



Contract Number

SAP Number

County Service Area 70, D1

Department Contract Representative	Trevor Leja, Deputy Director
Telephone Number	(909) 386-8800
Consultant	Tetra Tech, Inc.
Consultant Representative	Jeffrey Butson
Telephone Number	(720) 864-4566
Contract Term	01/05/2021 thru 06/05/2021
Original Contract Amount	\$54,250
Amendment Amount	
Total Contract Amount	\$54,250
Cost Center	

IT IS HEREBY AGREED AS FOLLOWS:

WHEREAS, through the County of San Bernardino, Department of Public Works - Special Districts, the County Service Area 70, D1("District") desires to procure engineering services for the Lake Arrowhead Inundation Mapping Project (Project); and

WHEREAS, Tetra Tech originally prepared an inundation mapping study for Lake Arrowhead, dated August 17, 2011, the scope of which terminated at the Mojave Forks Dam; and

WHEREAS, the California Division of Safety of Dams (DSOD) recently requested that mapping be continued downstream of the Mojave Forks Dam in the Mojave River, and the District, therefore, wishes to engage Tetra Tech to update the previously prepared mapping between Lake Arrowhead and the Mojave Forms Dam, and prepare a new mapping downstream of Mojave Forks Dam in order to provide this information to DSOD; and

WHEREAS, the District finds Consultant qualified to provide these services; and

WHEREAS, the District desires that such services be provided by Consultant and Consultant agrees to perform these services as set forth below;

NOW, THEREFORE, the District and Consultant mutually agree to the following terms and conditions:

A. RESERVED.

B. CONSULTANT RESPONSIBILITIES

Subject to the terms of this Contract and the terms Attachment A Tetra Tech Proposal: Lake Arrowhead Inundation Mapping Project, Consultant shall:

- B.1** Provide the Services and Deliverables as more particularly set forth in Attachment A and this Section B, pursuant to the Schedule and Estimated Fee set forth in Attachment A.
- B.2** Participate in and provide Project Management, Meetings, and Coordination with the District and DSOD, and complete miscellaneous follow-up tasks as requested by the District, as more specifically set forth in Attachment A. These services are based on a per hour fee and estimated to require twenty-six hours. For any additional services, Tetra Tech is required to submit a Scope of Services Change Request, which must be authorized by District before the additional services commence.
- B.3** Provide Modeling and Report/Mapping Services as more specifically set forth in Attachment A. For any additional services, Tetra Tech is required to submit a Scope of Services Change Request, which must be authorized by District before the additional services commence.
- B.4** Monitor direct costs. If such costs are incurred, Tetra Tech shall invoice the District on a cost-plus-15 percent fee basis for all expenses incurred.
- B.5** Provide Services on a Time and Expenses, Not-to-Exceed Fee basis, as more particularly set forth in Attachment A, Estimated Fee. Adjustments in Services during project development may affect the cost estimate. For any additional services, Tetra Tech is required to submit a Scope of Services Change Request, which must be authorized by District before the additional services commence.
- B.6** Provide Deliverables to the District in the form of an electronic copy of all documents, models, and maps, to be prepared and submitted by Tetra Tech. Any request for hard copies shall be subject to an additional associated cost.
- B.7** Define the Project Schedule through discussions with the District and the DSOD upon authorization to Proceed. The total estimated project duration is five months from the date of Authorization to Proceed, as more particularly set forth in Attachment A, Schedule.

C. GENERAL CONTRACT REQUIREMENTS

C.1 Recitals

The recitals set forth above are true and correct and incorporated herein by this reference.

C.2 Contract Amendments

Consultant agrees any alterations, variations, modifications, or waivers of the provisions of the Contract, shall be valid only when reduced to writing, executed and attached to the original Contract and approved by the person(s) authorized to do so on behalf of Consultant and District.

C.3 Reserved.

C.4 Attorney's Fees and Costs

If any legal action is instituted to enforce any party's rights hereunder, each party shall bear its own costs and attorney fees, regardless of who is the prevailing party. This paragraph shall not apply to those costs and attorney fees directly arising from a third-party legal action against a party hereto and payable under Indemnification and Insurance Requirements.

C.5 Background Checks for Consultant Personnel

Consultant shall ensure that its personnel (a) are authorized to work in the jurisdiction in which they are assigned to perform services; (b) do not use legal or illegal substances in any manner which will impact their ability to provide services to the District; and (c) are not otherwise disqualified from performing the services under applicable law. If requested by the District and not in violation of applicable law, Consultant shall conduct a background check, at Consultant's sole expense, on all its personnel providing services. If requested by the District, Contractor shall provide the results of the background check of each individual to verify that the individual meets Consultant's standards for employment. Such background check shall be in the form generally used by Consultant in its initial hiring of employees or contracting for contractors or, as applicable, during the employment-screening process but must, at a minimum, have been performed within the preceding 12-month period. Consultant personnel who do not meet the County's hiring criteria, in District's sole discretion, shall not be assigned to work on District's property or services, and District shall have the right, at its sole option, to refuse access to any of Consultant's personnel to any District facility.

C.6 Change of Address

Consultant shall notify the District in writing, of any change in mailing address within ten (10) business days of the change.

C.7 Choice of Law

This Contract shall be governed by and construed according to the laws of the State of California.

C.8 Compliance with County Policy

In performing the services and while at any County facilities, Consultant personnel (including subcontractors) shall (a) conduct themselves in a businesslike manner; (b) comply with the policies, procedures, and rules of the County regarding health and safety, and personal, professional and ethical conduct; (c) comply with the finance, accounting, banking, Internet, security, and/or other applicable standards, policies, practices, processes, procedures, and controls of the County; and (d) abide by all laws applicable to the County facilities and the provision of the services, and all amendments and modifications to each of the items addressed in subsections (b), (c), and (d) (collectively, "County Policies"). County Policies, and additions or modifications thereto, may be communicated orally or in writing to Consultant or Consultant personnel or may be made available to Consultant or Consultant personnel by conspicuous posting at a County facility, electronic posting, or other means generally used by County to disseminate such information to its employees or contractors. Consultant shall be responsible for the promulgation and distribution of County Policies to Consultant personnel to the extent necessary and appropriate.

County shall have the right to require Consultant's employees, agents, representatives and subcontractors to exhibit identification credentials issued by County in order to exercise any right of access under this Contract.

C.9 Confidentiality

Consultant shall protect from unauthorized use or disclosure names and other identifying information concerning persons receiving services pursuant to this Contract, except for statistical information not identifying any participant. Consultant shall not use or disclose any identifying information for any other purpose other than carrying out the Consultant's obligations under this Contract, except as may be otherwise required by law. This provision will remain in force even after the termination of the Contract.

C.10 Primary Point of Contact

Consultant will designate an individual to serve as the primary point of contact for the Contract. Consultant or designee must respond to District inquiries within two (2) business days. Consultant shall not change the primary contact without written acknowledgement to the District. Consultant will also designate a back-up point of contact in the event the primary contact is not available.

C.11 County Internship Initiative

Contractor agrees to be contacted by the County to solicit its participation in an internship initiative known as GenerationGo! Career Pathways, involving the potential placement and hiring of interns by Contractor's business. Contractor is encouraged, and agrees to make good faith efforts, to utilize the County's program to aid the ***County's Vision for a skilled workforce and jobs that create countywide prosperity***, and its ***goal to Create, Maintain and Grow Jobs and Economic Value in the County***. The County's objective with its internship initiative is to focus on training, education, employment and support services to develop a more highly-educated and trained workforce. When participating in the County's internship initiative, the Contractor remains an independent contractor and shall not be construed as agents, officers, or employees of the County. More information about the County's GenerationGo! Career Pathways Program can be located at <http://wp.sbcounty.gov/workforce/career-pathways/>.

