional grant support becomes available for activities contained in this Agreement. At that time, the Agreement would be supplemented to indicate the revised local cost share.

Cities shall pay as billed by the County. The County shall provide a quarterly summary of its costs directly contributing to work elements in accordance with the Agreement. If the Agreement is terminated before completion of the work contemplated herein, the Cities agree to reimburse the County within thirty (30) days of the termination date for the Cities' share of costs incurred up to the date of termination.

Each party shall make a good faith effort to participate at the funding levels necessary to fund the prorata share of the monitoring program, as permitted by the adoption and approval of the annual budget. In the event a City fails to secure the necessary funding, please refer to Section 8- REALLOCATION OF FUNDS DUE TO BUDGET REDUCTION hereafter.

## **6. RESPONSIBILITIES OF COUNTY**

- 6.1** Administer the Agreement including coordination with city public works staff, participating county departments, and other city and county agencies as necessary thereby ensuring adequate review and approval via the TAC of planned monitoring activities by September 1<sup>st</sup>.
- 6.2** Provide legal opinions and technical support as necessary to carry out the work.
- 6.3** Account for funds expended and bill each agency quarterly for its agreed upon share of the program.
- 6.4** Operate and maintain the stream and precipitation gauges for those currently installed and any future gauges identified by the TAC;
- 6.5** Collect, process, and make available stream flow and precipitation data to the Cities and others by posting the data on the Thurston County Department of Resource Stewardship website a minimum of six times per year and when requested by the Cities.
- 6.6** Coordinate with the Thurston County Public Health and Social Services Department, Environmental Health (TCEH) for sampling of water quality parameters, including but not limited to, temperature, turbidity, pH, dissolved oxygen, conductivity, fecal coliform bacteria, total phosphorus, and nitrate-nitrite, for those streams identified by the TAC;
- 6.7** Coordinate with TCEH and Stream Team for macroinvertebrate sampling during low flow events in accordance with field collection procedures and data assessment for those streams identified by the TAC;
- 6.8** Coordinate with the TCEH for the proper management of the ambient monitoring data and macroinvertebrate data using TCEH's Surface Water Ambient Monitoring Standard Operating Procedures and Analysis Methods for quality assurance and quality control (QA/QC) procedures;
- 6.9** Coordinate with TCEH for the publication of the monitoring data outlined by the abovementioned Program Elements, including data from other state, and federal agencies, students, and volunteer organizations, in the Thurston County Water Resources Monitoring Report and post it on the Thurston County Department of Resource Stewardship website.

**7. RESPONSIBILITIES OF CITIES**

7.1 Assign its chief public works or engineering manager or designee to participate and assist the County in scope of work preparation, review and approval of planned monitoring activities and overall program direction.

7.2 Reimburse the County for the Cities' share of the account for labor and other costs directly contributing to program elements in accordance with this Agreement.

**8. REALLOCATION OF FUNDS DUE TO BUDGET REDUCTION**

Should a City fail to secure adequate funding for any or all of the program elements outlined above, the City shall provide written notice to the County within thirty (30) calendar days of its budget adoption.

The Cities agree to meet within fourteen (14) calendar days thereafter to discuss the impacts of such a budget reduction. As participation for each City is contingent upon final budget approval and adoption, the Cities may elect to redistribute costs or eliminate specific program elements as needed, provided that the participating Cities do not exceed the maximum amounts indicated in Section 5 ESTIMATED COST AND FINANCING, unless otherwise agreed upon in writing through either subsequent agreements or addendums to this Agreement.

**9. DURATION**

This Agreement shall commence on January 1, 2012 and shall terminate on December 31, 2014.

**10. HOLD HARMLESS AND INDEMNIFICATION**

The parties to this Agreement agree that each party is responsible only to themselves for any and all claims, actions, suits, liability, loss, expenses, damages, and judgments of any nature whatsoever, including costs and attorney's fees in defense thereof, for injury, sickness, disability or death to persons or damage to property caused by or arising out of the performance of this Agreement. PROVIDED FURTHER, that in the event of the concurrent negligence of any of the parties, those parties' obligations hereunder shall apply only to the percentage of fault attributable to themselves, their employees or agents.

