



**WEATHER MODIFICATION PROGRAM  
FOR THE SANTA ANA RIVER WATERSHED**  
*RESEARCH AND ANALYSES REQUIREMENTS*

**REQUEST FOR PROPOSAL**  
FOR  
**CONSULTING SERVICES**  
FOR  
**SANTA ANA RIVER WATERSHED WEATHER MODIFICATION**

**OCTOBER 1, 2019**

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# **REQUEST FOR PROPOSAL FOR CONSULTING SERVICES**

## **FOR**

### **SANTA ANA RIVER WATERSHED WEATHER MODIFICATION**

#### **1. INTRODUCTION**

The Santa Ana Watershed Project Authority (SAWPA) requests proposals from qualified consultants to perform a feasibility study for a weather modification program for the Santa Ana River Watershed. In an effort increase the natural precipitation, this program is expected to produce benefits related to an increased water supply.

The work will be performed under the supervision of the SAWPA, a Joint Powers Authority that delivers regional water solutions supporting its member agencies. SAWPA plans and builds multi-benefit projects increasing water supply, protecting water quality, providing recreation opportunities and restoring the environment of the Santa Ana River Watershed. SAWPA is composed of five member agencies: Eastern Municipal Water District, Inland Empire Utilities Agency, Orange County Water District, San Bernardino Valley Municipal Water District, and Western Municipal Water District. SAWPA will serve as administrator of the project. Proposals are due to SAWPA by **5:00 pm on October 31, 2019.**

#### **2. BACKGROUND**

The Santa Ana River watershed is located in southern California and is approximately 2,840 square miles in size. The tributaries of the Santa Ana River begin in the San Bernardino, San Gabriel, San Jacinto, and Santa Ana Mountains. The tributaries merge with the Santa Ana River which flows to the Pacific Ocean. The watershed includes portions of San Bernardino County, Riverside County, Orange County, and a small portion of Los Angeles County.

As part of regional efforts to increase water supply and reliance, SAWPA has administered various projects receiving funding from agencies such as the California Department of Water Resources and Regional Water Quality Control Board. SAWPA has served as contractor for various projects increasing water supply within the region.

SAWPA has managed multiple regional water resource projects over its roughly 50 years. These include the watershed wide Santa Ana Conservation and Conjunctive Use Project, the Drought Response Water Use Efficiency programs, and the Water Energy Nexus program supporting drought tolerant landscaping for economically disadvantaged communities in the watershed. The largest regional project undertaken by SAWPA has been the Inland Empire Brine Line consisting of 93 miles of the 16 inch to 84 inch pipeline that remove non-reclaimable high saline waste flows from the watershed.

#### **3. OBJECTIVE**

The primary objective of this project is to determine the feasibility of a weather modification or cloud seeding program to increase precipitation and snowpack in the Santa Ana River Watershed.

#### **4. ANTICIPATED SCOPE OF WORK**

The consultant shall provide a detailed study/ design of a cloud seeding program to be implemented in the Santa Ana River Watershed during the wet season (October 15 through April 15). Consultant will prepare Memorandum regarding the feasibility of pursuing further project development, considering

meteorological and hydrological data, and subject to SAWPA approval, will then produce a draft Report and final Report, as described below.

### **Task 1 – Collection of Data**

- a. The Consultant shall search and evaluate potential weather modification generator locations in the watershed by considering factors such as ease of property access for permanent equipment, climate trends at the sub-watershed level, and location of existing water supply infrastructure such as groundwater banks and surface water reservoirs. The Consultant shall determine the appropriateness of cloud seeding locations and methodologies. The Consultant shall collect cost data from similar weather modification programs implemented in other watersheds.
- b. The Consultant shall consider different sources of meteorological and hydrological data and determine the most suitable database to be used for the study of cloud seeding program. The Consultant shall be responsible for all computer and internet access for obtaining the data.
- c. The Consultant shall provide a summary of its findings to SAWPA. Selected meteorological and hydrologic data to be used in the development of the weather modification program shall be provided in Task 1 Memorandum, draft and final report.
- d. The Consultant shall prepare Task 1 Memorandum that describes the climatology of the Santa Ana River Watershed and whether the weather modification to increase rainfall and/or snowfall appears feasible and deserves further analysis. After considering this Task 1 Memorandum, SAWPA will determine whether to proceed with further analysis and the following tasks.