C.12 District Representative

The Director of the Department of Public Works – Special Districts or his/her designee shall represent the District in all matters pertaining to the services to be rendered under this Contract, including termination and assignment of this Contract, and shall be the final authority in all matters pertaining to the services/Scope of Work by Consultant. If this Contract was initially approved by the San Bernardino County Board of Supervisors, then the Board of Supervisors must approve all amendments to this Contract, unless otherwise delegated.

C.13 Damage to County Property

Consultant shall repair, or cause to be repaired, at its own cost, all damages to County vehicles, facilities, buildings or grounds caused by the willful or negligent acts of Consultant or its employees or agents. Such repairs shall be made immediately after Consultant becomes aware of such damage, but in no event later than thirty (30) days after the occurrence.

If the Consultant fails to make timely repairs, the County may make any necessary repairs. The Consultant, as determined by the County, shall repay all costs incurred by the County for such repairs, by cash payment upon demand, or County may deduct such costs from any amounts due to the Consultant from the County, as determined at the County's sole discretion.

C. 14 Debarment and Suspension

Consultant certifies that neither it nor its principals or subcontractors is presently disbarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency. (See the following United States General Services Administration's System for Award Management website <https://www.sam.gov>). Consultant further certifies that if it or any of its subcontractors are business entities that must be registered with the California Secretary of State, they are registered and in good standing with the Secretary of State.

C.15 Drug and Alcohol Free Workplace

In recognition of individual rights to work in a safe, healthful and productive work place, as a material condition of this Contract, the Consultant agrees that the Consultant and the Consultant's employees, while performing service for the District, on District or County property, or while using District or County equipment:

C.15.1 Shall not be in any way impaired because of being under the influence of alcohol or an illegal or controlled substance.

C.15.2 Shall not possess an open container of alcohol or consume alcohol or possess or be under the influence of an illegal or controlled substance.

C.15.3 Shall not sell, offer, or provide alcohol or an illegal or controlled substance to another person, except where Consultant or Consultant's employee who, as part of the

performance of normal job duties and responsibilities, prescribes or administers medically prescribed drugs.

Consultant shall inform all employees that are performing service for the District on County property, or using County equipment, of the County's objective of a safe, healthful and productive work place and the prohibition of drug or alcohol use or impairment from same while performing such service for the District.

The District may terminate for default or breach of this Contract and any other Contract the Consultant has with the District, if the Consultant or Consultant's employees are determined by the District not to be in compliance with above.

C.16 Duration of Terms

This Contract, and all of its terms and conditions, shall be binding upon and shall inure to the benefit of the heirs, executors, administrators, successors, and assigns of the respective parties, provided no such assignment is in violation of the provisions of this Contract.

C.17 Employment Discrimination

During the term of the Contract, Consultant shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, sexual orientation, age, or military and veteran status. Consultant shall comply with Executive Orders 11246, 11375, 11625, 12138, 12432, 12250, 13672, Title VI and Title VII of the Civil Rights Act of 1964, the California Fair Employment and Housing Act and other applicable Federal, State and County laws and regulations and policies relating to equal employment and contracting opportunities, including laws and regulations hereafter enacted.

C.18 Environmental Requirements

In accordance with County Policy 11-08, the County prefers to acquire and use products with higher levels of post-consumer recycled content. Environmentally preferable goods and materials must perform satisfactorily and be available at a reasonable price. The County requires Consultant to use recycled paper for any printed or photocopied material created as a result of this Contract. Consultant is also required to use both sides of paper sheets for reports submitted to the County whenever practicable.

To assist the County in meeting the reporting requirements of the California Integrated Waste Management Act of 1989 (AB 939), Consultant must be able to annually report the County's environmentally preferable purchases. Consultant must also be able to report on environmentally preferable goods and materials used in the provision of their service to the County, utilizing a County approved form.

C.19 Improper Influence

Consultant shall make all reasonable efforts to ensure that no County officer or employee, whose position in the County enables him/her to influence any award of the Contract or any competing offer, shall have any direct or indirect financial interest resulting from the award of the Contract or shall have any relationship to the Consultant or officer or employee of the Consultant.

C.20 Improper Consideration

Consultant shall not offer (either directly or through an intermediary) any improper consideration such as, but not limited to cash, discounts, service, the provision of travel or entertainment, or any items of value to any officer, employee or agent of the County in an attempt to secure favorable treatment regarding this Contract.

The County, by written notice, may immediately terminate this Contract if it determines that any improper consideration as described in the preceding paragraph was offered to any officer,

employee or agent of the County with respect to the proposal and award process. This prohibition shall apply to any amendment, extension or evaluation process once a contract has been awarded.

Consultant shall immediately report any attempt by a County officer, employee or agent to solicit (either directly or through an intermediary) improper consideration from Consultant. The report shall be made to the supervisor or manager charged with supervision of the employee or the County Administrative Office. In the event of a termination under this provision, the County is entitled to pursue any available legal remedies.

C.21 Informal Dispute Resolution

In the event the District determines that service is unsatisfactory, or in the event of any other dispute, claim, question or disagreement arising from or relating to this Contract or breach thereof, the parties hereto shall use their best efforts to settle the dispute, claim, question or disagreement. To this effect, they shall consult and negotiate with each other in good faith and, recognizing their mutual interests, attempt to reach a just and equitable solution satisfactory to both parties.

C.22 Legality and Severability

The parties' actions under the Contract shall comply with all applicable laws, rules, regulations, court orders and governmental agency orders. The provisions of this Contract are specifically made severable. If a provision of the Contract is terminated or held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall remain in full effect.

C.23 Licenses, Permits and/or Certifications

Consultant shall ensure that it has all necessary licenses, permits and/or certifications required by Federal, State, County, and municipal laws, ordinances, rules and regulations for Consultant's scope of work under this Contract. The Consultant shall maintain these licenses, permits and/or certifications in effect for the duration of this Contract. Consultant will notify County immediately of loss or suspension of any such licenses, permits and/or certifications. Failure to maintain a required license, permit and/or certification may result in immediate termination of this Contract.

C.24 Material Misstatement/Misrepresentation

If during the course of the administration of this Contract, the District determines that Consultant has made a material misstatement or misrepresentation or that materially inaccurate information has been provided to the District, this Contract may be immediately terminated. If this Contract is terminated according to this provision, the District is entitled to pursue any available legal remedies.

C.25 Mutual Covenants

The parties to this Contract mutually covenant to perform all of their obligations hereunder, to exercise all discretion and rights granted hereunder, and to give all consents in a reasonable manner consistent with the standards of "good faith" and "fair dealing".

C.26 Nondisclosure

Consultant shall hold as confidential and use reasonable care to prevent unauthorized access by, storage, disclosure, publication, dissemination to and/or use by third parties of, confidential information that is either: (1) provided by the or District to Consultant or an agent of Consultant or otherwise made available to Consultant or Consultant's agent in connection with this Contract; or, (2) acquired, obtained, or learned by Consultant or an agent of Consultant in the performance of this Contract. For purposes of this provision, confidential information means any data, files, software, information or materials in oral, electronic, tangible or intangible form and however stored, compiled or memorialize and includes, but is not limited to: technology infrastructure, architecture, financial data, trade secrets, equipment specifications, user lists, passwords, research data, and technology data.

C.27 Notice of Delays

Except as otherwise provided herein, when either party has knowledge that any actual or potential situation is delaying or threatens to delay the timely performance of this contract, that party shall, within twenty-four (24) hours, give notice thereof, including all relevant information with respect thereto, to the other party.

