

**CITY OF SANTA ROSA  
PROFESSIONAL SERVICES AGREEMENT  
WITH EKI ENVIRONMENT AND WATER, INC.  
AGREEMENT NUMBER \_\_\_\_\_**

This "Agreement" is made as of this \_\_\_\_ day of \_\_\_\_\_, 2019, by and between the City of Santa Rosa, a municipal corporation ("City"), and EKI Environment and Water, Inc., a California Corporation ("Consultant").

**R E C I T A L S**

A. City desires to have updated water demand and conservation projections prepared for the following members of the Sonoma Marin Saving Water Partnership: Cities of Santa Rosa, Cotati, Rohnert Park, Petaluma and Sonoma, Town of Windsor, Marin Municipal Water District, North Marin Water District, and Valley of the Moon Water District (Water Contractors). The services generally include data review and analysis, development of demand projections, analysis of demand management measures and programs for each of Water Contractor, and preparation of individual final reports suitable for including with each Water Contractor's 2020 Urban Water Management Plan.

B. City desires to retain a qualified firm to conduct the services described above in accordance with the Scope of Services as more particularly set forth in Exhibit A to the Agreement.

C. Consultant represents to City that it is a firm composed of highly trained professionals and is fully qualified to conduct the services described above and render advice to City in connection with said services.

D. The parties have negotiated upon the terms pursuant to which Consultant will provide such services and have reduced such terms to writing.

**AGREEMENT**

**NOW, THEREFORE**, City and Consultant agree as follows:

**1. SCOPE OF SERVICES**

Consultant shall provide to City the services described in Exhibit A ("Scope of Services"). Consultant shall provide these services at the time, place, and in the manner specified in Exhibit A. Exhibit A is attached hereto for the purpose of defining the manner and scope of services to be provided by Consultant and is not intended to, and shall not be construed so as to, modify or expand the terms, conditions or provisions contained in this Agreement. In the event of any conflict between this Agreement and any terms or conditions of any document prepared or provided by Consultant and made a part of this Agreement, including without limitation any document relating to the scope of services or payment therefor, the terms of this Agreement shall control and prevail.

## **2. COMPENSATION**

a. City shall pay Consultant for services rendered pursuant to this Agreement at the rates, times and in the manner set forth in Exhibit B. Consultant shall submit monthly statements to City which shall itemize the services performed as of the date of the statement and set forth a progress report, including work accomplished during the period, percent of each task completed, and planned effort for the next period. Invoices shall identify personnel who have worked on the services provided, the number of hours each worked during the period covered by the invoice, the hourly rate for each person, and the percent of the total project completed, consistent with the rates and amounts shown in Exhibit B.

b. The payments prescribed herein shall constitute all compensation to Consultant for all costs of services, including, but not limited to, direct costs of labor of employees engaged by Consultant, travel expenses, telephone charges, copying and reproduction, computer time, and any and all other costs, expenses and charges of Consultant, its agents and employees. In no event shall City be obligated to pay late fees or interest, whether or not such requirements are contained in Consultant's invoice.

c. Notwithstanding any other provision in this Agreement to the contrary, the total maximum compensation to be paid for the satisfactory accomplishment and completion of all services to be performed hereunder shall in no event exceed the sum of two hundred and forty-nine thousand, five hundred and thirty dollars and no cents (\$249,530), which includes a ten percent contingency. The City's Chief Financial Officer is authorized to pay all proper claims from Charge Number 55420.

## **3. DOCUMENTATION; RETENTION OF MATERIALS**

a. Consultant shall maintain adequate documentation to substantiate all charges as required under Section 2 of this Agreement.

b. Consultant shall keep and maintain full and complete documentation and accounting records concerning all extra or special services performed by it that are compensable by other than an hourly or flat rate and shall make such documents and records available to authorized representatives of City for inspection at any reasonable time.

c. Consultant shall maintain the records and any other records related to the performance of this Agreement and shall allow City access to such records during the performance of this Agreement and for a period of four (4) years after completion of all services hereunder.

## **4. INDEMNITY**

a. Consultant shall, to the fullest extent permitted by law, indemnify, protect, defend and hold harmless City, and its employees, officials and agents ("Indemnified Parties") from all claims, demands, costs or liability (including liability for claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, interest, defense costs, and expert witness fees), that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant, its officers, employees, or agents, in said performance

of professional services under this Agreement, excepting only liability arising from the sole negligence, active negligence or intentional misconduct of City.

b. The existence or acceptance by City of any of the insurance policies or coverages described in this Agreement shall not affect or limit any of City's rights under this Section 4, nor shall the limits of such insurance limit the liability of Consultant hereunder. This Section 4 shall not apply to any intellectual property claims, actions, lawsuits or other proceedings subject to the provisions of Section 17(b), below. The provisions of this Section 4 shall survive any expiration or termination of this Agreement.

## **5. INSURANCE**

a. Consultant shall maintain in full force and effect all of the insurance coverage described in, and in accordance with, Attachment One, "Insurance Requirements." Maintenance of the insurance coverage set forth in Attachment One is a material element of this Agreement and a material part of the consideration provided by Consultant in exchange for City's agreement to make the payments prescribed hereunder. Failure by Consultant to (i) maintain or renew coverage, (ii) provide City notice of any changes, modifications, or reductions in coverage, or (iii) provide evidence of renewal, may be treated by City as a material breach of this Agreement by Consultant, whereupon City shall be entitled to all rights and remedies at law or in equity, including but not limited to immediate termination of this Agreement. Notwithstanding the foregoing, any failure by Consultant to maintain required insurance coverage shall not excuse or alleviate Consultant from any of its other duties or obligations under this Agreement. In the event Consultant, with approval of City pursuant to Section 6 below, retains or utilizes any subcontractors or subconsultants in the provision of any services to City under this Agreement, Consultant shall assure that any such subcontractor has first obtained, and shall maintain, all of the insurance coverages set forth in the Insurance Requirements in Attachment One.

b. Consultant agrees that any available insurance proceeds broader than or in excess of the coverages set forth in the Insurance Requirements in Attachment One shall be available to the additional insureds identified therein.

c. Consultant agrees that the insurance coverages and limits provided under this Agreement are the greater of: (i) the coverages and limits specified in Attachment One, or (ii) the broader coverages and maximum limits of coverage of any insurance policy or proceeds available to the name insureds.

## **6. ASSIGNMENT**

Consultant shall not assign any rights or duties under this Agreement to a third party without the express prior written consent of City, in City's sole and absolute discretion. Consultant agrees that the City shall have the right to approve any and all subcontractors and subconsultants to be used by Consultant in the performance of this Agreement before Consultant contracts with or otherwise engages any such subcontractors or subconsultants.

