

**SECOND AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF POMONA, AND STANTEC CONSULTING SERVICES, INC. REGARDING IMPLEMENTING THE COORDINATED INTEGRATED MONITORING PROGRAM OF THE EAST SAN GABRIEL VALLEY WATERSHED MANAGEMENT GROUP**

THIS SECOND AMENDMENT TO THE AGREEMENT (SECOND AMENDMENT) is entered into by and between the CITY OF POMONA (CITY), AND STANTEC CONSULTING SERVICES, INC. (STANTEC).

**RECITALS**

**WHEREAS**, in September of 2017, the CITY's Council approved the Professional Services Agreement for the implementation of the Coordinated Integrated Monitoring Program (CIMP) on behalf of the East San Gabriel Valley Watershed Management Group (ESGVWMG);

**WHEREAS**, the LEAD AGENCY entered into a Professional Services Agreement for FY2017-18 and FY 2018-19 on behalf of the ESGVWMG in the amount not to exceed of \$506,638 for cost sharing as per the Agreement and Exhibits;

**WHEREAS**, in August 2018, the LEAD AGENCY entered into a FIRST AMENDEMNT to change the LEAD AGENCY a Professional Services Agreement for FY2018-19 and 6 months of FY 2019-20 on behalf of the ESGVWMG in the amount not to exceed of \$329,897 for cost sharing as per the Agreement and Exhibits; and

**WHEREAS**, the PARTIES, desire to enter into this SECOND AMENDMENT under the same terms and conditions as the AGREEMENT.

**NOW, THEREFORE**, the PARTIES hereby agree as follows:

1. All other terms and conditions of the Agreement shall remain in full force and effect.
2. The LEAD AGENCY shall be the contracting party entering into contracts to carry out the Coordinated Integrated Monitoring Program (CIMP) on behalf of the ESGVWMG.
3. The LEAD AGENCY shall enter into Amendment No. 2 of the Professional Services Agreement with Stantec for Fiscal Year 2019-2020 to continue with implementation of the CIMP, with anticipated expenses to all PARTIES as identified in Exhibit 1.

**IN WITNESS WHEREOF**, the PARTIES hereto have caused this SECOND AMENDMENT to be executed by their duly authorized representatives and affixed as of the date of signature of the PARTIES:

*[Signatures on following pages]*

**CITY OF POMONA**

By \_\_\_\_\_  
Linda Lowry, City Manager

\_\_\_\_\_  
Date

ATTEST:

By \_\_\_\_\_  
Rosalia A. Butler, MMC, City Clerk

\_\_\_\_\_  
Date

APPROVED AS TO FORM:

By \_\_\_\_\_  
Christi Hogin, Interim City Attorney

\_\_\_\_\_  
Date

**Stantec Consulting Services, Inc.**

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

# **Exhibit 1**

## **Stantec Proposal**



300 N. Lake Avenue, Suite 400  
Pasadena, CA 91101

May 28, 2019  
File: 224501167 - 2

**Attention: Darron Poulsen**  
Water Resources Director City of Pomona  
505 South Garey Avenue  
Pomona, CA 9176

**Reference: CIMP Implementation Proposal – Amendment #2**

Dear Mr. Poulsen,

Stantec Consulting Services Inc. (Stantec) is pleased to provide the following cost estimate in support of implementation of the Coordinated Implementation Monitoring Program (CIMP) from July 1, 2019 through June 30, 2020. The scope of the work is based on the documents submitted on behalf the East San Gabriel Valley Watershed Management Group (ESGVWMG or Group) to meet the requirements of the 2012 National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System Permit (MS4 Permit). This cost estimate is broken out into two components: (1) project management (2) CIMP implementation (3) Special Study at Live Oak Wash; and (4) Watershed Management Plan (WMP) Adaptive Management. It should be noted, that the CIMP is designed using the minimum number of receiving water and outfall monitoring locations and still comply with the Los Angeles County MS4 permit. To be acceptable to the Regional Water Quality Control Board (RWQCB), the CIMP is written to cover the entire group area and provide information equally to the group members. Similarly, the WMP is meant to provide a path to full compliance with the MS4 Permit. It is our understanding that the WMP must be comprehensively evaluated and updated by July 29, 2019. Implementing the CIMP and WMP concurrently will provide a foundation for decision support for future activities and the adaptive management process.