Notwithstanding any other provision in the contract to the contrary, neither party shall be liable for any loss, damage or delay due to any cause beyond either party's reasonable control, including but not limited to acts of government, strikes, lockouts, other labor disputes, fire, explosion, theft, weather damage, flood, tornadoes, hurricanes, earthquake, epidemic, pandemic, commercial embargoes, riot, civil commotion, war, mischief or act of God.

C.28 Ownership of Documents

All documents, data, products, graphics, computer programs and reports prepared by Consultant pursuant to the Contract shall be considered property of the District upon payment for services (and products, if applicable). All such items shall be delivered to District at the completion of work under the Contract, subject to the requirements of Article D—Term of the Contract. Unless otherwise directed by District, Consultant may retain copies of such items.

C.29 Reserved.

C.30 Air, Water Pollution Control, Safety and Health

Consultant shall comply with all air pollution control, water pollution, safety and health ordinances and statutes, which apply to the work performed pursuant to this Contract.

C.31 Records

Consultant shall maintain all records and books pertaining to the delivery of services under this Contract and demonstrate accountability for contract performance. All records shall be complete and current and comply with all Contract requirements. Failure to maintain acceptable records shall be considered grounds for withholding of payments for invoices submitted and/or termination of the Contract.

All records relating to the Consultant's personnel, consultants, subcontractors, services/Scope of Work and expenses pertaining to this Contract shall be kept in a generally acceptable accounting format. Records should include primary source documents. Fiscal records shall be kept in accordance with Generally Accepted Accounting Principles and must account for all funds, tangible assets, revenue and expenditures. Fiscal records must comply with the appropriate Office of Management and Budget (OMB) Circulars, which state the administrative requirements, cost principles and other standards for accountancy.

C.32 Relationship of the Parties

Nothing contained in this Contract shall be construed as creating a joint venture, partnership, or employment arrangement between the Parties hereto, nor shall either Party have the right, power or authority to create an obligation or duty, expressed or implied, on behalf of the other Party hereto. In the performance of this Contract, Consultant, its agents and employees, shall act in an independent capacity and not as officers, employees, or agents of the County of San Bernardino. Any provision of this Contract that may appear to give the District any right to direct the Consultant concerning the details of performing the services/Scope of Work, or to exercise any control over such performance, shall mean only that the Consultant shall follow the direction of the District concerning the end results of the performance.

C.33 Release of Information

No news releases, advertisements, public announcements or photographs arising out of the Contract or Consultant's relationship with District may be made or used without prior written approval of the District.

C.34 Strict Performance

Failure by a party to insist upon the strict performance of any of the provisions of this Contract by the other party, or the failure by a party to exercise its rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other party with the terms of this Contract thereafter.

C.35 Subcontracting

Consultant shall obtain District's written consent, which District may withhold in its sole discretion, before entering into Contracts with or otherwise engaging any subcontractors who may supply any part of the services to District. At District's request, Consultant shall provide information regarding the subcontractor's qualifications and a listing of a subcontractor's key personnel including, if requested by the District, resumes of proposed subcontractor personnel. Consultant shall remain directly responsible to District for its subcontractors and shall indemnify District for the actions or omissions of its subcontractors under the terms and conditions specified in Article G. All approved subcontractors shall be subject to the provisions of this Contract applicable to Consultant Personnel.

For any subcontractor, Consultant shall:

- 35.1** Be responsible for subcontractor compliance with the Contract and the subcontract terms and conditions; and
- 35.2** Ensure that the subcontractor follows District's reporting formats and procedures as specified by District.
- 35.3** Include in the subcontractor's subcontract substantially similar terms as are provided in Articles B. Consultant Responsibilities and C. General Contract Requirements.

Upon expiration or termination of this Contract for any reason, District will have the right to enter into direct Contracts with any of the subcontractors. Consultant agrees that its arrangements with subcontractors will not prohibit or restrict such subcontractors from entering into direct contracts with District.

C. 36 Subpoena

In the event that a subpoena or other legal process commenced by a third party in any way concerning the Services provided under this Contract is served upon Consultant or County, such party agrees to notify the other party in the most expeditious fashion possible following receipt of such subpoena or other legal process. Consultant and County further agree to cooperate with the other party in any lawful effort by such other party to contest the legal validity of such subpoena or other legal process commenced by a third party as may be reasonably required and at the expense of the party to whom the legal process is directed, except as otherwise provided herein in connection with defense obligations by Consultant for County.

C.37 Termination for Convenience

The District and the Consultant each reserve the right to terminate the Contract, for any reason, with a thirty (30) day written notice of termination. Such termination may include all or part of the services described herein. Upon such termination, payment will be made to the Consultant for services rendered and expenses reasonably incurred prior to the effective date of termination. Upon receipt of termination notice Consultant shall promptly discontinue services unless the notice directs otherwise. Consultant shall deliver promptly to District and transfer title (if necessary) to all completed work, and work in progress, including drafts, documents, plans, forms, data, products, graphics, computer programs and reports.

C.38 Time of Performance

Consultant shall perform its services as expeditiously as is consistent with professional skill and care and the orderly progress of the work.

C.39 Venue

The parties acknowledge and agree that this Contract was entered into and intended to be performed in San Bernardino County, California. The parties agree that the venue of any action or claim brought by any party to this Contract will be the Superior Court of California, County of San Bernardino, San Bernardino District. Each party hereby waives any law or rule of the court, which would allow them to request or demand a change of venue. If any action or claim concerning this Contract is brought by any third-party and filed in another venue, the parties hereto agree to use their best efforts to obtain a change of venue to the Superior Court of California, County of San Bernardino, San Bernardino District.

C.40 Conflict of Interest

Consultant shall make all reasonable efforts to ensure that no conflict of interest exists between its officers, employees, or subcontractors and the District. Consultant shall make a reasonable effort to prevent officers, employees, subcontractors, or members of governing bodies from using their positions for purposes that are, or give the appearance of being motivated by a desire for private gain for themselves or others such as those with whom they have family business, or other ties. Officers, employees, and agents of cities, counties, districts, and other local agencies are subject to applicable conflict of interest codes and state law. In the event the District determines a conflict of interest situation exists, any increase in costs, associated with the conflict of interest situation, may be disallowed by the District and such conflict may constitute grounds for termination of the Contract. This provision shall not be construed to prohibit employment of persons with whom Consultant's officers, employees, or agents have family, business, or other ties so long as the employment of such persons does not result in increased costs over those associated with the employment of any other equally qualified applicant.

Consultant understands per the attached Conflict of Interest and Political Reform Act Obligations (Attachment B) that the Director of the Department of Public Works – Special Districts has determined Consultant meets Disclosure Determination number 1 and that no disclosure is required.

C.41 Former County Administrative Officials

Consultant agrees to provide, or has already provided information on former County of San Bernardino administrative officials (as defined below) who are employed by or represent Consultant. The information provided includes a list of former County administrative officials who terminated County employment within the last five years and who are now officers, principals, partners, associates or members of the business. The information also includes the employment with or representation of Consultant. For purposes of this provision, "County administrative official" is defined as a member of the Board of Supervisors or such officer's staff, County Executive Officer or member of such officer's staff, County department or group head, assistant department or group head, or any employee in the Exempt Group, Management Unit or Safety Management Unit.

C.42 Disclosure of Criminal and Civil Procedures

District reserves the right to request the information described herein from Consultant. Failure to provide the information may result in a termination of the Contract. The District also reserves the right to obtain the requested information by way of a background check performed by an investigative firm. The Consultant also may be requested to provide information to clarify initial responses. Negative information discovered may result in Contract termination.