## 7. NOTICES

Except as otherwise provided in this Agreement, any notice, submittal or communication required or permitted to be served on a party, shall be in writing and may be served by personal delivery to the person or the office of the person identified below. Service may also be made by mail, by placing first-class postage, and addressed as indicated below, and depositing in the United States mail to:

City Representative:

Colin Close  
Santa Rosa Water  
69 Stony Circle  
Santa Rosa, CA 95401  
Desk Phone: 707-543-4524  
Email: cclose@srcity.org

Consultant Representative:

Kathryn Wuelfing  
EKI Environment and Water, Inc.  
577 Airport Blvd., Suite 500  
Burlingame, CA 94010  
Desk Phone: 650-292-9127  
Email: kwuelfing@ekiconsulting.com

## 8. INDEPENDENT CONTRACTOR

a. It is understood and agreed that Consultant (including Consultant's employees) is an independent contractor and that no relationship of employer-employee exists between the parties hereto for any purpose whatsoever. Neither Consultant nor Consultant's assigned personnel shall be entitled to any benefits payable to employees of City. City is not required to make any deductions or withholdings from the compensation payable to Consultant under the provisions of this Agreement, and Consultant shall be issued a Form 1099 for its services hereunder. As an independent contractor, Consultant hereby agrees to indemnify and hold City harmless from any and all claims that may be made against City based upon any contention by any of Consultant's employees or by any third party, including but not limited to any state or federal agency, that an employer-employee relationship or a substitute therefor exists for any purpose whatsoever by reason of this Agreement or by reason of the nature and/or performance of any services under this Agreement.

b. It is further understood and agreed by the parties hereto that Consultant, in the performance of Consultant's obligations hereunder, is subject to the control and direction of City as to the designation of tasks to be performed and the results to be accomplished under this Agreement, but not as to the means, methods, or sequence used by Consultant for accomplishing such results. To the extent that Consultant obtains permission to, and does, use City facilities, space, equipment or support services in the performance of this Agreement, this use shall be at the Consultant's sole discretion based on the Consultant's determination that such use will promote Consultant's efficiency and effectiveness. Except as may be specifically provided elsewhere in this Agreement, the City does not require that Consultant use City facilities, equipment or support services or work in City locations in the performance of this Agreement.

c. If, in the performance of this Agreement, any third persons are employed by Consultant, such persons shall be entirely and exclusively under the direction, supervision, and control of Consultant. Except as may be specifically provided elsewhere in this Agreement, all terms of employment, including hours, wages, working conditions, discipline, hiring, and discharging, or any other

terms of employment or requirements of law, shall be determined by Consultant. It is further understood and agreed that Consultant shall issue W-2 or 1099 Forms for income and employment tax purposes, for all of Consultant's assigned personnel and subcontractors.

d. The provisions of this Section 8 shall survive any expiration or termination of this Agreement. Nothing in this Agreement shall be construed to create an exclusive relationship between City and Consultant. Consultant may represent, perform services for, or be employed by such additional persons or companies as Consultant sees fit.

## **9. ADDITIONAL SERVICES**

Changes to the Scope of Services shall be by written amendment to this Agreement and shall be paid on an hourly basis at the rates set forth in Exhibit B, or paid as otherwise agreed upon by the parties in writing prior to the provision of any such additional services.

## **10. SUCCESSORS AND ASSIGNS**

City and Consultant each binds itself, its partners, successors, legal representatives and assigns to the other party to this Agreement and to the partners, successors, legal representatives and assigns of such other party in respect of all promises and agreements contained herein.

## **11. TERM, SUSPENSION, TERMINATION**

a. This Agreement shall become effective on the date that it is made, set forth on the first page of the Agreement, and shall continue in effect until both parties have fully performed their respective obligations under this Agreement, unless sooner terminated as provided herein.

b. City shall have the right at any time to temporarily suspend Consultant's performance hereunder, in whole or in part, by giving a written notice of suspension to Consultant. If City gives such notice of suspension, Consultant shall immediately suspend its activities under this Agreement, as specified in such notice.

c. City shall have the right to terminate this Agreement for convenience at any time by giving a written notice of termination to Consultant. Upon such termination, Consultant shall submit to City an itemized statement of services performed as of the date of termination in accordance with Section 2 of this Agreement. These services may include both completed work and work in progress at the time of termination. City shall pay Consultant for any services for which compensation is owed; provided, however, City shall not in any manner be liable for lost profits that might have been made by Consultant had the Agreement not been terminated or had Consultant completed the services required by this Agreement. Consultant shall promptly deliver to City all documents related to the performance of this Agreement in its possession or control. All such documents shall be the property of City without additional compensation to Consultant.

## **12. TIME OF PERFORMANCE**

The services described herein shall be provided during the period, or in accordance with

the schedule, set forth in Exhibit A. Consultant shall complete all the required services and tasks and complete and tender all deliverables to the reasonable satisfaction of City, not later than March 31, 2021.

**13. STANDARD OF PERFORMANCE**

Consultant shall perform all services performed under this Agreement in the manner and according to the standards currently observed by a competent practitioner of Consultant's profession in California. All products of whatsoever nature that Consultant delivers to City shall be prepared in a professional manner and conform to the standards of quality normally observed by a person currently practicing in Consultant's profession, and shall be provided in accordance with any schedule of performance. Consultant shall assign only competent personnel to perform services under this Agreement. Consultant shall notify City in writing of any changes in Consultant's staff assigned to perform the services under this Agreement prior to any such performance. In the event that City, at any time, desires the removal of any person assigned by Consultant to perform services under this Agreement, because City, in its sole discretion, determines that such person is not performing in accordance with the standards required herein, Consultant shall remove such person immediately upon receiving notice from City of the desire of City for the removal of such person.

**14. CONFLICTS OF INTEREST**

Consultant covenants that neither it, nor any officer or principal of its firm, has or shall acquire any interest, directly or indirectly, that would conflict in any manner with the interests of City or that would in any way hinder Consultant's performance of services under this Agreement. Consultant further covenants that in the performance of this Agreement, no person having any such interest shall be employed by it as an officer, employee, agent or subcontractor, without the written consent of City. Consultant agrees to avoid conflicts of interest or the appearance of any conflicts of interest with the interests of City at all times during the performance of this Agreement.

**15. CONFLICT OF INTEREST REQUIREMENTS**

a. **Generally.** The City's Conflict of Interest Code requires that individuals who qualify as "consultants" under the Political Reform Act, California Government Code sections 87200 *et seq.*, comply with the conflict of interest provisions of the Political Reform Act and the City's Conflict of Interest Code, which generally prohibit individuals from making or participating in the making of decisions that will have a material financial effect on their economic interests. The term "consultant" generally includes individuals who make governmental decisions or who serve in a staff capacity.

b. **Conflict of Interest Statements.** The individual(s) who will provide services or perform work pursuant to this Agreement are "consultants" within the meaning of the Political Reform Act and the City's Conflict of Interest Code:

yes  no (check one)

If "yes" is checked by the City, Consultant shall cause the following to occur within 30 days after execution of this Agreement:

- (1) Identify the individuals who will provide services or perform work under this Agreement as "consultants"; and
- (2) Cause these individuals to file with the City Clerk the assuming office statements of economic interests required by the City's Conflict of Interest Code.

Thereafter, throughout the term of the Agreement, Consultant shall cause these individuals to file with the City Clerk annual statements of economic interests, and "leaving office" statements of economic interests, as required by the City's Conflict of Interest Code.