**11. ENTIRE AGREEMENT**

The parties agree that this Agreement is the complete expression of its terms and conditions. Any oral or written representations or understandings not incorporated in this Agreement are specifically excluded.

**12. TERMINATION**

Any party to this Agreement may terminate this Agreement by giving the other parties at least thirty (30) days advance written notice. 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. The hold harmless and indemnification provisions of this Agreement shall survive termination or expiration of this Agreement.

**13. 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 that 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.

Each party has caused this Agreement to be signed by its duly authorized officer or representative as of the date set forth below its signature.

**CITY OF LACEY**

\_\_\_\_\_  
Mayor

Date: \_\_\_\_\_

APPROVED AS TO FORM

\_\_\_\_\_  
City Attorney

ATTEST:

\_\_\_\_\_  
City Clerk

**CITY OF OLYMPIA**

\_\_\_\_\_  
Mayor

Date: \_\_\_\_\_

APPROVED AS TO FORM:

Darren Nielsen PCA  
City Attorney

ATTEST:

\_\_\_\_\_  
City Clerk



**CITY OF TUMWATER**

\_\_\_\_\_  
Mayor

Date: \_\_\_\_\_

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

ATTEST:

\_\_\_\_\_  
City Clerk

DATE: \_\_\_\_\_

BOARD OF COUNTY COMMISSIONERS  
Thurston County, Washington

ATTEST:

\_\_\_\_\_  
Clerk of the Board

\_\_\_\_\_  
Chair

APPROVED AS TO FORM:

\_\_\_\_\_  
Vice-Chair

JON TUNHEIM  
PROSECUTING ATTORNEY

\_\_\_\_\_  
COMMISSIONER

By: \_\_\_\_\_  
Deputy Prosecuting Attorney

**APPENDIX A: 2012 -2014 Inter-local Monitoring Agreement  
Summary of Annual Cost Sharing By Agency**

Program Element	Cooperating Agency				Annual Total
	Lacey	Olympia	Thurston	Tumwater	
	7%	19%	62%	12%	100%
1 Stream Flow Monitoring	\$ 1,975	\$ 5,293	\$ 17,103	\$ 3,278	\$ 27,649
2 Precipitation Monitoring	\$ 926	\$ 2,469	\$ 8,951	\$ 617	\$ 12,963
3 Macro Invertebrate Monitoring	7%	19%	69%	5%	100%
a. Thurston County Environmental Health	\$ 377	\$ 1,839	\$ 1,850	\$ 366	\$ 4,432
b. Stream Team	\$ 354	\$ 2,000	\$ 1,299	\$ 238	\$ 3,891
4 Ambient Monitoring Cost	\$ 3,752	\$ 27,888	\$ 18,848	\$ 3,752	\$ 49,720
5 Water Resources Monitoring Report	\$ 3,101	\$ 3,101	\$ 3,101	\$ 3,101	\$ 12,404
6 Administration	\$ 1,170	\$ 1,170	\$ 1,170	\$ 1,170	\$ 4,680
<b>Total Annual Monitoring Costs</b>	<b>\$ 11,654</b>	<b>\$ 43,761</b>	<b>\$ 52,323</b>	<b>\$ 12,521</b>	<b>\$ 120,260</b>
Percentage by Jurisdiction	9.7%	36.4%	43.5%	10.4%	100%
Maximum allocation	\$ 20,000	\$ 49,000	\$ 80,000	\$ 20,000	