### **Task 2 – Selection of Target Areas**

- a. The Consultant shall select the most suitable locations for implementation of a potential Cloud Seeding Program. Recommendations for a prioritized list of target areas based on storm direction shall be included in the report. Recommended locations shall be limited to areas within the Santa Ana River Watershed boundaries, identified in Exhibit A.
- b. The Consultant shall use the best available land use and hydrologic data to determine the most suitable weather modification target areas. The consultant shall use the judgement of an experienced climatologist to conduct and develop the study.
  - i. The Report is preferred to be developed by or under the supervision of a Weather Modification Association (WMA) certified manager, or a Certified Consulting Meteorologist from the American Meteorological Society, but this is not required.
- c. The Report shall show an area map indicating the designated target areas of the watershed to be covered by each cloud seeding generator under expected normal conditions of air movement during typical storm types, which Consultant will identify. For land-based seeding sites, the Consultant shall consider target location's parcel information such as parcel size, access roads and ownership as available. For aerial-based seeding sites, the Report shall evaluate any limitations for flight paths.

### **Task 3 – Development of Program Design and Seeding Increase Estimates**

- a. The Consultant shall calculate the basic seeding runoff yield potential from each target area and provide a detailed explanation of the methodology behind these estimates.

- b. The Report shall have a full description of the approximate location, and instrument type for each cloud seeding generator placement, and affiliated equipment, including diagrams of the sites and optional generator layout.
- c. The project may include land based, aircraft, or a combination of land based and aircraft cloud seeding generation sites for the success of the Cloud Seeding Program.
- d. The Report shall detail organizational approaches, and/or control center sites that will be used to operate the Cloud Seeding Program. Potential control sites should consider radar, satellite antenna, or other associated equipment for the reception of weather data and radio communication equipment for remote control land-based seeding devices.
- e. The report will describe the amount of additional potential precipitation increase and an estimate of the additional potential runoff (acre-feet at X locations to be identified) associated with this increase, with assumptions presented.

#### **Task 4 – Perform a Benefit/Cost Analysis**

- a. The Consultant shall perform a benefit/cost analysis according to the criteria established by the American Society of Civil Engineers (ASCE) to determine the feasibility of a cloud seeding program in the Santa Ana River Watershed. The Consultant may also provide a second benefit/cost analysis method for comparison.
  - i. **Technical feasibility.** In this criterion, scientific data is considered as a basis for determining whether the proposed work could yield the desired additional precipitation.
  - ii. **Economic feasibility.** This criterion considers a combination of available financial resources and the expected return in additional water. The dollar amount to be used for estimating benefits resulting from additional runoff will be determined based on consultation with wholesale water agencies in the watershed and with SAWPA. Additionally, this criterion should consider all costs related to materials (such as cell service, silver, propane, operational equipment, instrumentation and personnel needed for construction and operation of the Cloud Seeding Program).
- b. The Consultant shall determine if a cloud seeding program is feasible at the recommended target locations within the Santa Ana River Watershed.

#### **Task 5 – Delivery of Final Report**

- a. A draft version of the Report shall be provided to SAWPA, allowing four weeks to review the draft and return comments. All comments shall be incorporated, finalized, and delivered to SAWPA within three weeks for approval. Approval of the updated Report is required prior to its implementation.

## Key Project Deliverables

Task	Task Deliverables	Format
1	Collection of Data – TM #1 Report	Excel
2	Selection of Target Areas	GIS Shape File
3	Program Development	Word or PDF
4	Benefit/Cost analysis	Word or PDF
5	Feasibility Study Draft Report*	Word or PDF
6	Feasibility Study Final Report*	Word or PDF
	Present study at SAWPA meeting	Powerpoint

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\*Reported results must be submitted in multiple formats corresponding to the original component files. At a minimum, this includes the Word and Excel files used to prepare are text, tables, figures and graphs as well as the final PDF version of the fully assembled report.

## **PROPOSAL REQUIREMENTS**

Responses to this RFP must be made according to the requirements set forth in this section for content and sequence. Failure to adhere to these requirements or to include conditions, limitations, or misrepresentations may be cause for rejection of the proposal. Any correction and resubmission by the proposer will not extend the time for evaluation of the proposal. Responses to this RFP will be prepared as concise as possible. The proposal will be 25 pages or less in length, not including resumes and project descriptions that may be included in an appendix. Submittal of boilerplate marketing materials is discouraged.