It should be noted that due to the nature of the extension of this work, Task 1 and 2 are relatively unchanged from the previous proposal submittals. Task 3 and 4 have been added to reflect additional tasks desired by the group.

## SCOPE OF WORK

### TASK 1 - PROJECT MANAGEMENT

Stantec will provide project and task management as detailed in this technical approach to the CIMP throughout the duration of the project. Stantec will report to the City of Pomona as the lead agency for the group. Stantec will also coordinate with team members as necessary through the duration of this project to ensure successful completion. Stantec is currently tasked and funded to provide these services through December 31, 2019. This amendment continues this work from January 1, 2020 through June 30, 2020 (i.e., 6-month period). The task can be summarized with the following key items:

- The Stantec team will conduct one kick-off meeting with the City of Pomona and up to 6 project status meetings. Key staff members will participate in the kick-off meeting. Agendas and meeting minutes will be prepared by the Stantec team for each meeting.
- Stantec will conduct a field kick-off meeting prior to the first monitoring event of the 2019/20 monitoring season. Following a presentation of the monitoring approach, the Stantec team will conduct a tour of the monitoring sites. The field kick-off meeting is anticipated to take approximately 4 hours.

**Reference: CIMP Implementation Proposal – Amendment #2**

## TASK 2 - CIMP IMPLEMENTATION

Implementation of the CIMP allows for an evaluation of the impacts from MS4 discharges to provide decision support for actions to improve water quality and enable the Group to comply with the MS4 Permit. The CIMP Implementation for the ESGV Group monitoring is composed of five sub-elements:

1. Equipment Rental and Installation
2. Receiving Water Monitoring
3. Stormwater Outfall Monitoring
4. Non-Stormwater Outfall Evaluation
5. Data Management and Reporting

### Task 2.1 - Equipment Purchase and Installation

Stantec is currently scoped and funded to procure and install equipment under the existing agreement.

### Task 2.2 - Receiving Water Monitoring

The Stantec team will collect and analyze stormwater data as specified in the CIMP at three receiving water monitoring sites. Table 1 summarizes the anticipated schedule of the installation and monitoring activities for both receiving water and stormwater outfall locations. These locations may change based on implementation needs and discussions with the Group.

The Stantec team will conduct three wet weather and four dry weather monitoring events at each site during the 2019/2020 monitoring season for the specific constituents detailed in the CIMP. Criteria contained within the CIMP regarding conditions for qualifying wet weather and dry weather monitoring events will be adhered to.

We assumed that toxicity will not be exceeded and no Toxicity Identification Evaluations (TIEs) will need to be conducted. Once data indicates a concern and a TIE is required, we will work with the group to evaluate the next steps.

The Stantec team will communicate to the City of Pomona prior to and upon activation of sampling teams. The notification will contain at a minimum:

- Anticipated start time and date of the monitoring event
- Anticipated highest total amount of rain during any given 24-hour period during the event
- Probability of the precipitation
- Source(s) of weather prediction
- Tests to be run on samples taken at each site
- Confirmation that the laboratory has been notified to expect samples
- Name and cell phone number of the Stantec team's monitoring event coordinator

Field leads will be present during the wet weather events to provide equipment trouble shooting and guidance to the monitoring teams during the collection of stormwater samples.



**Reference: CIMP Implementation Proposal – Amendment #2**

### Task 2.3 - Storm Water Outfall Monitoring

The Stantec team will perform three wet weather monitoring events during the 2019/2020 monitoring season in concert with receiving water monitoring for the specific constituents detailed in the approved CIMP. Criteria contained within the approved CIMP regarding proper conditions for qualifying wet weather monitoring events will be adhered to. Additionally, the constituents will be added to the monitoring lists for upstream outfalls and TMDL monitoring sites when triggered by the CIMP procedures.

The Stantec team will communicate to the City of Pomona prior to the precipitation event and upon activation of sampling teams. The notification will contain at a minimum the information previously stated for receiving water monitoring in Task 2.2.