**APPENDIX A: 2012 -2014 Inter-local Monitoring Agreement**

**Worksheet 1: Stream Flow Monitoring Cost by Agency**

Watershed	Stream	Cooperating Agency				Total
		Lacey	Olympia	Thurston	Tumwater	
Nisqually	Eaton Creek			\$ 3,950		\$ 3,950
Henderson	Woodard Creek			\$ 3,950		\$ 3,950
	Woodland Creek	\$ 1,975		\$ 1,975		\$ 3,950
Budd/Deschutes	Black Lake Ditch			\$ 1,975	\$ 1,975	\$ 3,950
	Chambers Creek		\$ 1,975	\$ 1,975		\$ 3,950
	Ellis Creek					\$ -
	Parcival Creek		\$ 1,343	\$ 1,303	\$ 1,303	\$ 3,949
Eld	Green Cove Creek		\$ 1,975	\$ 1,975		\$ 3,950
<b>Total Annual Cost</b>		<b>\$ 1,975</b>	<b>\$ 5,293</b>	<b>\$ 17,103</b>	<b>\$ 3,278</b>	<b>\$ 27,649</b>
Percentage by Cooperating Agency		7%	19%	62%	12%	100%

Allocation Table- Flow Monitoring				
Total	Lacey	Olympia	Thurston	Tumwater
1.00		0.00	1.00	
1.00		0.00	1.00	
1.00	0.50		0.50	
1.00		0.00	0.50	0.50
1.00		0.50	0.50	
0.00				
1.00		0.34	0.33	0.33
1.00		0.56	0.50	
<b>7.00</b>	<b>0.50</b>	<b>1.34</b>	<b>4.33</b>	<b>0.83</b>
100%	7%	19%	62%	12%

Cost Rationale:	Annual Cost per Gauge
<b>Annual Data Collection:</b>	
Assume 12 events per gauge per year, 1.0 hour per event per gauge, and 1 person per event.	\$ 654.00
<b>Annual Data Management:</b>	
Assume 12 events per gauge per year, 1.0 hour per event per gauge, and 1 person per event.	\$ 654.00
<b>Annual Operation and Maintenance</b>	
Maintenance: Assume 3 events per gauge, 1.0 hour per event, and 2 persons per event.	\$ 365.00
Calibration: Assume 4 events per gauge, 3.67 hours per event, and 2 persons per event.	\$ 1,783.62
<b>Annual Stream Gauge Replacement Cost:</b>	
Assume capital costs of \$2,100 per gauge amortized over 5 years (straight line depreciation).	\$ 420.00
<b>Annual Tools and Accessories:</b>	
Assume 10% of Annual Stream Gauge Replacement Cost per annum.	\$ 42.00
<b>Annual Equipment Rental and Replacement Cost (Vehicle):</b>	
Assume 25% of the Annual ER&R Reserve Replacement cost (Vehicle No. 541):	\$ 31.00
<b>Annual Flow Monitoring Costs on a per gauge basis:</b>	<b>\$3,949.62</b>

<sup>1</sup>All costs rounded to the nearest whole dollar amount.

**APPENDIX A: 2012 -2014 Inter-local Monitoring Agreement**

**Worksheet 2: Precipitation Monitoring Cost<sup>1</sup> by Agency**

Watershed	Gauge Location	Cooperating Agency				Total
		Lacey	Olympia	Thurston	Tumwater	
Nisqually	Meridian Road			\$ 1,852		\$ 1,852
Henderson	12th Avenue		\$ 926	\$ 926		\$ 1,852
	TC Fairgrounds	\$ 926		\$ 926		\$ 1,852
	WARC			\$ 1,852		\$ 1,852
Budd/Deschutes	TC Bldg. 4		\$ 617	\$ 617	\$ 617	\$ 1,851
	Lake Lawrence			\$ 1,852		\$ 1,852
	Olympia Airport <sup>2</sup>					\$ -
Eld	Kaiser Road		\$ 926	\$ 926		\$ 1,852
<b>Total Annual Cost</b>		<b>\$ 926</b>	<b>\$ 2,469</b>	<b>\$ 8,951</b>	<b>\$ 617</b>	<b>\$ 12,963</b>
Percentage by Cooperating Agency		7%	19%	69%	5%	100%

Total	Allocation Table- Precip Monitoring			
	Lacey	Olympia	Thurston	Tumwater
1.00			1.00	
1.00		0.50	0.50	
1.00	0.50		0.50	
1.00			1.00	
1.00		0.33	0.33	0.33
1.00			1.00	
0.00		0.00	0.00	0.00
1.00		0.50	0.50	
<b>7.00</b>	<b>0.50</b>	<b>1.33</b>	<b>4.83</b>	<b>0.33</b>
100%	7%	19%	69%	5%

**Cost Rationale:** Costs are derived from the program element's cost for data collection, data management, operation and maintenance, gauge replacement, tools and accessories and vehicle rental. Costs per Cooperating Agency are derived by determining the Annual Cost per precipitation gauge and prorating the costs by the number of participating agencies.