All proposals must include the following information:

1. Cover letter, including name, telephone number, fax number and address of the firm.
2. Background information about the proposer, including technical qualifications, size of firm and licenses. Description of the proposer's business (*i.e.*, individual, partnership, joint venture, *etc.*), and background information of subconsultants to be used.
3. Description of the proposer's experience. A list of similar services and project descriptions undertaken by the proposer (preferably with proposed project personnel), with beginning and ending dates, name, address, phone number, fax number, and e-mail address of a contact person for each reference.
4. Organization chart showing proposed management and project team.
5. Complete list of personnel, including subconsultants that will be dedicated to this project.
6. The names and qualifications of staff who will participate in the project.
7. A detailed description of the project approach. The project approach should describe the tools and methods that the Consultant will use to execute the work. The project approach need not repeat the Scope of Work, but should address each task, sub-task, and deliverable as well as optional tasks.
8. The fee proposal will include a breakdown of labor hours by employee billing classification, and an expense reimbursement schedule that includes the cost of non-labor and sub-consultant services. The fee proposal will be broken down by task and sub-task. All columns and rows will have totals.
9. Hourly billing rates for personnel to be assigned to the project.
10. Project schedule.
11. Miscellaneous/Exceptions. Respondents will thoroughly review the contents of this RFP and will submit all supplemental information required in this section of miscellaneous information. A draft contract agreement is enclosed within this RFP (Appendix A) that the consultant/firm will be required to sign. The respondent must identify any exceptions to that draft agreement as an element of the proposal submitted for review and consideration.

### **5. PROPOSED SCHEDULE**

RFP Published	October 1, 2019
Proposals Due	October 31, 2019 at 5pm
SAWPA Staff with MWDSC staff Proposal Review	November 11, 2019
SAWPA Commission Approves Agreement and Task Order	November 19, 2019
Sign Contract and Begin Work	January 2, 2020
Anticipated Completion Time	Fall 2020

### **6. SUBMITTALS**

Please submit three (3) hard copies of the proposal and one electronic copy (PDF file delivered via email) to Mark Norton, Water Resources & Planning Manager, at:

Santa Ana Watershed Project Authority  
11615 Sterling Avenue  
Riverside, CA 92503  
[mnorton@sawpa.org](mailto:mnorton@sawpa.org)

All proposals must be received by **5:00 p.m. on Thursday, October 31, 2019**. Proposals received after the stated time will not be considered. Thereafter, a review panel, composed of members of SAWPA staff and its member agencies, will conduct question and answer interviews. If additional information is needed, contact Mark Norton at (951) 354-4221 or [mnorton@sawpa.org](mailto:mnorton@sawpa.org).

## **7. EVALUATION CRITERIA**

Evaluation of qualifications will be conducted on the following (in order of importance):

- Responsiveness to the RFP (pass/fail)
- Experience and qualifications of the assigned individuals/firm
- Project approach and understanding of needs
- Anticipated value and quality of services received
- Appropriateness of proposed fee structure
- Project schedule

SAWPA reserves the sole right to evaluate and select the successful proposal. The selection process is anticipated to include an evaluation of the proposal and an interview.

## **8. GENERAL REQUIREMENTS**

- 9.1 All proposers are hereby advised that this RFP is an informal solicitation and is not a commitment or offer to enter into an agreement or engage into any competitive bidding or negotiation pursuant to any statute, ordinance, rule, or regulation. SAWPA reserves the right to negotiate with any qualified source. SAWPA reserves the right to reject any or all proposals for any reason or for no reason at all.
- 9.2 SAWPA reserves the right to request further information from the proposer either in writing or orally. Such request will be addressed to that person or persons authorized by the proposer to represent the proposer.
- 9.3 SAWPA reserves the sole right to judge the proposers' representations, either written or oral.
- 9.4 Proposers understand and agree that submission of a proposal constitutes acknowledgement and acceptance of, and a willingness to comply with, all of the terms, conditions, and criteria contained in this RFP.
- 9.5 False, incomplete, or unresponsive statements in connection with a proposal may be sufficient cause for the rejection of the proposal. The valuation and determination of the fulfillment of the above requirement will be SAWPA's responsibility and its decision will be final.
- 9.6 SAWPA reserves the right to interpret or change any provisions of this RFP at any time prior to the proposal submission date. Such interpretations or changes will be in the form of addenda to this RFP. Such addenda will become part of this RFP and may become part of any resultant contract. Such addenda will be made available to each person or organization that has received an RFP. Should such addenda require additional information not previously requested, a proposer's failure to address the requirements of such addenda might result in the proposal not being considered.
- 9.7 All proposals submitted in response to this RFP will become the exclusive property of SAWPA. At such time as SAWPA's recommendation to the SAWPA Board relative to proposal selection

appears on the Board Agenda, all such proposals become a matter of public record, and will be regarded as public records, with the exception of those parts of each proposal which are defined by the proposer as business or trade secrets, and so marked, as “confidential” or “proprietary.” SAWPA will not in any way be liable or responsible for the disclosure of any such proposals or any part thereof if disclosure of any such proposals or any part thereof if disclosure is required under the Public Records Act.