The above statements of economic interests are public records subject to public disclosure under the California Public Records Act. The City may withhold all or a portion of any payment due under this Agreement until all required statements are filed.

## **16. CONFIDENTIALITY OF CITY INFORMATION**

During performance of this Agreement, Consultant may gain access to and use City information regarding inventions, machinery, products, prices, apparatus, costs, discounts, future plans, business affairs, governmental affairs, processes, trade secrets, technical matters, systems, facilities, customer lists, product design, copyright, data, and other vital information (hereafter collectively referred to as "City Information") that are valuable, special and unique assets of the City. Consultant agrees to protect all City Information and treat it as strictly confidential, and further agrees that Consultant shall not at any time, either directly or indirectly, divulge, disclose or communicate in any manner any City Information to any third party without the prior written consent of City. In addition, Consultant shall comply with all City policies governing the use of the City network and technology systems. A violation by Consultant of this Section 16 shall be a material violation of this Agreement and shall justify legal and/or equitable relief.

## **17. CONSULTANT INFORMATION**

a. City shall have full ownership and control, including ownership of any copyrights, of all information prepared, produced, or provided by Consultant pursuant to this Agreement. In this Agreement, the term "information" shall be construed to mean and include: any and all work product, submittals, reports, plans, specifications, and other deliverables consisting of documents, writings, handwritings, typewriting, printing, photostatting, photographing, computer models, and any other computerized data and every other means of recording any form of information, communications, or representation, including letters, works, pictures, drawings, sounds, or symbols, or any combination thereof. Consultant shall not be responsible for any unauthorized modification or use of such information for other than its intended purpose by City.

b. Consultant shall fully defend, indemnify and hold harmless City, its officers and employees, and each and every one of them, from and against any and all claims, actions, lawsuits or other proceedings alleging that all or any part of the information prepared, produced, or provided by Consultant pursuant to this Agreement infringes upon any third party's trademark, trade name, copyright, patent or other intellectual property rights. City shall make reasonable efforts to notify Consultant not

later than ten (10) days after City is served with any such claim, action, lawsuit or other proceeding, provided that City's failure to provide such notice within such time period shall not relieve Consultant of its obligations hereunder, which shall survive any termination or expiration of this Agreement.

c. All proprietary and other information received from Consultant by City, whether received in connection with Consultant's proposal, will be disclosed upon receipt of a request for disclosure, pursuant to the California Public Records Act; provided, however, that, if any information is set apart and clearly marked "trade secret" when it is provided to City, City shall give notice to Consultant of any request for the disclosure of such information. Consultant shall then have five (5) days from the date it receives such notice to enter into an agreement with the City, satisfactory to the City Attorney, providing for the defense of, and complete indemnification and reimbursement for all costs (including plaintiff's attorneys' fees) incurred by City in any legal action to compel the disclosure of such information under the California Public Records Act. Consultant shall have sole responsibility for defense of the actual "trade secret" designation of such information.

d. The parties understand and agree that any failure by Consultant to respond to the notice provided by City and/or to enter into an agreement with City, in accordance with the provisions of subsection c, above, shall constitute a complete waiver by Consultant of any rights regarding the information designated "trade secret" by Consultant, and such information shall be disclosed by City pursuant to applicable procedures required by the Public Records Act.

## **18. MISCELLANEOUS**

a. Entire Agreement. This Agreement contains the entire agreement between the parties. Any and all verbal or written agreements made prior to the date of this Agreement are superseded by this Agreement and shall have no further effect.

b. Modification. No modification or change to the terms of this Agreement will be binding on a party unless in writing and signed by an authorized representative of that party.

c. Compliance with Laws. Consultant shall perform all services described herein in compliance with all applicable federal, state and local laws, rules, regulations, and ordinances, including but not limited to, (i) the Americans with Disabilities Act of 1990 (42 U.S.C. 12101, et seq.) ("ADA"), and any regulations and guidelines issued pursuant to the ADA; and (ii) Labor Code sections 1720, et seq., which require prevailing wages (in accordance with DIR determinations at [www.dir.ca.gov](http://www.dir.ca.gov)) be paid to any employee performing work covered by Labor Code sections 1720 et seq. Consultant shall pay to the City when due all business taxes payable by Consultant under the provisions of Chapter 6-04 of the Santa Rosa City Code. The City may deduct any delinquent business taxes, and any penalties and interest added to the delinquent taxes, from its payments to Consultant.

d. Discrimination Prohibited. With respect to the provision of services under this Agreement, Consultant agrees not to discriminate against any person because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status of that person.

e. Governing Law; Venue. This Agreement shall be governed, construed and enforced in accordance with the laws of the State of California. Venue of any litigation arising out of or connected with this Agreement shall lie exclusively in the state trial court in Sonoma County in the State of California, and the parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such court, and consent to service of process issued by such court.

f. Waiver of Rights. Neither City acceptance of, or payment for, any service or performed by Consultant, nor any waiver by either party of any default, breach or condition precedent, shall be construed as a waiver of any provision of this Agreement, nor as a waiver of any other default, breach or condition precedent or any other right hereunder.

g. Incorporation of Attachments and Exhibits. The attachments and exhibits to this Agreement are incorporated and made part of this Agreement, subject to terms and provisions herein contained.

## **19. AUTHORITY; SIGNATURES REQUIRED FOR CORPORATIONS**

Consultant hereby represents and warrants to City that it is (a) a duly organized and validly existing corporation, formed and in good standing under the laws of the State of California, (b) has the power and authority and the legal right to conduct the business in which it is currently engaged, and (c) has all requisite power and authority and the legal right to consummate the transactions contemplated in this Agreement. Consultant hereby further represents and warrants that this Agreement has been duly authorized, and when executed by the signatory or signatories listed below, shall constitute a valid agreement binding on Consultant in accordance with the terms hereof.

If this Agreement is entered into by a corporation, it shall be signed by two corporate officers, one from each of the following two groups: a) the chairman of the board, president or any vice-president; b) the secretary, any assistant secretary, chief financial officer, or any assistant treasurer. The title of the corporate officer shall be listed under the signature.

Executed as of the day and year first above stated.

**CONSULTANT:**

**CITY OF SANTA ROSA**  
a Municipal Corporation

Name of Firm: Eki Environment And Water, Inc

TYPE OF BUSINESS ENTITY (*check one*):

- Individual/Sole Proprietor
- Partnership
- Corporation
- Limited Liability Company
- Other (please specify: \_\_\_\_\_)

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

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

Title: \_\_\_\_\_

*Signatures of Authorized Persons:*

APPROVED AS TO FORM:

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

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

Title: \_\_\_\_\_

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

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

Title: \_\_\_\_\_

City of Santa Rosa Business Tax Cert. No.

\_\_\_\_\_

Attachments:

Attachment One - Insurance Requirements

Exhibit A - Scope of Services

Exhibit B - Compensation

**ATTACHMENT ONE  
INSURANCE REQUIREMENTS FOR  
PROFESSIONAL SERVICES AGREEMENTS**

**A. Insurance Policies:** Consultant shall, at all times during the terms of this Agreement, maintain and keep in full force and effect, the following policies of insurance with minimum coverage as indicated below and issued by insurers with AM Best ratings of no less than A-:VI or otherwise acceptable to the City.