Samples collected will be transferred to a laboratory or laboratories certified by the State of California to perform the required chemistry analysis of water, bacteriological indicator analysis of water quality samples, and toxicity analysis of water quality samples. Selected laboratories will meet the approved/modified detection and reporting limits identified in the Approved CIMP and MS4 Permit.

This effort includes development of tool for predicting runoff (sample composite) volumes for different storm depths and intensities.

Table 1 below summarizes the anticipated schedule of monitoring activities for both receiving water and stormwater outfall locations. These locations may change based on implementation needs and discussions with the Group.

**Table 1 – Summary of ESGV Group Receiving Water and Stormwater Outfall Monitoring Implementation Schedule**

Location	Water Body	Monitoring Type (# Wet/# Dry Events)			Storm Season
		LTA	TMDL	SW Outfall	
ESGV_LOW_DS	Live Oak Wash	3/4*	3/4*		2019-2020
ESGV_SJC_DS	San Jose Creek		3/4*		2019-2020
ESGV_SDW_DS	San Dimas Wash		3/4*		2019-2020
MTD 766	Big Dalton Wash			3/0	2019-2020
BI 0566 Line A	Upper San Jose Creek			3/0	2019-2020
San Antonio Drain Unit 1	Upper Chino Creek			3/0	2019-2020

\* TMDL indicator bacteria monitoring only (two events).



**Reference: CIMP Implementation Proposal – Amendment #2**

## Task 2.4 - Data Management and Reporting

To maintain a high-quality dataset of the collected environmental data, the Stantec team will assume separate roles of data collection and data evaluation. By maintaining the separation, the QA/QC review remains unbiased. The Stantec team has developed templates and data processing tools that efficiently receive electronic data from laboratories, identify out-of-range results, perform data qualification, and export data to a State Water Resources Control Board Surface Water Ambient Monitoring Program (SWAMP) compatible format. Additionally, data analysis routines provide an automated comparison of program data to relevant water quality objectives contained in the Los Angeles Basin Plan which includes California Toxics Rule, Title 22 drinking water standards, and California Ocean Plan. The resulting water quality objectives comparison functionality is used to develop event-based summaries of water quality exceedances to keep the Group updated. These queries support and supplement the semi-annual reports required under the NPDES permit.

### Post-event Monitoring Reports

The Stantec team will provide draft Post-event Monitoring Reports within three weeks of receipt of laboratory monitoring data following a monitoring event using available data that have gone through our quality assurance/quality control (QA/QC) process. Final post-event monitoring reports will include at a minimum:

- A summary of the monitoring event
- Copies of field logs
- Flow and rainfall data
- Hydrographs and Hyetographs
- Photo Documentation
- Laboratory data

Field forms and photo documentation photos will be submitted in a manner such that they can also be included as an appendix to the Annual Report or as a separate document.

### Annual Report

Stantec is already contracted to prepare and deliver the 2018-2019 annual report.

### Semi Annual Report

Stantec will prepare and submit a semi-annual data report to the Los Angeles Regional Water Quality Control Board prior to the July 2020 deadline.

### Health and Safety Plan

The existing Health and Safety Plan (HSP) will be revised based on the 2018/2019 monitoring year experience and reviewed by the field teams. . The HSP will address both general and site-specific safety concerns. Typical topics include first responder protocols, site security and access controls, traffic control measures, confined space rules, slip/trip/fall hazards and protection, safe handling and spill protection of chemicals, PPE requirement, and electrical safety.



**Reference: CIMP Implementation Proposal – Amendment #2**

### TASK 3 – SPECIAL STUDY AT LIVE OAKS WASH

The Live Oaks Wash compliance site (LOW) near Pudding Stone Reservoir is a TMDL Long Term Assessment Site. The compliance monitoring site is located downstream of the confluence of three open channel systems, named Puddingstone Channel, Marshall Canyon Channel, and Live Oak Wash. Each of the areas tributary to these three channel systems may generate pollutants at different rates. A special study will be performed by Stantec to measure the constituents of concern (Metals, Nutrients, Bacteria) contained within from each discrete channel system. The deliverable of the special study will be a Technical Memo that summarizes the findings. It is assumed that this special study will have a duration of 1 year comprising 3 wet weather events and 2 dry weather events.