- 9.8 SAWPA will not in any way be liable for any costs incurred in connection with the preparation of any proposal submitted in response to this RFP.



## **Appendix A**

### **SANTA ANA WATERSHED PROJECT AUTHORITY** **AGREEMENT FOR SERVICES BY INDEPENDENT CONSULTANT**

This Agreement is made this \_\_\_ day of \_\_\_\_\_, **2019** by and between the Santa Ana Watershed Project Authority ("SAWPA") located at 11615 Sterling Ave., Riverside, California, 92503 and \_\_\_\_\_ ("Consultant") whose address is \_\_\_\_\_.

#### **RECITALS**

This Agreement is entered into on the basis of the following facts, understandings, and intentions of the parties to this Agreement:

- SAWPA desires to engage the professional services of Consultant to perform such professional consulting services as may be assigned, from time to time, by SAWPA in writing;
- Consultant agrees to provide such services pursuant to, and in accordance with, the terms and conditions of this Agreement and has represented and warrants to SAWPA that Consultant possesses the necessary skills, qualifications, personnel, and equipment to provide such services; and
- The services to be performed by Consultant shall be specifically described in one or more written Task Orders issued by SAWPA to Consultant pursuant to this Agreement.

#### **AGREEMENT**

Now, therefore, in consideration of the foregoing Recitals and mutual covenants contained herein, SAWPA and Consultant agree to the following:

#### **ARTICLE I**

##### **TERM OF AGREEMENT**

**1.01** This agreement shall become effective on the date first above written and shall continue until **December 31, 20\_\_**, unless extended or sooner terminated as provided for herein.

#### **ARTICLE II**

## **SERVICES TO BE PERFORMED**

- 2.01** Consultant agrees to provide such professional consulting services as may be assigned, from time to time, in writing by the Commission and the General Manager of SAWPA. Each assignment shall be made in the form of a written Task Order. Each such Task Order shall include, but shall not be limited to, a description of the nature and scope of the services to be performed by Consultant, the amount of compensation to be paid, and the expected time of completion.
- 2.02** Consultant may at Consultant's sole cost and expense, employ such competent and qualified independent professional associates, subcontractors, and consultants as Consultant deems necessary to perform each assignment; provided that Consultant shall not subcontract any work to be performed without the prior written consent of SAWPA.

## **ARTICLE III**

### **COMPENSATION**

- 3.01** In consideration for the services to be performed by Consultant, SAWPA agrees to pay Consultant as provided for in each Task Order.
- 3.02** Each Task Order shall specify a total not-to-exceed sum of money and shall be based upon the regular hourly rates customarily charged by Consultant to its clients.
- 3.03** Consultant shall not be compensated for any services rendered nor reimbursed for any expenses incurred in excess of those authorized in any Task Order unless approved in advance by the Commission and General Manager of SAWPA, in writing.

**3.04** Unless otherwise provided for in any Task Order issued pursuant to this Agreement, payment of compensation earned shall be made in monthly installments after receipt from Consultant of a timely, detailed, corrected, written invoice by SAWPA's Project Manager, describing, without limitation, the services performed, when such services were performed, the time spent performing such services, the hourly rate charged therefore, and the identity of individuals performing such services for the benefit of SAWPA. Such invoices shall also include a detailed itemization of expenses incurred. Upon approval by an authorized SAWPA employee, SAWPA will pay within 30 days after receipt of a valid invoice from Consultant.

## **ARTICLE IV**

### **CONSULTANT OBLIGATIONS**

**4.01** Consultant agrees to perform all assigned services in accordance with the terms and conditions of this Agreement including those specified in each Task Order. In performing the services required by this Agreement and any related Task Order Consultant shall comply with all local, state and federal laws, rules and regulations. Consultant shall also obtain and pay for any permits required for the services it performs under this Agreement and any related Task Order.

**4.02** Except as otherwise provided for in each Task Order, Consultant will supply all personnel and equipment required to perform the assigned services.

**4.03** Consultant shall be solely responsible for the health and safety of its employees, agents and subcontractors in performing the services assigned by SAWPA. Consultant hereby covenants and agrees to:

**4.03a** Obtain a Commercial General Liability and an Automobile Liability insurance policy, including contractual coverage, with limits for bodily injury and property damage in an amount of not less than \$2,000,000.00 per occurrence for each such policy. Such policy shall name SAWPA, its officers, employees, agents and volunteers, as an additional insured, with any right to subrogation waived as to SAWPA, its officers, employees, agents and volunteers. If Commercial General Liability Insurance or other form with an aggregate limit is used, either the general aggregate limit shall apply separately to the work assigned by SAWPA under this Agreement or the general aggregate limit shall be at least twice the required occurrence limit. The coverage shall be at least as broad as Insurance Services Office Commercial General Liability Coverage (occurrence Form CG 00 01) and Insurance Services Office Form CA 00 01 covering Automobile Liability, Code 1 (any auto). The Commercial Liability Insurance shall include operations, products and completed operations, as applicable;