<b>Insurance</b>	<b>Minimum Coverage Limits</b>	<b>Additional Coverage Requirements</b>
1. Commercial general liability	\$ 1 million per occurrence \$ 2 million aggregate	Coverage must be at least as broad as ISO CG 00 01 and must include completed operations coverage. If insurance applies separately to a project/location, aggregate may be equal to per occurrence amount. <b>Coverage may be met by a combination of primary and umbrella or excess insurance but umbrella and excess shall provide coverage at least as broad as specified for underlying coverage. Coverage shall not exclude subsidence.</b>
2. Business auto coverage	\$ 1 million	ISO Form Number CA 00 01 covering any auto (Code 1), or if Consultant has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$ 1 million per accident for bodily injury and property damage.
3. Professional liability (E&O)	\$ 1 million per claim \$ 1 million aggregate	Consultant shall provide on a policy form appropriate to profession. If on a claims made basis, Insurance must show coverage date prior to start of work and it must be maintained for three years after completion of work.
4. Workers' compensation and employer's liability	\$ 1 million	As required by the State of California, with Statutory Limits and Employer's Liability Insurance with limit of no less than \$ 1 million per accident for bodily injury or disease. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Consultant, its employees, agents and subcontractors.

**B. Endorsements:**

1. All policies shall provide or be endorsed to provide that coverage shall not be canceled, except after prior written notice has been provided to the City in accordance with the policy provisions.

2. Liability, umbrella and excess policies shall provide or be endorsed to provide the following:
  - a. For any claims related to this project, Consultant's insurance coverage shall be primary and any insurance or self-insurance maintained by City shall be excess of the Consultant's insurance and shall not contribute with it; and,
  - b. **The City of Santa Rosa, its officers, agents, employees and volunteers are to be covered as additional insureds on the CGL policy.** General liability coverage can be provided in the form of an endorsement to Consultant's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used.

**C. Verification of Coverage and Certificates of Insurance:** Consultant shall furnish City with original certificates and endorsements effecting coverage required above. Certificates and endorsements shall make reference to policy numbers. All certificates and endorsements are to be received and approved by the City before work commences and must be in effect for the duration of the Agreement. The City reserves the right to require complete copies of all required policies and endorsements.

**D. Other Insurance Provisions:**

1. No policy required by this Agreement shall prohibit Consultant from waiving any right of recovery prior to loss. Consultant hereby waives such right with regard to the indemnitees.
2. All insurance coverage amounts provided by Consultant and available or applicable to this Agreement are intended to apply to the full extent of the policies. Nothing contained in this Agreement limits the application of such insurance coverage. Defense costs must be paid in addition to coverage amounts.
3. Policies containing any self-insured retention (SIR) provision shall provide or be endorsed to provide that the SIR may be satisfied by either Consultant or City. Self-insured retentions above \$10,000 must be approved by City. At City's option, Consultant may be required to provide financial guarantees.
4. Sole Proprietors must provide a representation of their Workers' Compensation Insurance exempt status.
5. City reserves the right to modify these insurance requirements while this Agreement is in effect, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

22 October 2019

Colin Close  
City of Santa Rosa Water Department  
69 Stony Circle  
Santa Rosa 95401

Subject: 2020 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures Update for Retail Agencies of the Sonoma-Marín Saving Water Partnership (EKI B9-135)

Dear Mr. Close:

EKI Environment and Water, Inc. (EKI) has prepared the attached "Scope of Work" exhibit to summarize the major work efforts and key assumptions associated with development of the *2020 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures Update*. We have also included an updated schedule and cost estimate based on our understanding that three of the Water Contractors would like Detailed Reports and that six of the Water Contractors would like Streamlined Reports.

We are happy to provide any additional requested information and look forward to working with you.

Very truly yours,

EKI ENVIRONMENT & WATER, INC.



Anona Dutton, P.G., C.Hg.  
Vice President



Kathryn L. Wuelfing  
Senior Water Resources Planner

## 1. SCOPE OF SERVICES

---

### Task 1 – Preliminary Work

This task consists of initial preparatory work to set up and manage the project, with an emphasis on transparency and coordination. To streamline coordination efforts, we have assumed that there will be one main contact person designated for each Water Contractor. As shown in Table 1, costs for this task are the same irrespective of the type of reports being generated.

#### *Subtask 1.1 – Kick-off and Data Needs Meeting and Project Management*

A key means to ensure that Water Contractor staff input is incorporated throughout the process, and that the project schedule, budget, and expectations are well managed, is through frequent and organized communications. EKI will work with the City of Santa Rosa (City) and designated Water Contractor staff to identify mutually beneficial means and frequency of communication and have identified the following key items that will provide the scaffolding for efficient project management:

- One (1) in-person project kickoff meeting to introduce key members of the project team and to review project scope and objectives, as well as data needs to support development of the 2020 UWMP Water Demand/Conservation Reports;
- Provide an anticipated schedule for each task, which will be updated as needed so that the Water Contractors are adequately informed of project progress and status;
- Provide monthly invoices to the City supported by progress status reports, which will be broken down by task and subtask as identified in this proposal; and
- Conduct routine communications and other project management tasks.

#### *Subtask 1.2 – Develop Project Timeline*

EKI will prepare a detailed project schedule that will include: (1) a timeline for Water Contractors to submit data; and (2) a detailed timeline for the preparation of the 2020 UWMP Water Demand/Conservation Reports, including project milestones. All project work is anticipated to be completed by December 31, 2020.

#### **Task 1 Deliverables**

- Project kick-off meeting, with agenda and meeting notes
- Task-based project schedule, updated as needed
- Monthly invoices and task-based progress status reports

### Task 2 – Information and Data Collection

This task consists of collecting and reviewing relevant data. Pertinent information needed to prepare the 2020 UWMP Water Demand/Conservation Reports shall be collected and reviewed. As shown in Table 1, costs for this some elements of this task vary with the type of reports being generated.

#### *Subtask 2.1 – Submit Data Request*

EKI understands that the Water Contractors have access to a significant amount of data (i.e., customer billing and water conservation program data) that can be applied for this project. EKI will submit a detailed data request to the Water Contractors immediately following the project kick-off meeting. Data will be requested in electronic format, such that it can be readily incorporated into a project database (see Subtask 2.5). For example, per the RFP, Water Contractors will be responsible for providing annual historical water conservation program participant

data in an Excel or equivalent format. We note that the data request to the Water Contractors may include a request for information from other agencies, such as detailed property characteristics from the Marin and Sonoma County assessors' offices.

### **Subtask 2.2 – Review and Summarize Previous DWR Comments**

DWR reviewed, and in some cases provided comments on the UWMPs prepared by the Water Contractors in 2015. To the extent applicable, EKI will compile and review DWR comments on the demand and conservation section of the 2015 UWMP for each of the Water Contractors.

### **Subtask 2.3 – Summarize New DWR Requirements**

EKI will summarize the new DWR requirements related to demand analysis and water conservation for the 2020 UWMP and provide a summary of the new requirements that need to be addressed and any recommended changes to the scope of work for review by Water Contractors.