	Annual Cost per Gauge
<i>Annual Data Collection:</i>	
Assume 12 events per gauge, 1.0 hour per gauge, and 1 person per event.	\$ 654.00
<i>Annual Data Management:</i>	
Assume 12 events per gauge, 1.0 hour per gauge, and 1 person per event.	\$ 654.00
<i>Annual Operation and Maintenance</i>	
Maintenance: Assume 1.0 event per gauge, 1.0 hours per gauge, and 2 persons per event.	\$ 122.00
<i>Annual Precipitation Gauge Replacement Cost:</i>	
Assume capital cost of \$1,700 per gauge amortized over 5 years (straight line depreciation)	\$ 340.00
<i>Annual Tools and Accessories:</i>	
Assume 15% of Annual Precipitation Gauge Replacement Cost per annum.	\$ 51.00
<i>Annual Equipment Rental and Replacement Cost (Vehicle):</i>	
Assume 25% of the Annual ER&R Reserve Replacement cost (Vehicle No. 541)	\$ 31.00
<b>Annual Precipitation Monitoring Costs on a per gauge basis:</b>	<b>\$1,852.00</b>

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**Exhibit 3a: Environmental Health, Macro Invertebrate Monitoring Cost<sup>1</sup> by Agency**

Watershed	Stream	Cooperating Agency				Total
		Lacey	Olympia	Thurston	Tumwater	
Nisqually	Eaton Creek					\$ -
Henderson	Woodard Creek	\$ 377	\$ 366	\$ 366		\$ 1,108
	Woodland Creek					\$ -
Budd/Deschutes	Black Lake Ditch					\$ -
	Chambers Creek		\$ 554	\$ 554		\$ 1,108
	Deschutes River					\$ -
	Ellis Creek					\$ -
	Indian Creek					\$ -
	Mission Creek					\$ -
	Moxlie					\$ -
	Penival Creek		\$ 366	\$ 377	\$ 366	\$ 1,108
	Schnelder Creek					\$ -
Eld	Green Cove Creek		\$ 554	\$ 554		\$ 1,108
	McLane Creek					\$ -
	Perry					\$ -
Totten	Kennedy Creek					\$ -
	Schnelder Creek					\$ -
<b>Total Annual Cost</b>		<b>\$ 377</b>	<b>\$ 1,839</b>	<b>\$ 1,850</b>	<b>\$ 366</b>	<b>\$ 4,432</b>
Percentage by Cooperating Agency		9%	42%	42%	8%	100%

Allocation Table- EH Macro Invertebrate					
Total	Lacey	Olympia	Thurston	Tumwater	
0.00		0.00			
1.00	0.34	0.33	0.33		
0.00					
0.00					
1.00		0.50	0.50		
0.00					
0.00		0.00			
0.00		0.00			
0.00		0.00			
1.00		0.33	0.34	0.33	
0.00					
1.00		0.50	0.50		
0.00			0.00		Not ILA- Funded by Thurston County
0.00			0.00		Not ILA- Funded by Thurston County
0.00			0.00		Not ILA- Funded by Thurston County
0.00			0.00		Not ILA- Funded by Thurston County
<b>4.00</b>	<b>0.34</b>	<b>1.66</b>	<b>1.67</b>	<b>0.33</b>	
1176%	100%	488%	491%	97%	

<b>Cost Rationale: Costs are derived from the program element's cost for data collection, data management, laboratory costs, tools and accessories, and vehicle rental. Costs per Cooperating Agency are derived by determining the Annual Cost per stream site and prorating the costs by the number of participating agencies.</b>		Annual Cost per Stream
<b>Annual Sample Collection:</b>		
Assume 4.0 hour per sample site; 2 persons		\$ 377.00
<b>Annual Data Management:</b>		
Assume 1.0 hour per sample site; and publish one (1) summary report per year.		\$ 47.00
<b>Annual Laboratory Fees</b>		
Private Lab: Assume 3 sampling events per annum.		\$ 684.00
<b>Annual TCEH Macro Invertebrate Monitoring Costs on a per stream basis:</b>		<b>\$ 1,108.00</b>

<sup>1</sup> All costs rounded to the nearest whole dollar amount.