Consultant is required to disclose whether the firm, or any of its partners, principals, members, associates or key employees (as that term is defined herein), within the last ten years, has been indicted on or had charges brought against it or them (if still pending) or convicted of any crime or offense arising directly or indirectly from the conduct of the firm's business, or whether the firm, or any of its partners, principals, members, associates or key employees, has within the last ten years, been indicted on or had charges brought against it or them (if still pending) or convicted of any crime or offense involving financial misconduct or fraud. If the response is affirmative, the

Consultant will be asked to describe any such indictments or charges (and the status thereof), convictions and the surrounding circumstances in detail.

In addition, the Consultant is required to disclose whether the firm, or any of its partners, principals, members, associates or key employees, within the last ten years, has been the subject of legal proceedings as defined herein arising directly from the provision of services by the firm or those individuals. "Legal proceedings" means any civil actions filed in a court of competent jurisdiction, or any matters filed by an administrative or regulatory body with jurisdiction over the firm or the individuals. If the response is affirmative, the Consultant will be asked to describe any such legal proceedings (and the status and disposition thereof) and the surrounding circumstances in detail.

For purposes of this provision "key employees" includes any individuals providing direct service to the County. "Key employees" do not include clerical personnel providing service at the firm's offices or locations.

C.43 Reserved.

C.44 Reserved.

C.45 Reserved.

C.46 Reserved.

C. 47 Errors, Omissions and/or Conflicts

Consultant shall perform the work in a manner consistent with the degree of care and skill ordinarily exercised by persons practicing under similar circumstances and in accordance with generally accepted industry standards prevailing at the time and locality, or similar vicinity, where the work is performed. Consultant shall be responsible for the integrity of the work prepared or approved by the Consultant and should County suffer damages due to errors, omissions, and/or conflicts within such documents caused by Consultant's negligence, the Consultant shall be responsible to County for costs of all such damages subject to the limitations provided in Section G 11.8 of this Contract.

C. 48. Reserved.

C. 49 Regulatory Agencies

Except for emergencies, or except for situations where contact is required by law or relevant professional canons of ethics (in which case Consultant will use its professional efforts to notify and confer with the County before such contact, the parties recognizing that there may not be time for such in an emergency), Consultant shall not contact the Local Enforcement Agency, South Coast Air Quality Management District or other regulatory agencies concerning any site that is the subject of this Contract without the Department of Public Works – Special District's prior approval.

C.50 Copyright

District shall have a royalty-free, non-exclusive and irrevocable license to publish, disclose, copy, translate, and otherwise use, copyright or patent, now and hereafter, all reports, studies, information, data, statistics, forms, designs, plans, procedures, systems, and any other materials or properties developed under this Contract including those covered by copyright, and reserves the right to authorize others to use or reproduce such material. All such materials developed under the terms of this Contract shall acknowledge the District as the funding agency and Consultant as the creator of the publication. No such materials, or properties produced in whole or in part under this Contract shall be subject to private use, copyright or patent right by Consultant in the United States or in any other country without the express written consent of District. Copies

of all educational and training materials, curricula, audio/visual aids, printer material, and periodicals, assembled pursuant to this Contract must be filed with the District prior to publication.

C.51 Artwork, Proofs and Negatives

All artwork, proofs, and/or negatives in either print or digital format for anything produced under the terms of this Contract are the property of the District. These items must be returned to the District within ten (10) days, upon written notification to the Consultant. In the event of a failure to return the documents, the District is entitled to pursue any available legal remedies. In addition, Consultant will be barred from all future solicitations, for a period of at least six (6) months.

D. TERM OF CONTRACT

This Contract is effective as of 01/05/21 and expires the earlier of 06/05/21 or completion of the Project. The Contract may be terminated earlier in accordance with provisions of this Contract. If necessary to complete the Project, the Contract term may be extended by mutual agreement of the parties.

E. DISTRICT RESPONSIBILITIES

Subject to the terms of this Contract and the terms Attachment A Tetra Tech Proposal: Lake Arrowhead Inundation Mapping Project, District shall:

- E.1** Provide Consultant with informational and physical access necessary to meet Consultant's responsibilities as set forth in Section B herein.
- E.2** Designate staff to manage and coordinate the Project with the Consultant. Participate in Meetings, and Coordination with the Consultant and DSOD
- E.3** Accept Deliverables referenced in Attachment A and Section B. 6 herein, and provide final sign-off to Consultant upon satisfactory completion of the Project.
- E.4** Comply with the Project Schedule referenced in Attachment A and Section B.7 herein.

F. FISCAL PROVISIONS

- F.1** The maximum amount of payment under this Contract shall not exceed \$54,250, and shall be subject to availability of other funds to the District. The consideration to be paid to Consultant, as provided herein, shall be in full payment for all Consultant's services and expenses incurred in the performance hereof, including travel and per diem.

Consultant bears the risk that it may not be able to generate its anticipated (or any) profit in completing its performance of all required items of work for the specified level of compensation. In no event shall Consultant be entitled to receive compensation for any item of work required of Consultant under the terms of the Contract, which item of work is not performed by Consultant (including Consultant's agents and approved subcontractors).

- F.2** Consultant's Proposal, attached as Exhibit A, hereto, sets out the Consultant's estimate of the cost (including wages) of completing the Scope of Work. The Cost Proposal was used by the District to determine the reasonableness of the cost of Consultant's proposal and is further used in making progress payments to Consultant and in making payment to Consultant in the event of the termination of the Contract prior to the completion of all items of work. Consultant is not entitled to any additional compensation by virtue of its costs (including wages) for any item of work exceeding the cost set forth in its Proposal, including excess costs related to delays in completion of the Project. Payment shall be made on a percent of task completed to the District's satisfaction pursuant to Exhibit A.

Task 3: Future Additional Services expenses shall not exceed \$9,000 and are subject to prior written authorization by the District.

An amount not to exceed \$250 is included for Other Direct Costs as needed. Costs in this category shall be invoiced by Tetra Tech on a cost plus 15 percent fee basis.

- F.3** Consultant shall provide District itemized monthly invoices, in arrears, and in a format acceptable to the District for services performed under this Contract within twenty (20) days of the end of the previous month. The District shall make payment to Consultant within thirty (30) working days after receipt of invoice or the resolution of any billing dispute.
- F.4** Consultant shall accept all payments from District via electronic funds transfer (EFT) directly deposited into the Consultant's designated checking or other bank account. Consultant shall promptly comply with directions and accurately complete forms provided by District required to process EFT payments.
- F.5** District is exempt from Federal excise taxes and no payment shall be made for any personal property taxes levied on Consultant or on any taxes levied on employee wages. The District shall only pay for any State or local sales or use taxes on the services rendered or equipment and/or parts supplied to the District pursuant to the Contract.
- F.6** **Reserved.**
- F.7** **Reserved.**
- F.8** Consultant shall adhere to the County's Travel Management Policy (8-02 and 08-02SP1) when travel is pursuant to this Contract and for which reimbursement is sought from the District. In addition, Consultant is encouraged to utilize local transportation services, including but not limited to, the Ontario International Airport.

G. INDEMNIFICATION, LIMITATION OF LIABILITY, AND INSURANCE REQUIREMENTS

G.1 Design Indemnity

For "design professional services" as defined in Civil Code section 2782.8, the following indemnification paragraph applies: "Consultant shall defend and indemnify County and District for claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant. This Agreement incorporates by reference the provisions of Civil Code section 2782.8, including, but not limited to, the provisions that concern the duty and cost to defend the County and District."

For all other Consultant services, the following indemnification paragraph applies: "The Consultant agrees to indemnify, and hold harmless the County and its authorized officers, employees, agents and volunteers from any losses, damages, and for any costs or expenses incurred by the County to the extent caused by the negligent acts or omissions of Consultant.