Table 2 summarizes the anticipated schedule of monitoring activities for the special study. The study will be performed separate from compliance monitoring outlined in Task 2. This Study is intended to inform the Group on the quality of discharges in each of these channels. Any data that will be collected will be done independent of the compliance monitoring discussed elsewhere in this proposal. The monitoring of these three locations is solely related to this Special Study and not for compliance purposes.

**Table 2 – Summary of ESGV Group Special Study Implementation Schedule**

Location	Water Body	Special Study		
		Wet	Dry	Season
ESGV_PUDD_CH	Puddingstone Channel	3	2	2019-2020
ESGV_MRSH_CH	Marshall Canyon Channel	3	2	2019-2020
ESGV_LOWS_CH	Live Oaks Wash	3	2	2019-2020

### TASK 4 – WATERSHED MANAGEMENT PLAN ADAPTIVE MANAGEMENT

An adaptive management approach provides a structured process that allows for acting under uncertain conditions based on the best available science, closely monitoring and evaluating outcomes, and re-evaluating and adjusting decisions as more information is collected. The WMP was designed to be implemented as an adaptive process. As new program elements are implemented, and data are gathered over time, the WMP will undergo revision to reflect the most current understanding of the watershed and present a sound approach to addressing changing conditions. It is our understanding that the WMP must be comprehensively evaluated and updated by July 29, 2019. The Stantec team will meet with each of the cities to identify projects or additional measures to be add to the WMP. Stantec will then incorporate the planned projects into the WMP. As part of this exercise, Stantec will incorporate planned stormwater capture projects into the WMP. Any shortfalls in achieving stormwater capture goals will be identified..

Stantec is working closely with the Six Basins Water Master consultant to prepare a Stormwater Capture Feasibility Study. Stantec will incorporate the results of this Study in the WMP as it becomes available. Requests for a Time



May 28, 2019  
Darron Poulsen  
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**Reference: CIMP Implementation Proposal – Amendment #2**

Scheduled Order from the RWQCB for an extension of the TMDL compliance milestones and a re-run of the Reasonable Assurance Analysis are excluded from this amendment.

## **COST ESTIMATE**

Stantec has prepared a detailed cost estimate for the labor and expenses necessary to complete the proposed scope of work and the proposed schedule described in this proposal (refer to Attachment A). The total estimated cost for the above scope of work is **\$352,110**. Stantec services will be charged on a time-and-materials basis in accordance with the terms and conditions of the existing contract authorized by the City of Pomona on September 18, 2017.

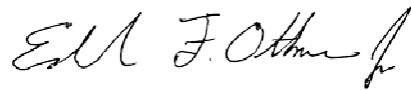
## **SCHEDULE**

The project has an assumed start date of July 1, 2019 and end date of June 30, 2020.

We look forward to working with the ESGVWMG to provide professional services for this important project. If you have questions or require further information, please contact Ed Othmer, phone numbers provided below.

Sincerely,

**Stantec Consulting Services, Inc.**



**Ed Othmer, Jr.** PE, CPESC, CPSWQ. QSP/D ToR, QISP ToR, ENV SP  
California Stormwater Sector Leader Project Manager  
Mobile (619) 279-3682  
Phone: (858) 751-1219  
ed.othmer@stantec.com

Attachment: Cost Summary



**ESGV Implementation of Coordinated Integrated Monitoring Program and Watershed Mangment Program - NPDES MS4 Compliance**  
**Stantec Fee Estimate - 2019/2020**