<sup>2</sup> Thurston County, Department of Environmental Health staff members to conduct fieldwork.

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**Exhibit 3b: Stream Team Macro Invertebrate Monitoring - Cost by Agency**

Watershed	Stream	Cooperating Agency				Total
		Lacey	Olympia	Thurston	Tumwater	
Nisqually	Ealon Creek			\$ 353		\$ 353
Henderson	Woodard Creek					\$ -
	Woodland Creek- Draham	\$ 177		\$ 177		\$ 354
	Woodland Creek- Pleasant Glade	\$ 177		\$ 177		\$ 354
Budd/Deschutes	Black Lake Ditch		\$ 117	\$ 121	\$ 117	\$ 355
	Chambers Creek					\$ -
	Deschutes River					\$ -
	Ellis Creek		\$ 177	\$ 177		\$ 354
	Indian Creek		\$ 353			\$ 353
	Mission Creek		\$ 353			\$ 353
	Moxie		\$ 353			\$ 353
	Perrival Creek		\$ 117	\$ 117	\$ 121	\$ 355
	Schneider Creek		\$ 353			\$ 353
Eld	Green Cove Creek		\$ 177	\$ 177		\$ 354
	McLane Creek					\$ -
	Perry					\$ -
Totten	Kennedy Creek					\$ -
	Schneider Creek					\$ -
<b>Total Annual Cost</b>		<b>\$ 354</b>	<b>\$ 2,000</b>	<b>\$ 1,299</b>	<b>\$ 238</b>	<b>\$ 3,891</b>
Percentage by Cooperating Agency		9%	51%	33%	6%	100%

Allocation Table- ST Macro Invertebrate				
Total	Lacey	Olympia	Thurston	Tumwater
1.00		0.00	1.00	
0.00				
1.00	0.50	0.00	0.50	
1.00	0.60	0.00	0.50	
1.00		0.33	0.34	0.33
0.00				
0.00				
1.00		0.50	0.50	
1.00		1.00		
1.00		1.00		
1.00		1.00		
1.00		0.33	0.33	0.34
1.00		1.00		
1.00		0.50	0.50	
0.00			0.00	
0.00				
0.00				
0.00				
11.00	1.00	5.66	3.67	0.67
100%	9%	51%	33%	6%

Not I.L.A.- Funded by Thurston

Cost Rationale: Costs are derived from the program element's cost for data collection, data management, laboratory costs, tools and accessories and vehicle rental. The Total Annual Costs for all streams are divided equally due to similar nature of the planned activities and upon mutual agreement between the Cooperating Agencies.		Annual Cost per Stream
Annual Sample Collection: Assume volunteers collect samples.		\$ -
Annual Data Management: Assume 1.0 hour per sample file; and publish one (1) summary report per annum <sup>2</sup> .		\$ 52.00
Annual Laboratory Fees: Private Lab: Assume \$ sampling events per annum.		\$ 301.00
Annual Stream Team Macro Invertebrate Monitoring Costs on a per stream basis:		\$353.00

<sup>1</sup> All costs rounded to the nearest whole dollar amount.

<sup>2</sup> Thurston County, Department of Environmental Health staff members to conduct fieldwork.