### **Subtask 2.4 – Review Planning Documents**

As part of the data request (Subtask 2.1), EKI will provide a summary list of the planning documents that are needed from the Water Contractors. We have assumed that the Water Contractors will provide EKI with the latest General Plan and relevant background reports and other planning documents in the timeframe specified in the agreed-upon project schedule.

EKI will review the Water Contractors' General Plans and other relevant planning documents to establish forecasted growth to 2045. If specific forecasts are not available for all Water Contractors, we have assumed that the individual Water Contractor will instruct EKI to use an alternate source, such as projections made by the Association of Bay Area Governments.

### **Subtask 2.5 – Conduct Data Review**

EKI will collect and review the data received in response to the data request (Subtask 2.1), provided the data are received within the timeframe specified in the agreed-upon project schedule. To the extent that data are missing or not provided in a timely manner, EKI will contact the individual Water Contractors and seek direction regarding potential alternative data sources.

To facilitate the analyses conducted herein, EKI will build a working relational database in Microsoft Access to manage and mine program participation and other data. This project database and other files summarizing analytical results (Excel workbooks and GIS files) will be provided to the Water Contractors at the completion of the project.

### **Subtask 2.6 – Prepare Technical Memorandum #1**

Following the review of the data provided by the Water Contractors, EKI will prepare a brief technical memorandum (TM) to document the data assimilation effort (TM #1). This memorandum will: (1) summarize the available historical demand and water conservation program data, (2) summarize the relevant aspects of DWR's review and new requirements, and (3) document growth projections based on planning documents.

EKI will provide the draft TM #1 to the Water Contractors for review and comment. To the extent applicable, Water Contractor comments will be incorporated into the portions of draft TM #1 that will be included in the 2020 UWMP Water Demand/Conservation Reports, described under Task 4.

## Task 2 Deliverables

- Detailed data request
- Draft TM #1: Summary of Available Data, Key Data Gaps, Potential Data Gap-Filling Approaches, and Summary of DWR Comments and New Requirements

## Task 3 – Develop Updated Regional Conservation Measures

The goal of this task is to update the suite of common regional conservation measures that was developed and used by the Water Contractors in 2015 and will be considered for implementation in the future. As shown in Table 1, costs for this some elements of this task vary with the type of reports being generated.

### Subtask 3.1 – Analysis of Past Program Participation

As part of the basis for estimating the remaining potential for future conservation programs and savings, EKI will summarize historical participation in all conservation program offerings. In addition, for a selected group of Water Contractors, EKI will perform a detailed evaluation of past customer participation for each Water Contractor in up to five (5) signature conservation programs,<sup>1</sup> such as Cash for Grass/Mulch Madness, smart irrigation controller retrofits, hot water recirculation system rebates, Water Smart home evaluations, and public irrigation education classes.<sup>2</sup> Each of the sets of analyses described herein will include the development of compelling maps, charts and graphics that will support visualization of the results and conclusions and make them accessible to a broad audience.

#### **Past Program Participation**

EKI will summarize the total participation and device distribution from past program participation for the five signature programs within each Water Contractor’s service area, based on the data provided in Task 2. Participation will be evaluated relative to key geographic, property, and customer demographic characteristics. More specifically, program participation will include breakdown and comparisons by:

- Neighborhood-level median household income, rate of home-ownership vs. rentership, and household member age, based on Census data (for residential programs);
- Age of building stock based on County Assessor parcel data (for residential and CII programs, as appropriate);
- Building, lot, and or irrigated area size, based on County Assessor parcel or other information made available (for residential and CII programs, as appropriate); and
- Distance customers travel to attend educational classes (as applicable).

This analysis will also look at temporal trends in conservation measure/program participation, with a particular focus on changes in program participation before, during, and following the recent drought and in connection with specific marketing and outreach campaigns. This approach can be utilized for both intervention-based programs, and also for more education-based programs (e.g., workshop attendance), and as shown in Figure 2, can provide important insights into reasons for program performance or lack thereof.

<sup>1</sup> In EKI’s experience, performance of the analysis on a smaller number of key programs can yield very compelling results. If desired, additional programs can be assessed for additional cost. Like-programs may be grouped together (e.g., by device) or separately (e.g., to evaluate the difference in participation in rebate versus no-cost programs).

<sup>2</sup> Analysis of public education classes assumes that that the Water Contractors can provide specific information on customers who attended the programs.

### ***Geospatial Participation Density Analysis***

For a selected group of water contractors, EKI will perform geospatial analyses of program participation to identify program participation density for the five identified programs within each Water Contractor’s service area. This analysis will be used to identify statistically significant areas of high and low participation density (participation “hot” and “cold” spots) for residential conservation programs. These results will be summarized and presented by Water Contractor which: (1) will allow for a comparison of the relative program saturation between Water Contractors; and (2) can be used to inform future program targeting and marketing efforts. Maps will be produced showing hot and cold spots based on Water Contractor service areas, for each program and customer type. These data can also be provided to the Water Contractor as GIS files.

### ***Subtask 3.2 – Analyze and Quantify Water Savings Achieved by Past Programs***

In order to analyze and quantify actual water savings achieved due to past program participation, EKI proposes to utilize a “cohort analysis method”, sometimes called a “Differences-to-Differences Method” to measure program-specific water savings at the account-level based on billing history and program participation data for a selected group of water contractors.<sup>3</sup>

To quantify water savings achieved by a given conservation measure/program, EKI will compare water use before and after implementation of a given intervention for program participants to the water use at geographically-stratified cohort accounts who have not participated in the same or other programs in the given time frame.<sup>4</sup> The incremental volume of water saved by program participants compared to that of the cohort can then be attributed to program participation, as all other factors are normalized.

Specifically, for residential water users, comparing the change in participating account water use to a non-participating cohort located in the same geographic area (e.g., Census Block Group) effectively controls for factors that can influence water use including, climate, house and yard size, general socio-economic factors, etc. As with the above analyses, programs will be grouped to limit the overall number of analyses to those that are most meaningful for planning purposes (e.g., by fixture or educational outreach type).

### ***Subtask 3.3 - Regional Conservation Measure Workshop***

Following the results of the above analysis, EKI will work with the City to convene a workshop with representatives of the Water Contractors to review the results of the analyses – with particular emphasis on conservation measure/program performance, observed savings, and potential remaining opportunities.

During the workshop, EKI will also review the current state of the industry and identify the conservation measures that have and could provide the most water savings value for the region, including conservation measures that will support compliance with *Making Conservation a California Way of Life* and identifying those measures that most likely will be phased out if they are redundant to requirements imbedded in building and plumbing codes and state law.

### ***Subtask 3.4 - Regional Conservation Measure Codification***

Following the completion of the program water savings analysis and measure ranking, EKI will prepare a draft TM to document the methods and results (TM #2). TM #2 will describe the source of the data, technical approach, water savings by selected conservation measures/programs, and total water savings by customer sector,

<sup>3</sup> We have assumed that the Water Contractors will be able to provide such customer-level billing data in a standardized format so as to facilitate efficient incorporation into the project database.