- 4.03b** Obtain a policy of Professional Liability (errors and omissions) insurance appropriate to the Consultant's profession in a minimum amount of \$2,000,000.00 per claim or occurrence to cover any negligent acts or omissions or willful misconduct committed by Consultant, its employees, agents and subcontractors in the performance of any services for SAWPA. Architects' and engineers' coverage shall include contractual liability;
- 4.03c** Obtain a policy of Employer's Liability insurance in a minimum amount of \$1,000,000.00 per accident for bodily injury and property damage.
- 4.03d** Provide worker's compensation insurance or a California Department of Insurance-approved self-insurance program in an amount and form required by the State of California and the Employer's Liability Insurance that meets all applicable Labor Code requirements, covering all persons or entities providing services on behalf of the Consultant and all risks to such persons or entities;
- 4.03e** Consultant shall require any subcontractor that Consultant uses for work performed for SAWPA under this Agreement or related Task Order to obtain the insurance coverages specified above.
- 4.03f** Consultant hereby agrees to waive subrogation which any insurer of Consultant may seek to require from Consultant by virtue of the payment of any loss. Consultant shall obtain an endorsement that may be necessary to give effect to this waiver of subrogation. In addition, the Workers Compensation policy shall be endorsed with a waiver of subrogation in favor of SAWPA for all work performed by Consultant, and its employees, agents and subcontractors.

All such insurance policy or policies shall be issued by a responsible insurance company with a minimum A. M. Best Rating of "A-" Financial Category "X", and authorized and admitted to do business in, and regulated by, the State of California. If the insurance company is not admitted in the State of California, it must be on the List of Eligible Surplus Line Insurers (LESLI), shall have a minimum A.M. Best Rating of "A", Financial Category "X", and shall be domiciled in the United States, unless otherwise approved by SAWPA in writing. Each such policy of insurance shall expressly provide that it shall be primary and noncontributory with any policies carried by SAWPA and, to the extent obtainable, such coverage shall be payable notwithstanding any act of negligence of SAWPA that might otherwise result in forfeiture of coverage. Evidence of all insurance coverage shall be provided to SAWPA prior to issuance of the first Task Order. Such policies shall provide that they shall not be canceled or amended without 30 day prior written notice to SAWPA. Consultant acknowledges and agrees that such insurance is in addition to Consultant's obligation to fully

indemnify and hold SAWPA free and harmless from and against any and all claims arising out of an injury or damage to property or persons caused by the negligence, recklessness, or willful misconduct of Consultant in performing services assigned by SAWPA.

**4.04** Consultant hereby covenants and agrees that SAWPA, its officers, employees, and agents shall not be liable for any claims, liabilities, penalties, fines or any damage to property, whether real or personal, nor for any personal injury or death caused by, or resulting from, or claimed to have been caused by or resulting from, any negligence, recklessness, or willful misconduct of Consultant. Consultant shall hold harmless, defend and indemnify SAWPA and its officers, employees, agents and volunteers from and against any and all liability, loss, damage, fines, penalties, expense and costs, including, without limitation, attorneys' fees and litigation expenses and costs, of every nature arising out of or related to Consultant's negligence, recklessness, or willful misconduct related to or arising from the performance of the work required under this Agreement and any related Task Order or Consultant's failure to comply with any of its obligations contained in this Agreement and any related Task Order, except as to such loss or damage which was caused by the active negligence or willful misconduct of SAWPA.

**4.05** In the event that SAWPA requests that specific employees or agents of Consultant supervise or otherwise perform the services specified in each Task Order, Consultant shall ensure that such individual(s) shall be appointed and assigned the responsibility of performing the services.

**4.06** In the event Consultant is required to prepare plans, drawings, specifications and/or estimates, the same shall be furnished with a registered professional engineer's number and shall conform to local, state and federal laws, rules and regulations. Consultant shall obtain all necessary permits and approvals in connection with this Agreement, any Task Order or Change Order. However, in the event SAWPA is required to obtain such an approval or permit from another governmental entity, Consultant shall provide all necessary supporting documents to be filed with such entity, and shall facilitate the acquisition of such approval or permit.