Activity No.	Contract Hourly Rate ACTIVITY DESCRIPTION	Stantec Consulting Services, Inc						Larry Walker Associates								BL Hall				Laboratory Analysis	Other Direct Costs (ODCs) - Materials, Equipment, Fees, Transportation, Lodging, Meals	TOTAL PROJECT COST
		273	153	148	109	TOTAL HOURS (Project Engineering / Management)	LABOR FEE (Project Engineering / Management)	278	244	244	165	165	85	TOTAL HOURS (Project Engineering / Management)	Larry Walker Associates FEE Estimate	100	115	TOTAL HOURS (Project Engineering / Management)	BL Hall FEE ESTIMATE			
<b>1.0</b>	<b>Task 1 – Project Management, Coordination, &amp; Meetings</b>	<b>40</b>	<b>84</b>	<b>24</b>	<b>30</b>	<b>178</b>	<b>\$ 30,596</b>	<b>32</b>					<b>24</b>	<b>56</b>	<b>\$ 12,854</b>	<b>6</b>		<b>6</b>	<b>\$ 600</b>	<b>\$ -</b>	<b>\$ 3,600</b>	<b>\$ 47,651</b>
1.1	Kick-Off Meeting	2	4			6	\$ 1,158	8						8	\$ 2,225			6	\$ -		\$ 600	\$ 3,983
1.2	Project Meetings, Preparation of Agendas and Minutes (12)	12	24		6	42	\$ 7,605	24					24	48	\$ 10,630				\$ -		\$ 3,000	\$ 21,235
1.3	Field Kick-Off Meeting	2	8	24		34	\$ 5,311								\$ -	6		6	\$ 600		\$ -	\$ 5,911
1.4	Presentation of Draft Annual Report (1)						\$ -								\$ -				\$ -		\$ -	\$ -
1.5	Project Management, Project Schedule, Monthly Updates	24	48		24	96	\$ 16,522								\$ -				\$ -		\$ -	\$ 16,522
<b>2.0</b>	<b>Task 2 - CIMP Requirements</b>	<b>57.5</b>	<b>37</b>	<b>455</b>	<b>1</b>	<b>550.5</b>	<b>\$ 88,598</b>	<b>59</b>	<b>10</b>	<b>12</b>	<b>56</b>	<b>48</b>	<b>4</b>	<b>189</b>	<b>\$ 39,259</b>	<b>315</b>		<b>315</b>	<b>\$ 36,225</b>	<b>\$ 50,534</b>	<b>\$ 8,000</b>	<b>\$ 222,617</b>
<b>2.1</b>	<b>Equipment Purchase and Installation</b>																					\$ -
2.1.1	Equipment Purchase						\$ -								\$ -				\$ -			\$ -
2.1.2	Equipment Permitting and Installation						\$ -								\$ -				\$ -			\$ -
2.1.3	Monthly Data Download and Equipment Maintenance (6)			48		48	\$ 7,081								\$ -				\$ -			\$ 7,081
2.1.4	Equipment Demobilization			23		23	\$ 3,393								\$ -	45	45		\$ 5,175			\$ 8,568
<b>2.2</b>	<b>Receiving Water TMDL Monitoring</b>																					\$ -
2.2.1	Monitoring and Sampling Activities	24		188		212	\$ 34,290	21					14	35	\$ 8,147		135	135	\$ 15,525	\$ 34,669	\$ 4,000	\$ 96,631
<b>2.3</b>	<b>Stormwater Outfall Monitoring</b>																					\$ -
2.3.1	Monitoring and	24		188		212	\$ 34,290	21					14	35	\$ 8,147		135	135	\$ 15,525	\$ 15,865	\$ 4,000	\$ 77,827
<b>2.4</b>	<b>Data Management and Reporting Methodology</b>																					\$ -
2.4.1	Initial & Modified Electronic Data File Submittals (1)	1	1			2	\$ 426	1	10					11	\$ 2,719				\$ -			\$ 3,145
2.4.2	Post Event Monitoring Reports 7 events (3 wet 4 dry per year for 1 year)	3.5	14			17.5	\$ 3,098	14			56			70	\$ 13,122				\$ -			\$ 16,220
2.4.3.1	Draft Annual Report (1)						\$ -								\$ -				\$ -			\$ -
2.4.3.2	Final Annual Report (1)						\$ -								\$ -				\$ -			\$ -
2.4.4.1	Draft Semi-Annual Data Report (1)	2	10			12	\$ 2,076	1		8		16	3	28	\$ 5,124				\$ -			\$ 7,200
2.4.4.2	Final Semi-Annual Data Report (1)	2	8			10	\$ 1,770	1		4		4	1	10	\$ 1,999				\$ -			\$ 3,769
2.4.5	Prepare Health and Safety Plan	1	4	8	1	14	\$ 2,175								\$ -				\$ -			\$ 2,175
<b>3.0</b>	<b>Task 3 - Special Study at Live Oaks Wash</b>	<b>40</b>	<b>160</b>			<b>200</b>	<b>\$ 35,404</b>								<b>\$ -</b>				<b>\$ -</b>	<b>\$ 18,814</b>		<b>\$ 54,218</b>
3.1	Additional Monitoring Activies	10	40			50	\$ 8,851								\$ -				\$ -	52		\$ 8,903
3.2	Reporting Activities	30	120			150	\$ 26,553								\$ -				\$ -	\$ 18,814		\$ 45,367
<b>4.0</b>	<b>Task 4 - Watershed Management Plan Adaptive Management</b>	<b>40</b>	<b>32</b>	<b>80</b>		<b>152</b>	<b>\$ 27,624</b>								<b>\$ -</b>				<b>\$ -</b>			<b>\$ 27,624</b>
4.1	Interviews with Cities	32	32			64	\$ 13,637								\$ -				\$ -			\$ 13,637
4.2	Report Drafting	8		80		88	\$ 13,987								\$ -				\$ -			\$ 13,987
	<b>TOTAL</b>	<b>177.5</b>	<b>313</b>	<b>559</b>	<b>31</b>	<b>1080.5</b>	<b>\$ 182,223</b>	<b>91</b>	<b>10</b>	<b>12</b>	<b>56</b>	<b>72</b>	<b>4</b>	<b>245</b>	<b>\$ 52,114</b>	<b>6</b>	<b>315</b>	<b>321</b>	<b>\$ 36,825</b>	<b>\$ 69,348</b>	<b>\$ 11,600</b>	<b>\$ 352,110</b>