Infringement Indemnity

Consultant will indemnify, defend, and hold harmless the County, the District and its officers, employees, agents and volunteers, from any and all third party claims, costs (including without limitation reasonable attorneys' fees), and losses for infringement of any United States patent, copyright, trademark or trade secret (Intellectual Property Rights) by any goods or services. If a credible claim is made or threatened, including without limitation the filing of a lawsuit against County and/or District, or County and/or District receives a demand or notice claiming actual or potential infringement or misappropriation of any Intellectual Property Rights, County and/or District will use reasonable efforts to notify Consultant promptly of such lawsuit, claim or election. However, County and/or District's failure to provide or delay in providing such notice will relieve Consultant of its obligations only if and to the extent that such delay or failure materially prejudices Consultant's ability to defend such lawsuit or claim. County and/or District will give Consultant sole control of the defense (with counsel reasonably acceptable to County and/or District) and settlement of such claim; provided that Consultant may not settle the claim or suit absent the written consent of County and/or District unless such settlement (a) includes a release of all claims

pending against County and/or District. (b) contains no admission of liability or wrongdoing by County and/or District, and (c) imposes no obligations upon County and/or District other than an obligation to stop using the goods or services that are the subject of the claim. In the event that Consultant fails to or elects not to defend County and/or District against any claim for which County and/or District is entitled to indemnity by Consultant, then Consultant shall reimburse County and/or District for all reasonable attorneys' fees and expenses within thirty (30) days from date of invoice or debit memo from County and/or District. After thirty (30) days, County and/or District will be entitled to deduct any unpaid invoice or debit memo amount from any amounts owed by County and/or District to Consultant. This shall not apply to any judgment or settlement amount, which amounts County and/or District shall be entitled to notify, invoice or debit Consultant's account at any time; and County and/or District, at its sole discretion, may settle the claim or suit.

If, in Consultant's opinion, any goods or services become, or are likely to become, the subject of a claim of infringement of Intellectual Property Rights, Consultant may, at its option: (i) procure for County and/or District the right to continue using the goods or receiving the services; (ii) replace or modify the goods or services to be non-infringing, without incurring a material diminution in performance or function; or (iii) if neither of the foregoing is feasible, in the reasonable judgment of Consultant, County and/or District shall cease use of the goods or services upon written notice from Consultant, and Consultant shall provide County and/or District with a pro-rata refund of the unearned fees paid by County and/or District to Consultant for such goods or services.

G.2 Additional Insured

All policies, except for Worker's Compensation, Errors and Omissions and Professional Liability policies shall contain additional endorsements naming the County, the District and its officers, employees, agents and volunteers as additional named insured with respect to liabilities arising out of the performance of services hereunder. The additional insured endorsements shall not limit the scope of coverage for the County/District to vicarious liability but shall allow coverage for the County/District to the full extent provided by the policy. Such additional insured coverage shall be at least as broad as Additional Insured (Form B) endorsement form ISO, CG 2010.11 85.

G.3 Waiver of Subrogation Rights

Consultant shall require the carriers of required coverages to waive all rights of subrogation against the County, the District, its officers, employees, agents, volunteers, contractors and subcontractors. All general or auto liability insurance coverage provided shall not prohibit Consultant and Consultant's employees or agents from waiving the right of subrogation prior to a loss or claim. Consultant hereby waives all rights of subrogation against the County and District.

G.4 Policies Primary and Non-Contributory

All policies required herein are to be primary and non-contributory with any insurance or self-insurance programs carried or administered by the County and/or District.

G.5 Severability of Interests

Consultant agrees to ensure that coverage provided to meet these requirements is applicable separately to each insured and there will be no cross liability exclusions that preclude coverage for suits between Consultant and County and/or District or between County and any other insured or additional insured under the policy.

G.6 Proof of Coverage

Consultant shall furnish Certificates of Insurance to the District Department administering the Contract evidencing the insurance coverage at the time the Contract is executed, additional endorsements, as required shall be provided prior to the commencement of performance of services hereunder, which certificates shall provide that such insurance shall not be terminated or expire without thirty (30) days written notice to the Department, and Consultant shall maintain such insurance from the time Consultant commences performance of services hereunder until the

completion of such services. Within fifteen (15) days of the commencement of this contract, Consultant shall furnish a copy of the Declaration page for all applicable policies and will provide complete certified copies of the policies and endorsements immediately upon request.

G.7 Acceptability of Insurance Carrier

Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and with a minimum "Best" Insurance Guide rating of "A- VII".

G.8 Deductibles and Self-Insured Retention

Any and all deductibles or self-insured retentions in excess of \$10,000 shall be declared to and approved by Risk Management.

G.9 Failure to Procure Coverage

In the event that any policy of insurance required under this Contract does not comply with the requirements, is not procured, or is canceled and not replaced, District has the right but not the obligation or duty to cancel this Contract or obtain insurance if it deems necessary and any premiums paid by the District will be promptly reimbursed by Consultant or District payments to the Consultant will be reduced to pay for District purchased insurance.

G.10 Insurance Review

Insurance requirements are subject to periodic review by County and District. The Director of Risk Management or designee is authorized, but not required, to reduce, waive or suspend any insurance requirements whenever Risk Management determines that any of the required insurance is not available, is unreasonably priced, or is not needed to protect the interests of County and/or District. In addition, if the Department of Risk Management determines that heretofore unreasonably priced or unavailable types of insurance coverage or coverage limits become reasonably priced or available, the Director of Risk Management or designee is authorized, but not required, to change the above insurance requirements to require additional types of insurance coverage or higher coverage limits, provided that any such change is reasonable in light of past claims against County and/or District, inflation, or any other item reasonably related to the County's and/or the District's risk.

Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this Contract. Consultant agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual or alleged, on the part of County and/or District to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of the County and/or District.

G.11 Consultant agrees to provide insurance set forth in accordance with the requirements herein. If Consultant uses existing coverage to comply with these requirements and that coverage does not meet the specified requirements, Consultant agrees to amend, supplement or endorse the existing coverage to do so.

Without in anyway affecting the indemnity herein provided and in addition thereto, Consultant shall secure and maintain throughout the contract term the following types of insurance with limits as shown:

G.11.1 Workers' Compensation/Employer's Liability – A program of Workers' Compensation insurance or a state-approved, self-insurance program in an amount and form to meet all applicable requirements of the Labor Code of the State of California, including Employer's Liability with \$250,000 limits covering all persons including volunteers providing services on behalf of the Consultant and all risks to such persons under this contract.

If Consultant has no employees, it may certify or warrant to the County or District that it does not currently have any employees or individuals who are defined as "employees" under the Labor Code and the requirement for Workers' Compensation coverage will be waived by the Director of Risk Management.

With respect to Consultants that are non-profit corporations organized under California or Federal law, volunteers for such entities are required to be covered by Workers' Compensation insurance.

G.11.2 Commercial/General Liability Insurance – Consultant shall carry General Liability Insurance covering all operations performed by or on behalf of Consultant providing coverage for bodily injury and property damage with a combined single limit of not less than one million dollars (\$1,000,000), per occurrence. The policy coverage shall include:

- a. Premises operations and mobile equipment.
- b. Products and completed operations.
- c. Broad form property damage (including completed operations).
- d. Explosion, collapse and underground hazards.
- e. Personal injury.
- f. Contractual liability.
- g. \$2,000,000 general aggregate limit.

G.11.3 Automobile Liability Insurance – Primary insurance coverage shall be written on ISO Business Auto coverage form for all owned, hired and non-owned automobiles or symbol 1 (any auto). The policy shall have a combined single limit of not less than one million dollars (\$1,000,000) for bodily injury and property damage, per occurrence.