<sup>4</sup> To be included in the analysis, participant accounts cannot have participated in any other program during this timeframe and all accounts included in the analysis must be active (i.e., occupied and demonstrating a minimum level of annual water use).

home/account level, and Water Contractor. TM #2 will also describe the regional ranking process and the cost and water savings associated with each conservation measure. TM #2 will include compelling maps, charts and graphics that will support visualization of the results and conclusions and make them accessible to a broad audience.

EKI will provide the draft TM #2 to the Water Contractors for review and comment. To the extent applicable, Water Contractor comments will be incorporated into the portions of draft TM #2 that will be included in the 2020 UWMP Water Demand/Conservation Reports, described under Task 4.

### **Task 3 Deliverables**

- Workshop agenda, slide deck, and other materials
- Draft TM #2: Historical Water Efficiency Program Participation and Water Savings Achieved and Program Ranking

## **Task 4 – Demand Analysis and Water Conservation Measures Update**

This task consists of preparing updated water demand analyses through 2045 for the Water Contractors. The update shall reflect adopted General Plan population and employment and land use projections, changes in water use and/or demand hardening patterns, and savings from current and future water conservation measures. As shown in Table 1, costs for this some elements of this task vary with the type of reports being generated.

### **Subtask 4.1 – Analyze Demographic Data**

In response to the data request (Subtask 2.1) it is assumed that the Water Contractors will provide data on: (1) the number of historical and existing customers and associated water use over time broken down by customer category; and (2) the future connections, population, dwelling units, land use, and employment based on the most recently adopted applicable General Plans, or other appropriate source(s). This demographic and water use information shall serve as the basis for evaluating water use demands and trends for a selected group of water contractors. Changes since 2015 in the sphere of influence and proposed sphere of influence of each incorporated municipality and water district within the study area shall be identified. Each Water Contractor will also specify the demographic forecast to be used or concur with the analysis before work proceeds on the subsequent subtasks. To the extent applicable, EKl will incorporate the provided data into the database developed pursuant to Subtask 2.5 and describe it in TM #1 (Subtask 2.6).

### **Subtask 4.2 – Develop Water Use Characteristics**

Based on the data provided, the existing and historical water use within each Water Contractor's service area will be defined in terms of annual total production and consumption by user class (residential, commercial, industrial, institutional, parks, other, as per the billing systems of each Water Contractor). Unit water demands (gallons/account/day) for each major user class (residential, commercial/industrial, public), and estimated indoor and outdoor water use will be presented. Recent account-level water billing data (Subtask 2.5) will be reviewed, as available, to determine appropriate water demand factors for the demand analysis. This review will include evaluating and selecting a baseline year that is comparable to current conditions, absent the influence of drought, economic recession, and other key drivers. Changes in water demand will be evaluated by sector over time to identify evaluate and incorporate demand hardening into the selected water demand factors. By evaluating the changes in per account water use over time, demand hardening can be observed and incorporated into future water projections.

Unit water use trends will be evaluated to define the different (higher or lower) unit water use factors to apply for future conditions. Therefore, if supported by the data, different water demand factors may be established for

new construction than applied for existing customers.

### **Subtask 4.3 – Estimate Future Water Demands**

In order to evaluate the potential for future water savings and programs, and to inform the conservation program scenarios described below, EKI proposes to evaluate current water use by Water Contractor customers by customer sector. In addition to total water use, as described below, this evaluation will: (1) quantify indoor versus outdoor water use; (2) identify the maximum savings potential by customer sector; and (3) apply an industry-standard model to conduct the demand and conservation forecasting. As shown in Table 1, costs for these some elements of this task vary with the type of reports being generated.

#### **Indoor vs. Outdoor Water Use**

Indoor versus outdoor water use will be estimated to the extent that data are available. Outdoor water use remains the biggest “knob” to be turned with respect to WUE. Identifying the percentage of water use that remains dedicated to landscape irrigation provides a focused target for the implementation of WUE programs and provides an estimate for water savings potential.

#### **Populate AWE Model**

The Alliance for Water Efficiency (AWE) has developed a model that is an industry standard for projecting the cost-benefit and potential savings associated with water conservation.

EKI proposes to apply the AWE model to estimate the baseline demand projections inclusive of: (1) water savings through pre-2014 as well as through 2014-2019, (2) impacts of the current and future approved CALGreen Codes, and (3) appliance/fixture standards already in place.

The AWE model will then be applied to project water demands inclusive of post-2019 water savings estimates for complying with the State’s new urban efficiency standards, to the extent they have been defined. EKI will provide each Water Contractor with their own model for future use.

### **Subtask 4.4 - Water Conservation and Economic Analysis**

As part of Subtask 2.1, EKI will work with the Water Contractors to collect data to quantify the costs and water savings of the various conservation measures/programs in each service area. Based on this information, EKI will conduct an economic evaluation of selected water conservation measures using the model customized for each Water Contractor. Specifically, the costs of the water conservation measures shall be summarized and the dollar savings from reduced water demand shall be quantified yearly and based on avoided costs provided by each participating Water Contractor (which reflects their own individual options for obtaining additional water supply, if needed).

Water savings from each of the water conservation measures/ requirements shall be estimated and expressed for each 5-year increment to 25 years.

EKI preliminarily proposes to evaluate the conservation program implementation scenarios described below. EKI will work with the Water Contractors to define the specific programs to be included under each scenario.

- **Scenario 1 – Business as Usual Model:** This scenario will reflect a business-as-usual model with conservation programs offered to customers under normal supply conditions. This approach will include a suite of cost-effective programs open to all customers on a voluntary basis, with the goal of being easily sustained with minimal to moderate staff resources. This scenario will include a mix of indoor and outdoor programs.

- **Scenario 2 – Outdoor Water Use Efficiency Only Model:** This scenario will reflect a conservation program that focuses all efforts on outdoor water uses. Like the Business as Usual model, this scenario will focus on programs open to all customers on a voluntary basis and minimal to moderate staff resources.
- **Scenario 3 – Targeting Under-Represented Market Sectors Model:** This scenario will reflect a conservation program that focuses on reaching the customer groups and market sectors identified under Task 3 as having been under-represented by participation in programs to date. This scenario will consider both indoor and outdoor programs and, based on consultation with the Water Contractors, may include programs that have eligibility limitations for participation.
- **Scenario 4 – Aggressive, Water Shortage-Driven Model:** This scenario will reflect the implementation of more aggressive conservation programs during drought conditions or supply shortages that require greater than 20% water demand reduction. This scenario will reflect conservation programs that require an increased level of staff resources and more aggressive targeting of specific customer groups.

In developing the above scenarios, EKI will include higher performance technologies that are currently or likely available in the near-term (e.g., <1 gallon per flush toilets, new leak detection and water loss control technologies, etc.) as well as behavior-based measures (e.g., adjustment of irrigation watering schedules and timing, and use of membrane filtration cleaning for swimming pools in lieu of draining and refilling). As applicable, the hot and cold spot participation density analysis and the demographic and property characteristic analyses described under Subtask 3.1 will be used to identify any customer groups that are currently under-represented by participation in past programs. The findings of this evaluation will be used, in particular, to inform Scenario 3.