Costs are reflective of an 12-month average and is not necessarily indicative of actual cost, which will be billed on a time and materials basis.

New rates are effective starting October 1st 2019

## Analytical Costs

Analyte	Unit Cost	Receiving Water												Storm Water Outfall					
		Live Oak Wash (Puddingstone)				San Jose Creach R1				San Dimas Wash				Big Dalton Wash (MTD 766)		Upper San Jose Creek (BI 0566 Line A)		Upper Chino Creek (SA Drain 1	
		Wet		Dry		Wet		Dry		Wet		Dry		Wet & E Coli		Wet & E Coli		Wet & E Coli	
		Events	Cost	Events	Cost	Events	Cost	Events	Cost	Events	Cost	Events	Cost	Event	Cost	Event	Cost	Event	Cost
General Chemistry																			
Hardness	\$30	3	\$90	2	\$60	3	\$180	2	\$120	3	\$90	2	\$60	3	\$90	3	\$90	3	\$90
Total Suspended Solids	\$12	3	\$36	2	\$24	3	\$72	2	\$48	3	\$36	2	\$24	3	\$36	3	\$36	3	\$36
Alkalinity	\$15	3	\$45	2	\$30	3	\$90	2	\$60	0	\$0	0	\$0	3	\$45	3	\$45	0	\$0
Total Dissolved Solids	\$12	2	\$24	2	\$24	0	\$0	2	\$48	0	\$0	2	\$24	0	\$0	0	\$0	0	\$0
Chloride	\$30	2	\$60	2	\$60	0	\$0	2	\$120	0	\$0	2	\$60	0	\$0	0	\$0	0	\$0
Sulfate (included with Chloride)	\$0	2	\$0	2	\$0	0	\$0	2	\$0	0	\$0	2	\$0	0	\$0	0	\$0	0	\$0
Total Organic Carbon	\$48	2	\$96	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	3	\$144	0	\$0	0	\$0
Total Nitrogen (calc)	\$10	3	\$30	0	\$0	3	\$0	0	\$0	3	\$30	0	\$0	0	\$0	0	\$0	0	\$0
Organic Nitrogen (calc)	\$10	3	\$30	0	\$0	3	\$0	0	\$0	3	\$30	0	\$0	3	\$30	0	\$0	0	\$0
TKN	\$45	3	\$135	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	3	\$135	0	\$0	0	\$0
Total P	\$50	3	\$150	2	\$100	3	\$300	2	\$200	3	\$150	2	\$100	3	\$150	0	\$0	0	\$0
Ortho P	\$30	3	\$90	2	\$60	3	\$180	2	\$120	3	\$90	2	\$60	3	\$90	0	\$0	0	\$0
Ammonia	\$45	3	\$135	2	\$90	3	\$270	2	\$180	0	\$0	0	\$0	3	\$135	3	\$135	0	\$0
Nitrate	\$30	3	\$90	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	3	\$90	0	\$0	0	\$0
Nitrite	\$30	3	\$90	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	3	\$90	0	\$0	0	\$0
Metals (Total and Dissolved)																			
Mercury (Total)	\$100	2	\$200	2	\$200	0	\$0	0	\$0	0	\$0	0	\$0	3	\$300	0	\$0	0	\$0
Methylmercury	\$235	2	\$470	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	3	\$705	0	\$0	0	\$0
Cyanide	\$35	0	\$0	0	\$0	3	\$0	2	\$0	0	\$0	0	\$0	0	\$0	3	\$105	0	\$0
Selenium																			
Copper	\$96	3	\$288	2	\$192	3	\$576	2	\$384	3	\$288	2	\$192	3	\$288	3	\$288	3	\$288
Lead																			
Zinc																			
Bacteria																			
E. coli	\$45	3	\$135	4	\$180	3	\$540	4	\$720	3	\$135	4	\$180	7	\$315	7	\$315	7	\$315