If Consultant is transporting one or more non-employee passengers in performance of contract services, the automobile liability policy shall have a combined single limit of two million dollars (\$2,000,000) for bodily injury and property damage per occurrence.

If Consultant owns no autos, a non-owned auto endorsement to the General Liability policy described above is acceptable.

G.11.4 Umbrella Liability Insurance – An umbrella (over primary) or excess policy may be used to comply with limits or other primary coverage requirements. When used, the umbrella policy shall apply to bodily injury/property damage, personal injury/advertising injury and shall include a "dropdown" provision providing primary coverage for any liability not covered by the primary policy. The coverage shall also apply to automobile liability.

G.11.5 Professional Liability – Professional Liability Insurance with limits of not less than one million (\$1,000,000) per claim and two million (\$2,000,000) aggregate limits

or

Errors and Omissions Liability Insurance – Errors and Omissions Liability Insurance with limits of not less than one million (\$1,000,000) and two million (\$2,000,000) aggregate limits

or

If insurance coverage is provided on a "claims made" policy, the "retroactive date" shall be shown and must be before the date of the state of the contract work. The claims made insurance shall be maintained or "tail" coverage provided for a minimum of five (5) years after contract completion.

G.11.6 Reserved.

G.11.7 Cyber Liability Insurance - Cyber Liability Insurance with limits of no less than \$1,000,000 for each occurrence or event with an annual aggregate of \$2,000,000 covering privacy violations, information theft, damage to or destruction of electronic information, intentional and/or unintentional release of private information, alteration of electronic information, extortion and network security. The policy shall protect the involved County and/or District entities and cover breach response cost as well as regulatory fines and penalties.

G.11.8 Limitation of Liability - To the fullest extent permitted by law, regardless of any other terms herein to the contrary: (a) Consultant shall not be liable for special, incidental, consequential losses or damages (including but not limited to lost profits and/or loss of use of the project that is the subject of this Contract); (b) the total liability of Consultant, its officers, directors, employees, and representatives, and any of them, to County or District and any one claiming by, through or under them, for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to this Contract, from any cause or causes whatsoever, shall not exceed the compensation received by Consultant under this Contract, provided, however that, Consultant's total liability for claims covered by insurance to be provided by Consultant pursuant to this Section G 11, shall not exceed \$1,000,000, except in the event of Consultant's, gross negligence willful misconduct, or violations of law.

H. SUCCESSORS AND ASSIGNS

H.1 This Contract shall be binding upon District and Consultant and their respective successors and assigns.

H.2 Neither the performance of this Contract, nor any part thereof, nor any monies due or to become due thereunder may be assigned by Consultant without the prior written consent and approval of District.

H.3 Death or Incapacity: If the Consultant transacts business as an individual, his/her death or incapacity shall automatically terminate this Contract as of the date of such event, and neither he/she nor his/her estate shall have any further right to perform hereunder, and District shall pay him/her or his/her estate the compensation payable under Article F, Fiscal Provisions, for any services rendered prior to such termination not heretofore paid, reduced by the amount of additional costs which will be incurred by District by reason of such termination. If there be more than one Consultant and any one of them die or become incapacitated and the others continue to render the services covered herein, District will make payment to those continuing as though there had been no such death or incapacity and District will not be obliged to take any account of the person who died or became incapacitated or to make any payments to such person or his estate. The provision shall apply in the event of progressive or simultaneous occasions of death or incapacity among any group of persons named as Consultant herein, and if death or incapacity befalls the last one of such group before this Contract is fully performed, then the rights shall be as if there had been only one Consultant.

I. RIGHT TO MONITOR AND AUDIT

I.1 The County, State and Federal government shall have absolute right to review and audit all records, books, papers, documents, corporate minutes, and other pertinent items as requested, and shall have absolute right to monitor the performance of Consultant in the delivery of services provided under this Contract. Consultant shall give full cooperation, in any auditing or monitoring conducted. Consultant shall cooperate with the District in the implementation, monitoring, and evaluation of this Contract and comply with any and all reporting requirements established by the District.

I.2 All records pertaining to services delivered and all fiscal, statistical and management books and records shall be available for examination and audit by District representatives for a period of

three years after final payment under the Contract or until all pending County, State and Federal audits are completed, whichever is later.

J. CORRECTION OF PERFORMANCE DEFICIENCIES

- J.1** Failure by Consultant to comply with any of the provisions, covenants, requirements or conditions of this Contract shall be a breach of this Contract. Consultant shall use reasonable efforts to cure such breach. If Consultant cannot cure such breach within a reasonable time after receipt of written notice of such breach, District may, at its option, take the following actions:
- J.2** In the event of a non-cured breach, District may, at its sole discretion and in addition to any other remedies available at law, in equity, or otherwise specified in this Contract:
- a. Afford Consultant thereafter additional time within which to cure the breach, which period shall be established at the sole discretion of District; and/or
 - b. Discontinue reimbursement to Consultant for and during the period in which Consultant is in breach; and/or
 - c. Withhold funds pending duration of the breach; and/or
 - d. Offset against any monies billed by Consultant but yet unpaid by District the monies reflecting the value of work non-remedied by Consultant; and/or
 - e. Terminate this Contract immediately and be relieved of the payment of any consideration to Consultant for the work non-remedied. In the event of such termination, District may proceed with the work so terminated in any manner deemed proper by District. Consultant shall reimburse District the difference between the portion of the contract amount allocable to the terminated scope and the actual amounts reasonably incurred by District to complete such terminated scope. Such amounts shall be paid by Consultant upon demand.
- J.3** Unless a remedy is specifically designated as exclusive, no remedy conferred by any of the specific provision of the Contract is intended to be exclusive of any other remedy, and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder, now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies by either Party shall not constitute a waiver of the right to pursue other available remedies.

K. NOTICES

All written notices provided for in this Contract or which either party desires to give to the other shall be deemed fully given, when made in writing and either served personally, or by facsimile, or deposited in the United States mail, postage prepaid, and addressed to the other party as follows:

*County of San Bernardino
Department of Public Works - Special Districts
222 W. Hospitality Ln., 2nd Floor
San Bernardino, CA. 92415*

*Consultant and contact information
As indicated on signature page of this contract*

Notice shall be deemed communicated two (2) County working days from the time of mailing if mailed as provided in this paragraph.

L. ENTIRE AGREEMENT

- L.1** This Contract, including all Attachment, Exhibits and other attachments, which are attached hereto and incorporated by reference, and other documents incorporated herein, represents the final, complete and exclusive agreement between the parties hereto. Any prior agreement, promises, negotiations or representations relating to the subject matter of this Contract not expressly set forth herein are of no force or effect. This Contract is executed without reliance upon any promise, warranty or representation by any party or any representative of any party other than those expressly contained herein. Each party has carefully read this Contract and signs the same of its own free will.

L.2 The Terms and Conditions in Attachment A are hereby incorporated into the Contract. However, if a conflict occurs between Attachment A and any provision in Sections A through L of the Contract, the applicable provision(s) of Sections A through L of the Contract shall take precedence.

M. CONTRACT EXECUTION

This Contract may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, and such counterparts shall together constitute one and the same Contract. The parties shall be entitled to sign and transmit an electronic signature of this Contract (whether by facsimile, PDF or other email transmission), which signature shall be binding on the party whose name is contained therein. Each party providing an electronic signature agrees to promptly execute and deliver to the other party an original signed Contract upon request.

IN WITNESS WHEREOF, District and Consultant have each caused this Contract to be subscribed by its respective duly authorized officers, on its behalf.

COUNTY SERVICE AREA 70, D1

_____, Chairman, Board of Directors

Dated: _____
 SIGNED AND CERTIFIED THAT A COPY OF THIS
 DOCUMENT HAS BEEN DELIVERED TO THE
 CHAIRMAN OF THE BOARD
 Lynna Monell, Secretary

By _____
 Deputy

TETRA TECH, INC.

