

**FIRST AMENDMENT  
TO  
PROFESSIONAL SERVICES AGREEMENT**

This First Amendment ("Amendment"), dated as of April 13, 2021, is by and between the County of Sonoma, a political subdivision of the State of California ("County"), and Sonoma Ecology Center, a non-profit California Corporation, hereinafter referred to as ("Consultant").

**RECITALS**

WHEREAS, County and Consultant entered into that certain Agreement, dated July 1, 2015, for services related to projects that restore wetlands and watersheds in and reduce polluted runoff into San Francisco Bay; and

WHEREAS, County and Consultant desire to amend the Agreement to adjust the scope of work to include additional services provided under the agreement and increase the amount of the agreement by \$62,167.81 to pay for these additional services and to increase the term of the agreement,

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

**AGREEMENT**

1. Agreement Section 2. Payment, first and second paragraphs are deleted and replaced with the following:

2. Payment. For all services and incidental costs required hereunder, Consultant shall be paid in accordance with the following terms:

Consultant shall be paid for performance of the Services set forth in Exhibit A in accordance with the terms and budget set forth in Exhibit B, Budget; provided, however, that total payments to Consultant shall not exceed \$821,615.81, without the prior written approval of County. Consultant understands that no minimum amount is guaranteed or implied. Consultant shall submit its bills in arrears on a quarterly basis in a form approved by County's Auditor and the Head of the County Department receiving the services. The bills shall show or include: (i) the task(s) performed; (ii) the time in quarter hours devoted to the task(s); (iii) the hourly rate or rates of the persons performing the task(s).

2. Agreement Section 3. Term of Agreement is deleted and replaced with the following:

3. Term of Agreement. The term of this Agreement shall be from July 1, 2015 to December 31, 2021, unless terminated earlier in accordance with the provisions of Article 4 below.

3. Exhibit A.1. Scope of Work is hereby appended to the existing Exhibit A Scope of Work.

4. Exhibit B is amended to include the following and have its Total Costs Estimate adjusted as with the following:

Exhibit B – Budget  
Additions

|     |  |             |
|-----|--|-------------|
| 2.1 | Pathogen Sampling Lab Analysis Sonoma Creek    | \$12,984.73 |
| 3.1 | Pesticide Sampling Lab Analysis Sonoma Creek   | \$10,000.00 |
| 3.2 | Pesticide Sampling Lab Analysis Petaluma River | \$9,183.08  |

**New Total Costs Estimate**

**\$821,615.81**

5. Except to the extent the Agreement is specifically amended or supplemented hereby, the Agreement, together with exhibits is, and shall continue to be, in full force and effect as originally executed, and nothing contained herein shall, or shall be construed to modify, invalidate or otherwise affect any provision of the Agreement or any right of County arising thereunder.

6. This Amendment shall be governed by and construed under the internal laws of the state of California, and any action to enforce the terms of this Amendment or for the breach thereof shall be brought and tried in the County of Sonoma.

COUNTY AND CONSULTANT HAVE CAREFULLY READ AND REVIEWED THIS AMENDMENT AND EACH TERM AND PROVISION CONTAINED HEREIN AND, BY EXECUTION OF THIS AMENDMENT, SHOW THEIR INFORMED AND VOLUNTARY CONSENT THERETO.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the effective date.

**CONSULTANT:**  
**Sonoma Ecology Center**

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

Name: Richard Dale

Title: Executive Director

Date: 2-17-2021

**COUNTY OF SONOMA:**

CERTIFICATES OF INSURANCE ON  
FILE WITH AND APPROVED AS TO  
SUBSTANCE FOR COUNTY:

By: **Tennis Wick** Digitally signed by Tennis Wick  
Date: 2021.05.20 08:53:14 -07'00'  
Department Head

Date: **20 MAY 21**

APPROVED AS TO FORM FOR  
COUNTY:

By: **Linda Schiltgen** Digitally signed by Linda Schiltgen  
Date: 2021.05.21 08:51:04 -07'00'  
County Counsel

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

By: **Tennis Wick** Digitally signed by Tennis Wick  
Date: 2021.05.20 08:53:48 -07'00'  
Director of Permit Sonoma

Date: **20 MAY 21**

## **Exhibit A.1. - Scope of Work**

### **Task 2.1 - Pathogen Sampling in Sonoma Valley**

Pathogen sampling for the Clean Streams in Southern Sonoma County will expand on prior sampling data and implement a sampling program that may refine the actual sources of chronic pathogen contributions. As such, sampling locations will be selected to bracket potential contributing land uses and determine ambient conditions compared to when the TMDL was developed. Samples will be sent to analytical laboratory for testing of E.coli using the Colilert (IDEXX) method of analysis.