## **ARTICLE V**

### **SAWPA OBLIGATIONS**

**5.01** SAWPA shall:

**5.01a** Furnish all existing studies, reports and other available data pertinent to each Task Order that are in SAWPA's possession;

**5.01b** Designate a person to act as liaison between Consultant and the General Manager and Commission of SAWPA.

## **ARTICLE VI**

### **ADDITIONAL SERVICES, CHANGES AND DELETIONS**

**6.01** During the term of this Agreement, the Commission of SAWPA may, from time to time and without affecting the validity of this Agreement or any Task Order issued pursuant thereto, order changes, deletions, and additional services by the issuance of written Change Orders authorized and approved by the Commission of SAWPA.

**6.02** In the event Consultant performs additional or different services than those described in any Task Order or authorized Change Order without the prior written approval of the Commission of SAWPA, Consultant shall not be compensated for such services.

**6.03** Consultant shall promptly advise SAWPA as soon as reasonably practicable upon gaining knowledge of a condition, event, or accumulation of events, which may affect the scope and/or cost of services to be provided pursuant to this Agreement. All proposed changes, modifications, deletions, and/or requests for additional services shall be reduced to writing for review and approval or rejection by the Commission of SAWPA.

**6.04** In the event that SAWPA orders services deleted or reduced, compensation shall be deleted or reduced by a comparable amount as determined by SAWPA and Consultant shall only be compensated for services actually performed. In the event additional services are properly authorized, payment for the same shall be made as provided in Article III above.

## **ARTICLE VII**

### **CONSTRUCTION PROJECTS: CONSULTANT CHANGE ORDERS**

**7.01** In the event SAWPA authorizes Consultant to perform construction management services for SAWPA, Consultant may determine, in the course of providing such services, that a Change Order should be issued to the construction contractor, or Consultant may receive a request for a Change Order from the construction

contractor. Consultant shall, upon receipt of any requested Change Order or upon gaining knowledge of any condition, event, or accumulation of events, which may necessitate issuing a Change Order to the construction contractor, promptly consult with the liaison, General

Manager and Commission of SAWPA. No Change Order shall be issued or executed without the prior approval of the Commission of SAWPA.

## **ARTICLE VIII**

### **TERMINATION OF AGREEMENT**

- 8.01** In the event the time specified for completion of an assigned task in a Task Order exceeds the term of this Agreement, the term of this Agreement shall be automatically extended for such additional time as is necessary to complete such Task Order and thereupon this Agreement shall automatically terminate without further notice.
- 8.02** Notwithstanding any other provision of this Agreement, SAWPA, at its sole option, may terminate this Agreement at any time by giving 10 day written notice to Consultant, whether or not a Task Order has been issued to Consultant.
- 8.03** In the event of termination, the payment of monies due Consultant for work performed prior to the effective date of such termination shall be paid after receipt of an invoice as provided in this Agreement.

## **ARTICLE IX**

### **CONSULTANT STATUS**

- 9.01** Consultant shall perform the services assigned by SAWPA in Consultant's own way as an independent contractor, in pursuit of Consultant's independent calling and not as an employee of SAWPA. Consultant shall be under the control of SAWPA only as to the result to be accomplished and the personnel assigned to perform services. However, Consultant shall regularly confer with SAWPA's liaison, General Manager, and Commission as provided for in this Agreement.
- 9.02** Consultant hereby specifically represents and warrants to SAWPA that the services to be rendered pursuant to this Agreement shall be performed in accordance with the standards customarily applicable to an experienced and competent professional consulting organization rendering the same or similar services. Furthermore, Consultant represents and warrants that the individual signing this Agreement on behalf of Consultant has the full authority to bind Consultant to this Agreement.

## ARTICLE X

### AUDIT AND OWNERSHIP OF DOCUMENTS

- 10.01** All draft and final reports, plans, drawings, specifications, data, notes, and all other documents of any kind or nature prepared or developed by Consultant in connection with the performance of services assigned to it by SAWPA are the sole property of SAWPA, and Consultant shall promptly deliver all such materials to SAWPA. Consultant may retain copies of the original documents, at its option and expense. Use of such documents by SAWPA for project(s) not the subject of this Agreement shall be at SAWPA's sole risk without legal liability or exposure to Consultant. SAWPA agrees to not release any software "code" without prior written approval from the Consultant.
- 10.02** Consultant shall retain and maintain, for a period not less than four years following termination of this Agreement, all time records, accounting records, and vouchers and all other records with respect to all matters concerning services performed, compensation paid and expenses reimbursed. At any time during normal business hours and as often as SAWPA may deem necessary, Consultant shall make available to SAWPA's agents for examination of all such records and will permit SAWPA's agents to audit, examine and reproduce such records.