(Print or type name of corporation, company, contractor, etc.)

By Tom Hesemann
 Tom Hesemann (Dec 16, 2020 4:23:45)
 (Authorized signature - sign in blue ink)

Name Tom Hesemann
 (Print or type name of person signing contract)

Title Sr Vice President
 (Print or Type)

Dated: Dec 16, 2020

Address 1900 South Sunset St. Suite 1E
Longmont, CO 80501

FOR COUNTY USE ONLY

Approved as to Legal Form <u>Katherine Hardy</u> Katherine Hardy (Dec 17, 2020 14:44:51)	Reviewed for Contract Compliance <u>Donald Day</u>	Reviewed/Approved by Department <u>Trevor Leja</u>
Katherine Hardy, County Counsel Date <u>Dec 17, 2020</u>	<u>Dec 21, 2020</u> Date _____	Trevor Leja, Deputy Director Date <u>Dec 21, 2020</u>

ATTACHMENT A

Tetra Tech Proposal dated September 30, 2020.

ATTACHMENT B

CONFLICT OF INTEREST AND POLITICAL REFORM ACT OBLIGATIONS

Consultant shall make all reasonable efforts to ensure that no County and/or District officer or employee, whose position in the County and/or enables him/her to influence any award of the Contract or any competing offer, shall have any direct or indirect financial interest resulting from the award of the Contract or shall have any relationship to the Consultant or officer or employee of the Consultant.

During the term of this Contract Consultant shall not act a Consultant or perform services of any kind for any person or entity whose interests conflict in any way with those of the County and/or. Consultant shall at all times comply with the terms of the Political Reform Act and the local conflict of interest code. Consultant shall immediately disqualify itself and shall not use its official position to influence in any way, any matter coming before the County and/or in which the Consultant has a financial interest as defined in Government Code section 87103. Consultant represents that it has no knowledge of any financial interests which would require it to disqualify itself from any matter on which it might perform services for the County and/or.

"Consultant" means an individual who, pursuant to a contract with a state or local agency:

(A) Makes a governmental decision whether to:

1. Approve a rate, rule or regulation;
2. Adopt or enforce a law;
3. Issue, deny, suspend, or revoke any permit, license, application, certificate, approval, order, or similar authorization or entitlement;
4. Authorize the County/District to enter into, modify, or renew a contract provided it is the type of contract that requires County/District approval;
5. Grant County/District approval to a contract that requires County/District approval and to which the County/District is a party, or to the specifications for such a contract;
6. Grant County/District approval to a plan, design, report, study, or similar item;
7. Adopt, or grant County/District approval of, policies, standards, or guidelines for the County/District, or for any subdivision thereof; or

(B) Serves in a staff capacity with the County or District and in that capacity participates in making a governmental decision as defined in Regulation 18702.2 or performs the same or substantially all the same duties for the County or District that would otherwise be performed by an individual holding a position specified in the County's Conflict of Interest Code.

DISCLOSURE DETERMINATION:

- ☒ 1. Consultant will not be "making a government decision" or "serving in a staff capacity" as defined in Sections A and B above. No disclosure required.
- ☐ 2. Consultant will be "making a government decision" or "serving in a staff capacity" as defined in either Section A or B above. As a result, Consultant shall be required to file a Statement of Economic Interest with the Clerk of the Board of Supervisors in a timely manner as required by law.

PROPOSAL:

LAKE ARROWHEAD INUNDATION MAPPING

SCOPE OF SERVICES

This document outlines the services that Tetra Tech will provide to San Bernardino County for engineering services for the Lake Arrowhead Inundation Mapping project. Tetra Tech originally prepared an inundation mapping study for Lake Arrowhead, dated August 17, 2011. The extents of the original study inundation mapping terminated at the Mojave Forks Dam (also known as Mojave River Dam). The California Division of Safety of Dams (DSOD) recently requested that mapping be continued downstream of the Mojave Forks Dam (in the Mojave River). This Scope reflects the modeling and report effort required to extend the update the previously prepared mapping between Lake Arrowhead and Mojave Forks Dam and prepare new inundation mapping downstream of Mojave Forks Dam.

Task 1: Project Management, Coordination, Meetings, and Miscellaneous Follow-Up

This task includes time for ongoing project management, meetings, and coordination with the County and DSOD. Time spent completing minor miscellaneous tasks requested by the Client not accounted for in tasks described below will also be billed as part of this task. This estimate includes approximately 26 hours of staff time for these services throughout the project; invoicing will be provided for actual time required. If we find that additional time is needed as we approach the limit of our budget, we will notify you and request approval of a change order.

Task 2: Modeling and Report

Tetra Tech will prepare dam breach inundation maps for areas downstream of Lake Arrowhead to supplement the original study prepared by Tetra Tech in 2011. The DSOD has requested that inundation maps in the 2011 study be extended downstream from the Mojave Forks Dam to a point where the flood wave no longer poses a threat to life or critical facilities. Our preliminary evaluation suggests this modeling termination point is located approximately 40 miles east of Barstow, CA, or approximately 100 miles downstream of Mojave Forks Dam. Flows will pass through the cities of Hesperia, Victorville, and Barstow. We have assumed through preliminary evaluation of the nearby Cedar Springs Dam study (HDR, 2019) that flow downstream from Mojave Forks Dam is contained within the banks of the Mojave River.

This study focuses on analyzing the approximate inundation zone for downstream reaches as a result of a dam break at Lake Arrowhead. Existing conditions will be based on publicly available data which will limit the resolution of the results. Further, river systems are dynamic, and plan, profile, and cross-section characteristics can change as a result of unexpected conditions, such as a dam break. The inundation maps cannot account for these types of changes and represent only the estimated inundation zone under existing topographic conditions. Therefore, future uses based on these maps should reasonably account for these types of uncertainties.

The DSOD previously commissioned an inundation mapping study (HDR, 2019) for the Cedar Springs Dam that is located nearby in a different drainage, and upstream of Mojave Forks Dam. Tetra Tech reviewed materials previously prepared for the Cedar Springs Dam (Silverwood Lake) to evaluate whether the data could be re-purposed for the Lake Arrowhead Inundation Mapping. Our evaluation showed that some of the data can be used for the Lake Arrowhead Inundation Mapping project, but additional publicly available data will be needed to conduct the study.

The original study was prepared by Tetra Tech in 2011. In the time that has passed since our original submittal, significant changes in the "state of the practice" have occurred. The original mapping was prepared using techniques, software, and regulatory expectations that have changed. We will conduct a pre-study conference call with the DSOD to discuss which elements of the 2011 study may be used now. For budgeting purposes, we

assume that the dam breach study and inundation mapping of Lake Arrowhead would be partially redone. We assume that information regarding the volume, material composition of the dam, and maximum normal water surface elevations would not change for this study. The hydraulic model downstream of the dam would be revised to incorporate the digital elevation model data that is required for a two-dimensional simulation.

Tetra Tech will prepare a two-dimensional hydraulic model of the flow areas downstream of Lake Arrowhead using publicly available digital elevation model data and supplemented with data from the Cedar Springs Dam study. Tetra Tech will not collect any new topographic data for this study. We plan to rely on publicly available data and do not assume any liability for use of this data. This hydraulic model will form the analytical basis of the dam breach study and inundation mapping. A sensitivity analysis of dam breach parameters such as breach size, time of formation, and Manning's n value will be conducted to reasonably estimate the inundation zone within the potential range of uncertainty of input data. The hydraulic model will incorporate the Mojave Forks Dam outlet works to estimate the amount of attenuation in peak flow that would occur due to the flood storage capacity of the dam.