A monitoring regime was initiated to sample a collection of 10-core sites spread across the Sonoma Creek watershed to establish baseline conditions regarding ambient pathogens levels and to monitor progress relative to ongoing TMDL implementation. A 5-week geometric mean (geomean) based sampling approach was employed for this core-site sampling to account for the spatial and temporal variability inherent in pathogens data collection. A subsequent goal was to narrow in on potential sources through more targeted sampling once data patterns emerged and hot spot areas were identified. This targeted approach evolved throughout the study but culminated in a powerful approach that combined high resolution, 5-week geomean sampling at sites upstream of known hot spot core-site areas based on tributary inputs, with Microbiological Fingerprinting (also referred to as Microbial Source Tracking, MST) analysis at sites below pathogens loading reaches. This spatially and temporally explicit, multiple lines of evidence approach helped to establish both location and source identification with enough certainty to take enable proactive steps towards pathogen elimination.

Commonly used bacterial indicators of fecal contamination include total coliforms, fecal coliforms, E. coli, and fecal enterococci. Total coliforms include several genera of bacteria commonly found in the intestines of warm-blooded animals.

### **Task 3.1 and 3.2**

In the 1990s, San Francisco Bay Area urban creeks were found to exceed water quality standards for aquatic toxicity, primarily due to runoff of the common insecticide diazinon. Diazinon was commonly used throughout the Bay Area to manage a broad spectrum of pests, such as ants and grubs. Although only a small fraction of the diazinon applied outdoors reached surface water, that fraction was sufficient to result in diazinon concentrations that were toxic to test organisms. The Diazinon and Pesticide-Related Toxicity in San Francisco Bay Area Urban Creeks TMDL and supporting documents examine this water quality problem, identify sources of diazinon, and set forth actions that will lead to a solution.

Establishing and quantifying potential-pesticide-related-toxicity for the above constituents represents the most cost-effective approach for gathering knowledge that can be used to inform the management decisions and actions of the partners in this grant. Establishing actual toxicity and quantifying the portion of total actual toxicity attributable to pesticides is a resource-intensive analytical step that will reduce the number of samples that can be analyzed (reducing actionable information on the spatial and temporal variability of pesticide-toxicity) and will yield non-actionable information on the quantity of unexplained toxicity in the watershed.

Three Years of Wet Season (October – March) synoptic water quality sampling will be conducted at 5 “core” stations during the “first-flush” storm event, during water years (WYs) 2017, 2018 and 2019. The storm event threshold for sampling will be  $\Rightarrow 0.5$ ” within 24 hour rainfall event, or several cumulative rainfall events over multiple days. The sampling regime is meant to be adaptive, with the intent of capturing the first major runoff event of the season.

Pesticide sampling will be analyzed for Bifenthrin, Cyfluthrin, Lambda-Cyhalothrin, Cypermethrin, Deltamethrin:Tralomethrin, Esfenvalerate:Fenvalerate, Fipronil, Fipronil Desulfinyl, Fipronil Sulfide, Fipronil Sulfone, Tau-Fluvalinate, Permethrin, Diazinon.

**As originally proposed in the Clean Streams Southern Sonoma County Grant Workplan, Sonoma County was to contract for the cost of the laboratory analysis of these samples.**

#### **ESTIMATED BREAKDOWN OF COST BY TASK OF MONEY SPEND ON LAB ANALYSIS**

| <i><b>Task No.</b></i>   | <i><b>Description</b></i>                             | <i><b>Total</b></i> |
|--|---|---------------------|
| <b>2.1</b>   | <b>Pathogen Sampling Lab Analysis Sonoma Creek</b>    | <b>\$12,984.73</b>  |
| <b>3.1</b>   | <b>Pesticide Sampling Lab Analysis Sonoma Creek</b>   | <b>\$10,000.00</b>  |
| <b>3.2</b>   | <b>Pesticide Sampling Lab Analysis Petaluma River</b> | <b>\$9,183.08</b>   |
| <b>Total</b>   |   | <b>\$62,167.81</b>  |
| <i>(Expenses (travel, equipment, and supplies, etc) for all tasks included in total)</i> |   |                     |