#### **Subtask 4.5 – Prepare Draft Reports**

EKI will prepare one draft technical report (i.e., the 2020 UWMP Water Demand/Conservation Report) for each Water Contractor that can stand alone separately from their respective 2020 UWMPs or be formatted to serve as an appendix to the 2020 UWMP, at each Water Contractor's option. Each Water Contractor's report will have the same template with individualized tables and graphs. As shown in Table 1, costs for these elements of this task vary with the type of reports being generated. However, each report will include, at a minimum, the following information:

- a. Table of contents
- b. Summary of demand analysis update results
- c. Methodology and assumptions
- d. Results and conclusions
- e. Data and information collected for analysis
- f. Detailed description of water conservation measures analysis
- g. Demographics projections
- h. Historical water use patterns
- i. Water demand projections for the next twenty-five years in five-year increments
- j. Additional (future) water savings from existing and additional conservation measures and legislative requirements
- k. References and list of contacts

### **Subtask 4.6 – Attend Review Meetings**

EKI will attend up to a total of two (2) in-person meetings with each Water Contractor, for a total of 18 separate meetings. As shown in Table 1, costs for this task are the same irrespective of the type of reports being generated.

The first set of individual meetings with each Water Contractor will be held to discuss the basis of the demand projections and the preliminary results, and the second set of individual meetings will be held to present the draft 2020 UWMP Water Demand/Conservation Report to each Water Contractor for comments.

In an effort to be efficient, EKI will strive to hold all 18 meetings within four (4) total days (i.e., two days per each set of meetings). EKI will coordinate with the City to identify days and locations for the meetings.

Additional communication will occur as needed in person at EKI’s office or by email or telephone conference calls (up to three per Water Contractor).

EKI will provide each Water Contractor with a draft electronic copy of their respective 2020 UWMP Water Demand/Conservation Report. Based on the RFP, up to two (2) revisions of the demand projections and water conservation and economic analysis per Water Contractor may be made.

### **Subtask 4.7 – Prepare Final Reports**

EKI will revise each 2020 UWMP Water Demand/Conservation Report one time based upon a single, compiled set of comments received from each Water Contractor in electronic (e.g., red-line) format. It is assumed that all comments will be resolved within changes to the report and no separate response to comments will be issued. One (1) hard copy and one (1) electronic copy in WORD of the final report for each Water Contractor will be provided. As shown in Table 1, costs for this some elements of this task vary with the type of reports being generated.

#### **Task 4 Deliverables**

- Draft 2020 UWMP Water Demand/Conservation Reports
- Final 2020 UWMP Water Demand/Conservation Reports and associated electronic files

### **Major Assumptions**

The following key assumptions have been made to support the estimate scope, schedule, and budget for this effort.

- All requested data will be provided in electronic format, and in accordance with the project schedule.
- All reviews will be conducted in a timely and coordinated fashion, and comments will be relatively minor.
- Meetings and workshops will be scheduled by the City to occur as described herein.
- Communications will be coordinated with a single representative from each Water Contractor and pursuant to the hours and meeting counts described herein.
- Water Contractors will not change their mind about which analyses, programs, or type of report they want once a decision has been made and direction provided to consultant.<sup>5</sup>

---

<sup>5</sup> Such changes could be addressed under a separate scope of work. However, the estimated budgets to address such changes would need to be examined at that time and costs may be higher than reflected herein due to efficiencies that may have been lost due to the timing of such decision.

## 2. SCHEDULE

EKI is prepared to start work on this project immediately upon authorization to proceed. A general schedule for the project is presented below. We will inform the City and the Water Contractors of any issues that arise that may affect the schedule for completion or impact the anticipated level of effort.

TASK	2019	2020											
	Dec	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>Task 1 - Preliminary Work</b>													
Subtask 1.1 – Kick-off and Data Needs Meeting	◆												
Subtask 1.2 – Develop Project Timeline	■												
Subtask 1.3 – Project Management		▨											
<b>Task 2 - Information and Data Collection</b>													
Subtask 2.1 – Submit Data Request	◆												
Subtask 2.2 – Review and Summarize Previous DWR Comments		■											
Subtask 2.3 – Summarize New DWR Requirements		■	■										
Subtask 2.4 – Review Planning Documents		■	■	■									
Subtask 2.5 – Conduct Data Review		■	■	■	■								
Subtask 2.6 – Prepare Technical Memorandum (TM) #1			■	■									
<b>Task 3 - Develop Updated Regional Conservation Measures</b>													
Subtask 3.1 – Analysis of Past Program Participation			■	■	■								
Subtask 3.2 – Analyze and Quantify Water Savings Achieved by Past Programs			■	■	■	■							
Subtask 3.3 - Regional Conservation Measure Workshop					◆								
Subtask 3.4 - Regional Conservation Measure Codification (TM#2)					■	■							
<b>Task 4 - Demand Analysis and Water Conservation Measures Update</b>													
Subtask 4.1 – Analyze Demographic Data					■	■							
Subtask 4.2 – Develop Water Use Characteristics					■	■	■						
Subtask 4.3 – Estimate Future Water Demands					■	■	■	■					
Subtask 4.4 – Water Conservation and Economic Analysis							■	■	■				
Subtask 4.5 – Prepare Draft Reports								■	■	■			
Subtask 4.6 – Attend Review Meetings									■	■	■		
Two in Person Meetings per Water Contractor (18 in Total)			◆							◆			
Email/Telephone Conference Calls (Up to Three per Water Contractor)					■	■		■	■	■			
Revise Analysis and Projections										■	■	■	
Subtask 4.7 – Prepare Final Reports												■	■

### 3. PROPOSED FEE

#### Fee Schedule

A complete 2019 Rate Schedule, inclusive of the 5% labor rate discount, is included herein.

#### Itemized Cost Summary

A detailed cost estimate for the above proposed scope of work is presented below. The costs are identified as (1) costs to develop nine streamlined “base reports”, (2) “add-on” costs to develop the more detailed reports for three agencies, and (3) total project costs. The total project costs to develop nine reports, including three detailed reports, are estimated to be \$226,845.