CTR Toxics																			
PAHs	\$125	0	\$0	0	\$0	3	\$0	2	\$0	0	\$0	0	\$0	0	\$0	3	\$375	0	\$0
DDT	\$150	2	\$300	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
PCB																			
Dieldrin																			
Chlordane																			
Toxicity																			
Acute C. dubia	\$600	2	\$1,200	1	\$600	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Chronic C. dubia	\$1,200	2	\$2,400	1	\$1,200	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Phase I TIE - Acute	\$5,000	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Phase I TIE - Chronic	\$9,900	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Phase II TIE - Acute	\$2,500	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Phase II TIE - Chronic	\$3,500	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Phase III TIE - Acute	\$2,500	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Phase III TIE - Chronic	\$3,500	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Sub Total (site)		\$6,094		\$2,820		\$2,208		\$2,000		\$849		\$700		\$2,643		\$1,389		\$729	
Sub Total (task)		\$14,671																	
Compositing Fee (\$20 per bottle)		\$5,400																	
QA/QC Samples (15%)		\$2,201																	
Bottle Cleaning and Blanking (10%)		\$1,467																	
Shipping Costs and sample pick up (10%)		\$1,467																	
After Hours Fees (7.5%)		\$1,100																	
Lab Reports (7.5%)		\$1,100																	
SubTotal		\$27,407																	
Tax (10%)		\$2,741																	
Total Year Analytical Cost		\$30,147																	
		\$13,796																	

Assume that no TIEs will be required.

		Live Oak Wash (Puddingstone)			
		Wet		Dry	
		Events	Cost	Events	Cost
Live Oaks Wash Special Study					
Hardness	\$30	9	\$270	6	\$180
Total Nitrogen (calc)	\$10	9	\$90	6	\$60
Organic Nitrogen (calc)	\$10	9	\$90	6	\$60
TKN	\$45	9	\$405	6	\$270
Total P	\$50	9	\$450	6	\$300
Ortho P	\$30	9	\$270	6	\$180
Ammonia	\$45	9	\$405	6	\$270
Nitrate	\$30	9	\$270	6	\$180
Nitrite	\$30	9	\$270	6	\$180
Selenium	\$96	9	\$864	6	\$576
Copper					
Lead					
Zinc					
E. coli	\$45	9	\$405	6	\$270
Sub Total (site)		\$3,789		\$2,526	
Sub Total (task)		\$6,315			
Compositing Fee (\$20 per bottle)		\$5,400			
QA/QC Samples (15%)		\$947			
Bottle Cleaning and Blanking (10%)		\$632			
Shipping Costs and sample pick up (10%)		\$632			
After Hours Fees (7.5%)		\$474			
Lab Reports (7.5%)		\$474			
SubTotal		\$14,873			
Tax (10%)		\$1,487			
Total Year Analytical Cost		\$16,360			