## ARTICLE XI

### MISCELLANEOUS PROVISIONS

- 11.01** This Agreement supersedes any and all previous agreements, either oral or written, between the parties hereto with respect to the rendering of services by Consultant for SAWPA and contains all of the covenants and agreements between the parties with respect to the rendering of such services in any manner whatsoever. Any modification of this Agreement will be effective only if it is in writing signed by both parties.
- 11.02** Consultant shall not assign or otherwise transfer any rights or interest in this Agreement without the prior written consent of SAWPA. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
- 11.03** In the event Consultant is an individual person and dies prior to completion of this Agreement or any Task Order issued hereunder, any monies earned that may be due Consultant from SAWPA as of the date of death will be paid to Consultant's estate.

- 11.04** Time is of the essence in the performance of services required hereunder. Extensions of time within which to perform services may be granted by SAWPA if requested by Consultant and agreed to in writing by SAWPA. All such requests must be documented and substantiated and will only be granted as the result of unforeseeable and unavoidable delays not caused by the lack of foresight on the part of Consultant.
- 11.05** Consultant shall comply with all local, state and federal laws, rules and regulations including those regarding nondiscrimination and the payment of prevailing wages.
- 11.06** SAWPA expects that Consultant will devote its full energies, interest, abilities and productive time to the performance of its duties and obligations under this Agreement, and shall not engage in any other consulting activity that would interfere with the performance of Consultant's duties under this Agreement or create any conflicts of interest. If required by law, Consultant shall file a Conflict of Interest Statement with SAWPA.
- 11.07** Any dispute which may arise by and between SAWPA and the Consultant, including the Consultants, its employees, agents and subcontractors, shall be submitted to binding arbitration. Arbitration shall be conducted by a neutral, impartial arbitration service that the parties mutually agree upon, in accordance with its rules and procedures. The arbitrator must decide each and every dispute in accordance with the laws of the State of California, and all other applicable laws. Unless the parties stipulate to the contrary prior to the appointment of the arbitrator, all disputes shall first be submitted to non-binding mediation conducted by a neutral, impartial mediation service that the parties mutually agree upon, in accordance with its rules and procedures.
- 11.08** During the performance of the Agreement, Consultant and its subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status and denial of family care leave. Consultant and its subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Consultant and its subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code, Section 12290 et seq.) and the applicable regulations promulgated there under (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 et seq., set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Consultant and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other





# SANTA ANA WATERSHED PROJECT AUTHORITY

TASK ORDER NO. \_\_\_\_\_

CONSULTANT:

VENDOR NO.

VALUE:

PAYMENT: Upon Proper Invoice

REQUESTED BY: \_\_\_\_\_ (date)

FINANCE: \_\_\_\_\_  
Karen Williams, CFO Date

FINANCING SOURCE: Acct. Coding XX  
Acct. Description: General Consulting

COMMISSION AUTHORIZATION REQUIRED: YES ( ) NO ( )  
Commission Memo # \_\_\_\_\_.

This Task Order is issued by the Santa Ana Watershed Project Authority (hereafter "SAWPA") to \_\_\_\_\_ (hereafter "Consultant") pursuant to the Agreement between SAWPA and Consultant entitled *Agreement for Services*, dated \_\_\_\_\_ (*expires* ).

## I. PROJECT NAME OR DESCRIPTION

## II. SCOPE OF WORK / TASKS TO BE PERFORMED

Consultant shall provide all labor, materials and equipment for the Project to perform the specific tasks of \_\_\_\_\_, and as more thoroughly described in Attachment A (or describe full tasks here).

*Please refer to Appendix X for acceptable formats, also found at [www.sawpa.org/html/e\\_req.htm](http://www.sawpa.org/html/e_req.htm)*

## III. PERFORMANCE TIME FRAME

Consultant shall begin work within five days of the date this Task Order is signed by the Authorized Officer and shall complete performance of such services by or before \_\_\_\_\_, 20\_\_.

## IV. SAWPA LIAISON

\_\_\_\_\_ shall serve as liaison between SAWPA and Consultant.

## V. COMPENSATION

For all services rendered by Consultant pursuant to this Task Order, Consultant shall receive a total not-to-exceed sum of \$ \_\_\_\_\_ in accordance with the schedule of rates. Payment for such services shall be made within 30 days upon receipt of timely and proper invoices from



## Electronic Deliverables

### X.1 PRODUCTS

All products identified as deliverables under this Contract/Task Order/Work Order (including, but not limited to documents, data analyses, databases, maps, graphics, images, design drawings, and Geographic Information System [GIS] data) will be provided to SAWPA in electronic format in accordance with the project delivery schedule.

Unless specified elsewhere in the Contract/Task Order/Work Order, SAWPA will have no license restrictions, and may use the electronic files/data for purposes it deems appropriate.