**Table 1 - Budget Estimate for Proposed Scope of Work**

TASKS	ESTIMATED COSTS		
	Base Report Costs (9 Reports)	Detailed Report Add-On Cost (3 Reports)	TOTAL
	(\$)	(\$)	(\$)
<b><u>Task 1 - Preliminary Work</u></b>			
Subtask 1.1 – Kick-off and Data Needs Meeting			
Kick-off Meeting	\$5,172	\$0	\$5,172
Subtask 1.2 – Develop Project Timeline			
Detailed project schedule	\$1,250	\$0	\$1,250
Subtask 1.3 – Project Management	\$9,508	\$0	\$9,508
<b>Subtotal</b>	<b>\$15,930</b>	<b>\$0</b>	<b>\$15,930</b>
<b><u>Task 2 - Information and Data Collection</u></b>			
Subtask 2.1 – Submit Data Request	\$967	\$0	\$967
Subtask 2.2 – Review and Summarize Previous DWR Comments	\$3,340	\$0	\$3,340
Subtask 2.3 – Summarize New DWR Requirements	\$3,099	\$0	\$3,099
Subtask 2.4 – Review Planning Documents			
Review and establish forecasted growth for 9 Water Contractors	\$4,557	\$1,538	\$6,095
Subtask 2.5 – Conduct Data Review			
Compile Project Working Database	\$3,085	\$0	\$3,085
Incorporate Demand Data	\$5,175	\$0	\$5,175
Incorporate Conservation Program Data	\$5,175	\$0	\$5,175
Subtask 2.6 – Prepare Technical Memorandum (TM) #1			
Summarize Historical Demand and Conservation Data	\$5,375	\$0	\$5,375
Summarize DWR's Review and New Requirements	\$5,375	\$0	\$5,375
Summarize Growth Projections based on Planning Documents	\$5,375	\$0	\$5,375
<b>Subtotal</b>	<b>\$41,523</b>	<b>\$1,538</b>	<b>\$43,061</b>
<b><u>Task 3 - Develop Updated Regional Conservation Measures</u></b>			
Subtask 3.1 – Analysis of Past Program Participation			
Evaluate participation relative to selected Census data	\$0	\$1,819	\$1,819
Evaluate participation relative to property characteristic and age data	\$0	\$1,649	\$1,649
Geospatial Participation Density Analysis	\$0	\$2,360	\$2,360
Subtask 3.2 – Analyze and Quantify Water Savings Achieved by Past Programs	\$0	\$2,531	\$2,531
Subtask 3.3 - Regional Conservation Measure Workshop	\$7,682	\$0	\$7,682
Subtask 3.4 - Regional Conservation Measure Codification			

Table 1 - Budget Estimate for Proposed Scope of Work

TASKS	ESTIMATED COSTS		
	Base Report Costs (9 Reports)	Detailed Report Add-On Cost (3 Reports)	TOTAL
	(\$)	(\$)	(\$)
Prepare Draft TM #2	\$9,556	\$0	\$9,556
<b>Subtotal</b>	<b>\$17,238</b>	<b>\$8,359</b>	<b>\$25,597</b>
<b><u>Task 4 - Demand Analysis and Water Conservation Measures Update</u></b>			
Subtask 4.1 – Analyze Demographic Data	\$4,682	\$173	\$4,855
Subtask 4.2 – Develop Water Use Characteristics	\$3,568	\$1,189	\$4,758
Subtask 4.3 – Estimate Future Water Demands			
Estimate Indoor vs. Outdoor Water Use	\$0	\$2,294	\$2,294
Populate AWE Model for each Water Contractor	\$7,912	\$879	\$8,791
Subtask 4.4 – Water Conservation and Economic Analysis	\$7,646	\$850	\$8,495
Subtask 4.5 – Prepare Draft Reports	\$40,597	\$4,511	\$45,107
Subtask 4.6 – Attend Review Meetings			
Two in Person Meetings per Water Contractor (18 in Total)	\$13,997		\$13,997
Email/Telephone Conference Calls (Up to Three per Water Contractor)	\$11,929	\$994	\$12,923
Revise Analysis and Projections	\$16,382	\$1,365	\$17,747
Subtask 4.7 – Prepare Final Reports	\$21,785	\$1,815	\$23,601
<b>Subtotal</b>	<b>\$128,032</b>	<b>\$14,226</b>	<b>\$142,258</b>
<b>TOTAL:</b>	<b>\$202,723</b>	<b>\$24,122</b>	<b>\$226,845</b>

(1) A communications charge of 4% of labor costs covers e-mail access, web conferencing, cellphone calls, messaging and data access, file sharing, local and long distance telephone calls and conferences, facsimile transmittals, standard delivery U.S. postage, and incidental in-house copying.

(2) "Other Direct Costs" includes direct expenses, as listed below, incurred in connection with the work and will be reimbursed at cost plus ten percent (10%) for items such as:

- a. Maps, photographs, reproductions, printing, equipment rental, and special supplies related to the work.
- b. Consultants, soils engineers, surveyors, drillers, laboratories, and contractors.
- c. Rented vehicles, local public transportation and taxis, travel and subsistence.
- d. Special fees, insurance, permits, and licenses applicable to the work.
- e. Outside computer processing, computation, and proprietary programs purchased for the work.

**SCHEDULE OF CHARGES FOR EKI ENVIRONMENT & WATER, INC.****2 January 2019**

<b><u>Personnel Classification</u></b>	<b><u>Hourly Rate</u></b>	<b><u>5% Discounted</u></b>
Officer and Chief Engineer-Scientist	286	272
Principal Engineer-Scientist	275	261
Supervising I, Engineer-Scientist	265	252
Supervising II, Engineer-Scientist	255	242
Senior I, Engineer-Scientist	243	231
Senior II, Engineer-Scientist	230	219
Associate I, Engineer-Scientist	219	208
Associate II, Engineer-Scientist	205	195
Engineer-Scientist, Grade 1	191	181
Engineer-Scientist, Grade 2	180	171
Engineer-Scientist, Grade 3	165	157
Engineer-Scientist, Grade 4	146	139
Engineer-Scientist, Grade 5	129	123
Engineer-Scientist, Grade 6	113	107
Technician	104	99
Senior GIS Analyst	133	126
CADD Operator / GIS Analyst	118	112
Senior Administrative Assistant	130	124
Administrative Assistant	103	98
Secretary	85	81

**Direct Expenses**

Reimbursement for direct expenses, as listed below, incurred in connection with the work will be at cost plus fifteen percent (15%) for items such as:

- a. Maps, photographs, reproductions, printing, equipment rental, and special supplies related to the work.
- b. Consultants, soils engineers, surveyors, drillers, laboratories, and contractors.
- c. Rented vehicles, local public transportation and taxis, travel and subsistence.
- d. Special fees, insurance, permits, and licenses applicable to the work.
- e. Outside computer processing, computation, and proprietary programs purchased for the work.

A Communication charge for e-mail access, web conferencing, cellphone calls, messaging and data access, file sharing, local and long distance telephone calls and conferences, facsimile transmittals, standard delivery U.S. postage, and incidental in-house copying will be charged at a rate of 4% of labor charges. Large volume copying of project documents, e.g., bound reports for distribution or project-specific reference files, will be charged as a project expense as described above.

Reimbursement for company-owned automobiles, except trucks and four-wheel drive vehicles, used in connection with the work will be at the rate of sixty cents (\$0.60) per mile. The rate for company-owned trucks and four-wheel drive vehicles will be seventy-five cents (\$0.75) per mile. There will be an additional charge of thirty dollars (\$30.00) per day for vehicles used for field work. Reimbursement for use of personal vehicles will be at the federally allowed rate plus fifteen percent (15%).

CADD Computer time will be charged at twenty dollars (\$20.00) per hour. In-house material and equipment charges will be in accordance with the current rate schedule or special quotation. Excise taxes, if any, will be added as a direct expense.

Rate for professional staff for legal proceedings or as expert witnesses will be at a rate of one and one-half times the Hourly Rates specified above.

The foregoing Schedule of Charges is incorporated into the Agreement for the Services of EKI Environment & Water, Inc. and may be updated annually.