APPENDIX A: 2012-2014 Inter-local Monitoring Agreement

Exhibit 4: Ambient Monitoring Cost<sup>1</sup> by Agency

Watershed	Stream	Cooperating Agency				Total
		Lacey	Olympia	Thurston	Tumwater	
Nisqually	Eaton Creek					\$ -
Harrison	Woodard Creek			\$ 4,520		\$ 4,520
	Woodland Creek	\$ 2,260	\$ -	\$ 2,260		\$ 4,520
Budd/Deschutes	Black Lake Ditch					\$ -
	Chanhara Creek	\$ 1,492	\$ 1,492	\$ 1,537		\$ 4,520
	Deschutes River- E Street		\$ -	\$ 2,260	\$ 2,260	\$ 4,520
	Ellis Creek		\$ 2,260	\$ 2,260		\$ 4,520
	Inkan Creek		\$ 2,260	\$ 2,260		\$ 4,520
	Mission Creek		\$ 4,520			\$ 4,520
	Mudie Creek at Pine St		\$ 4,520			\$ 4,520
	Mudie Creek at mouth		\$ 4,520			\$ 4,520
	Percival Creek		\$ 1,537	\$ 1,492	\$ 1,492	\$ 4,520
	Schneider Creek		\$ 4,520			\$ 4,520
Eld	Green Cove Creek		\$ 2,260	\$ 2,260		\$ 4,520
	McLans Creek					\$ -
	Perry					\$ -
Tellen	Kennedy Creek					\$ -
	Schneider Creek					\$ -
<b>Total Annual Cost</b>		<b>\$ 3,752</b>	<b>\$ 27,888</b>	<b>\$ 18,848</b>	<b>\$ 3,752</b>	<b>\$ 49,720</b>
Percentage by Cooperating Agency		8%	56%	38%	8%	100%

Allocation Table- Ambient Monitoring					
Total	Lacey	Olympia	Thurston	Tumwater	
0.00					
1.00		0.00	1.00		
1.00	0.50	0.50	0.50		
0.00					
1.00	0.33	0.33	0.34		
1.00		0.00	0.00	0.00	
1.00		0.50	0.50		
1.00		1.00			
1.00		1.00			
1.00		1.00			
1.00		0.33	0.33	0.33	
1.00		1.00			
1.00		0.50	0.50		
0.00			0.00		Not I.L.A. Funded by Thurston County
0.00			0.00		Not I.L.A. Funded by Thurston County
0.00			0.00		Not I.L.A. Funded by Thurston County
0.00		0.00	0.00		Not I.L.A. Funded by Thurston County
<b>12.00</b>	<b>0.83</b>	<b>6.17</b>	<b>4.17</b>	<b>0.83</b>	
100%	7%	51%	35%	7%	

Cost Rationale	Annual Cost per Stream
<b>Annual Sample Collection:</b>	
Calibration: Assume 12 sampling events per annum; 1.5 hours per event; and 2 persons <sup>2</sup> per event	\$ 1,872.00
Collection: Assume 12 sampling events per annum; 1.0 hour per event; and 2 persons <sup>2</sup> per event	\$ 1,248.00
<b>Annual Data Management:</b>	
Assume 2.0 hours per sample site, and publish one (1) summary report per annum <sup>2</sup>	\$ 104.00
<b>Annual Laboratory Fees:</b>	
Private Lab: Assume 12 sampling events per annum	\$ 1,296.00
<b>Annual Equipment Rental and Replacement Cost:</b>	
Annual ERAR Reserve Replacement Cost (TCEH Vehicle)	\$ 600.00
<b>Annual Ambient Monitoring Costs on a per stream site basis:</b>	<b>\$4,520.00</b>

<sup>1</sup> All costs rounded to the nearest whole dollar amount.

<sup>2</sup> Thurston County, Department of Environmental Health staff members to conduct fieldwork.



Summary of Annual Cost Sharing By Agency					
Exhibit 6: Water Resources Monitoring Report Cost by Agency					
	Cooperating Agency				Total
	Lacey	Olympia	Thurston	Tumwater	
Bi-Annual Water Resources Report	3,101	3,101	3,101	3,101	12,404
<b>Total Annual Cost</b>	<b>\$ 3,101</b>	<b>\$ 3,101</b>	<b>\$ 3,101</b>	<b>\$ 3,101</b>	<b>\$ 12,404</b>
Percentage by Cooperating Agency	25%	25%	25%	25%	100%

Allocation Table- Annual Report				
Total	Lacey	Olympia	Thurston	Tumwater
1.00	0.25	0.25	0.25	0.25