### X.2 FORMATS

All deliveries will be provided in native (editable) formats. Additional non-native formats (e.g., Adobe Acrobat) will also be provided as described below.

SAWPA's standard data file formats are:

- Documents (including Desktop Publishing)
  - Microsoft Word 2010 or later
- Tables/Spreadsheets
  - Microsoft Excel 2010 or later
- Presentations
  - Microsoft PowerPoint 2010 or later
- Databases
  - Microsoft Access 2010 or later
  - Microsoft SQL Server 2008 or later
- Project Schedules
  - Microsoft Project 2010 or later
- Computer Aided Drafting (CAD) - Design Drawings, etc.
  - AutoDesk AutoCAD 2016 or later
- Graphics/Images
  - Adobe Illustrator CS5 or later
  - Adobe Photoshop CS5
  - Microsoft Visio 2010 or later
  - Standard JPG format

- TIF 4 format
- Web Information
  - HTML
  - Adobe Acrobat XI or later Portable Document Format (PDF)
- GIS Data
  - File Geodatabase
  - GIS Shapefiles
  - Data in ODBC-compatible format, preferably one of the following
    - Microsoft Access (for relational data)
    - Microsoft SQL Server (for more complex relational data)
  - GIS Applications to be fully compatible with ArcGIS 10.x or later
  - See Section X.3 for specifications
- Field mapping (GPS data)
  - Mapping formats to be one of the following
    - Trimble Pathfinder-compatible files
    - GIS format files listed above
- Analytical Data Formats
  - Standard Electronic Data Deliverable (EDD) formats as used by certified laboratories
- Applications
  - Specifications to any applications (specialized software, scripts, code, Plug-Ins, etc.) required as part of the Contract/Task Order/Work Order will be detailed in the body of Statement of Work.

### **X.3 SPECIFICATIONS (GIS AND RELATED DATA)**

In general, data provided to SAWPA for use in SAWPA's GIS will be fully compatible with SAWPA's GIS. Therefore, the following specifications will be followed:

- All data will be provided in Universal Transverse Mercator (UTM), Zone 11 meters, North American Datum (NAD) of 1983
- All vector data will be provided in shape file or file geodatabase format
- All rrid data will be provided in ESRI GRID, ESRI TIN, or US Geological Survey DEM format
- All image data (e.g., satellite imagery/aerial photos) will be provided in formats that are fully compatible with ESRI ArcGIS 10.X at no cost for plug-ins, Extensions, or other software tools

- All database information tied to the GIS will be fully compatible/functional with SAWPA's GIS with no additional software requirements
- All data will have sufficient metadata to identify as a minimum
  - Data description
  - Data sources
  - Data creator
  - Data creation date
  - Data accuracy.
- Metadata formats will be in ESRI Catalog format, based on accepted metadata standards (e.g., the Federal Geographic Data Committee, the CADD/GIS Technology Center's Spatial Data Standards, or other recognized standards format). Documents associated with metadata will identify the format/standards being used.

#### **X.4 DELIVERY OF ELECTRONIC FILES**

For each delivery specified, and for each version specified (e.g., Draft and Final Reports; 35%, 60%, 90%, 100%, and As-Built Design Drawings), the Consultant will provide electronic copies of the files in addition to any specified hard copies on the same schedule, unless otherwise specified in the schedule of deliverables. Delivery of electronic files does not substitute for required delivery of hard copies, unless approved in writing by SAWPA's Project Manager.

**Review Files.** In addition to native file format deliveries, Contractor will provide ALL report, map, graphic, and drawing deliverables in Adobe Acrobat PDF files. The PDF files will faithfully represent the completed hard copy document in terms of color pages, page sizes, etc. These files will be fully integrated files in proper page order, with graphics, tables, attachments, etc. inserted in their proper location in the document (or connected using the Link function). PDF files exceeding 10 pages in length will use internal hyperlinks (in Table of Contents) and/or use Acrobat's Bookmark features to enable easy navigation throughout the file. PDF files will be ready for posting to SAWPA's web site (if deemed appropriate) or distributed for review as part of a technical/peer/management review process.

**Media.** Delivery method for formal contract deliverables will be specified and approved by SAWPA's Project Manager, but will be one of the following (in general order of preference):

- Via email to SAWPA's Project Manager (for deliverables less than 15 MB, or time critical)
- USB Flash Drive
- Posted to Consultant's FTP or Dropbox

## **X.5 EXCEPTIONS**

Exceptions to these formats may be allowed in some cases. All exceptions will be approved within the body of the Contract/Task Order/Work Order or in writing by the Project Manager AND the Information Systems/Data Management Manager.