Cost Rationale: The Water Resources Monitoring Report will be prepared bi-annually. The costs will be equally divided among all Cooperating Agencies on a per annum basis.		Total Annual Costs
<b>Annual Data Collection, Draft Report; QA/QC:</b>		
Assume 80 hours per annum; and 2 persons <sup>2</sup>		\$8,320
Assume 18 hours per annum; and 1 person <sup>3</sup>		\$981
<b>Annual Word Processing:</b>		
Assume 56 hours per annum; and 1 person <sup>2</sup>		\$2,352
<b>Printing and Miscellaneous Supplies:</b>		\$750
<b>Total Annual Costs for Water Resources Report</b>		<b>\$12,403</b>

<sup>1</sup> All costs rounded to the nearest whole dollar amount.

<sup>2</sup> Thurston County, Department of Environmental Health staff members to collect and format data for publication.

<sup>3</sup> Thurston County, Department of Water and Waste Management staff members to collect and format data for publication.

Summary of Annual Cost Sharing By Agency					
Exhibit 7: Administration Costs <sup>1</sup> by Agency					
	Cooperating Agency				Total
	Lacey	Olympia	Thurston	Tumwater	
Annual Administrative Costs	\$ 1,170.00	\$ 1,170.00	\$ 1,170.00	\$ 1,170.00	4,680
Total Annual Cost	\$ 1,170.00	\$ 1,170.00	\$ 1,170.00	\$ 1,170.00	\$ 4,680
Percentage by Cooperating Agency	25%	25%	25%	25%	100%

Allocation Table- Administration Costs				
Total	Lacey	Olympia	Thurston	Tumwater
1.00	0.25	0.25	0.25	0.25

Cost Rationale: Administrative costs are sharing the total administrative costs equally among all Cooperating Agencies.	
	Total Annual Costs
<b>Annual Administrative Costs:</b>	
Project Manager: Assume 24 staff hours/annually	\$ 1,680
Utility Planner: Assume 24 staff hours/annually	\$ 1,704
Administrative Assistant: Assume 16 staff hours/annually	\$ 872
Accountant: Assume 12 staff hours/annually	\$ 824
<b>Total Annual Administrative Costs</b>	<b>\$ 4,680</b>

<sup>1</sup> All costs rounded to the nearest whole dollar amount.

**ILA- Monitoring Program  
Summary of Annual Rates and Charges**

original  
MPB

Prepared by: Kevin Dragon PE, EPM  
Date: 8/29/2003  
Revised: 7/11/2012

**FY2013  
Rates and Charges**

**WWM Billable Hourly Rates**

EPM	Engineering Project Manager	
NPDES Coordinator		\$70.00
UP	Utility Planner	\$71.00
WRS3	Water Resc Spc, PRG Supervisor	\$67.00
WRS2	Water Resc Spc -Sr. field	\$54.50
SAA	Sr Accountant Assistant	\$52.00
SOA	Senior Office Assistant	\$42.00

**TC Environmental Health Billable Hourly Rates**

ES(1)	Environmental Specialist	\$52.00
ES(2)	Environmental Specialist	\$52.00

**Miscellaneous Rates, Fees and Charges**

Annual ER&R Reserve Replacement costs:	\$855.00	per annum	
Stream Gauge (replacement costs):	\$1,850.00	per gauge	
Precipitation Gauge (replacement costs):	\$1,350.00	per gauge	
Macro Invertebrate Laboratory fees:	\$228.00	per sample	
Ambient Sampling Fees (Private Laboratory):			
Fecal Coliform	\$40.00	per sample	
Nitrate/Nitrite	\$25.00	per sample	
Total Phosphorous	\$25.00	per sample	
E. Coli	\$0.00	per sample	
Turbidity	\$0.00	Determined in field	
pH	\$0.00	Determined in field	
Conductivity	\$0.00	Determined in field	
Dissolved Oxygen, DO	\$0.00	Determined in field	
Shipping Charges	\$18.00	per sample or	\$70.00 per event
Total Ambient Sampling fee	\$108.00	per sample	