Tetra Tech will prepare a report detailing the study effort. This report will include inundation maps from Lake Arrowhead to the model termination point east of Barstow. Tetra Tech will submit the report to San Bernardino County and the DSOD for review and comment. Tetra Tech will respond to one round of comments and revise the report accordingly, assuming no additional analyses are requested.

This task includes up to 270 hours of staff time. If additional budget is needed, we will request approval of a change order.

Task 3: Future Additional Services

This task is included as a future discretionary task for effort not originally contemplated or anticipated as a part of this work. An example of unanticipated effort would include travel to an in-person meeting either with the County or the DSOD. Another example is a request from DSOD for additional analysis beyond their standard regulatory requirements.

This task will not be used unless explicitly authorized by San Bernardino County. We have included \$9,000 in our budget for this task. This amount is equal to 20% of the total costs of Tasks 1 and 2 and would cover an additional 50 hours of Jeff Butson's time.

Other Direct Costs

Tetra Tech has included a budget of \$250 for other direct costs such as postage or delivery services. However, if other direct costs are incurred for this project (such as travel expenses for a trip to San Bernardino County or Sacramento), Tetra Tech will invoice San Bernardino County on a cost-plus-15-percent fee basis for all expenses incurred.

CLARIFICATION OF SERVICES

This proposal is on a Time and Expenses, Not-to-Exceed Fee basis, and allows for versatility in the project approach. It is understood and agreed between the parties that the estimated total fee is for the services set forth herein. However, it is important to note that services may require adjustments during project development that affect the cost estimate. The fee reflects the estimated cost of work to complete each task one time.

DELIVERABLES

Tetra Tech will provide San Bernardino County with an electronic copy of all documents, models, and maps that we prepare and submit. Hard copies can be provided if requested; additional budget may be needed to cover the associated costs.

SCHEDULE

Upon Authorization to Proceed, Tetra Tech will define the schedule through discussions with San Bernardino County and, if needed, the DSOD. The total estimated project duration is five months. The initial discussions on approach and data may require up to one month. Once we determine the approach, we anticipate completing the hydraulic modeling in approximately two months. Report preparation and submittal will require one additional month. We expect to submit the draft report to San Bernardino County and DSOD four months after Authorization to Proceed. An additional month may be required for Tetra Tech to respond to comments and revise the report.

ESTIMATED FEE

This table outlines the cost estimate to complete each task within the Scope of Services above.

Task	Cost Estimate
Task 1: Project Management, Coordination, Meetings, & Miscellaneous Follow-up	\$ 5,200
Task 2: Modeling and Mapping	\$ 39,800
Task 3: Future Additional Services (20% of Total of Task 1 and Task 2)	\$ 9,000
Other Direct Costs	\$ 250
Time and Expenses, Not-to-Exceed Fee	\$ 54,250

TERMS

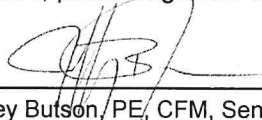
The Estimated Fee information contained within this Scope of Services is valid for 90 days from the date of this document. Services outlined herein will be performed on a Time-and-Expenses basis with a Not-To-Exceed amount. The cost estimates outlined are for budgetary purposes only; actual costs may vary. We will not exceed the total contract amount without prior authorization. If additional services are requested or required, Tetra Tech will submit a Scope of Services Change Request (i.e., change order) for your authorization.

This project will be conducted under the terms of the San Bernardino County Purchase Order.

AUTHORIZATION TO PROCEED

To authorize Tetra Tech to proceed, please sign and date below, and issue executed.

TETRA TECH, INC.
(Project Contact)


Jeffrey Butson, PE, CFM, Senior Engineer

September 30, 2020

TETRA TECH, INC.
(Authorization)


Pamela Hora, AICP,

September 30, 2020

CLIENT
AUTHORIZATION

Signature

Date

Print Name and Title

***This Scope of Services is intended solely for use by San Bernardino County
and is proprietary to Tetra Tech.***

PROPOSAL:

LAKE ARROWHEAD INUNDATION MAPPING

SCOPE OF SERVICES

This document outlines the services that Tetra Tech will provide to San Bernardino County for engineering services for the Lake Arrowhead Inundation Mapping project. Tetra Tech originally prepared an inundation mapping study for Lake Arrowhead, dated August 17, 2011. The extents of the original study inundation mapping terminated at the Mojave Forks Dam (also known as Mojave River Dam). The California Division of Safety of Dams (DSOD) recently requested that mapping be continued downstream of the Mojave Forks Dam (in the Mojave River). This Scope reflects the modeling and report effort required to extend the update the previously prepared mapping between Lake Arrowhead and Mojave Forks Dam and prepare new inundation mapping downstream of Mojave Forks Dam.

Task 1: Project Management, Coordination, Meetings, and Miscellaneous Follow-Up

This task includes time for ongoing project management, meetings, and coordination with the County and DSOD. Time spent completing minor miscellaneous tasks requested by the Client not accounted for in tasks described below will also be billed as part of this task. This estimate includes approximately 26 hours of staff time for these services throughout the project; invoicing will be provided for actual time required. If we find that additional time is needed as we approach the limit of our budget, we will notify you and request approval of a change order.

Task 2: Modeling and Report

Tetra Tech will prepare dam breach inundation maps for areas downstream of Lake Arrowhead to supplement the original study prepared by Tetra Tech in 2011. The DSOD has requested that inundation maps in the 2011 study be extended downstream from the Mojave Forks Dam to a point where the flood wave no longer poses a threat to life or critical facilities. Our preliminary evaluation suggests this modeling termination point is located approximately 40 miles east of Barstow, CA, or approximately 100 miles downstream of Mojave Forks Dam. Flows will pass through the cities of Hesperia, Victorville, and Barstow. We have assumed through preliminary evaluation of the nearby Cedar Springs Dam study (HDR, 2019) that flow downstream from Mojave Forks Dam is contained within the banks of the Mojave River.

This study focuses on analyzing the approximate inundation zone for downstream reaches as a result of a dam break at Lake Arrowhead. Existing conditions will be based on publicly available data which will limit the resolution of the results. Further, river systems are dynamic, and plan, profile, and cross-section characteristics can change as a result of unexpected conditions, such as a dam break. The inundation maps cannot account for these types of changes and represent only the estimated inundation zone under existing topographic conditions. Therefore, future uses based on these maps should reasonably account for these types of uncertainties.

The DSOD previously commissioned an inundation mapping study (HDR, 2019) for the Cedar Springs Dam that is located nearby in a different drainage, and upstream of Mojave Forks Dam. Tetra Tech reviewed materials previously prepared for the Cedar Springs Dam (Silverwood Lake) to evaluate whether the data could be re-purposed for the Lake Arrowhead Inundation Mapping. Our evaluation showed that some of the data can be used for the Lake Arrowhead Inundation Mapping project, but additional publicly available data will be needed to conduct the study.

The original study was prepared by Tetra Tech in 2011. In the time that has passed since our original submittal, significant changes in the "state of the practice" have occurred. The original mapping was prepared using techniques, software, and regulatory expectations that have changed. We will conduct a pre-study conference call with the DSOD to discuss which elements of the 2011 study may be used now. For budgeting purposes, we

assume that the dam breach study and inundation mapping of Lake Arrowhead would be partially redone. We assume that information regarding the volume, material composition of the dam, and maximum normal water surface elevations would not change for this study. The hydraulic model downstream of the dam would be revised to incorporate the digital elevation model data that is required for a two-dimensional simulation.

Tetra Tech will prepare a two-dimensional hydraulic model of the flow areas downstream of Lake Arrowhead using publicly available digital elevation model data and supplemented with data from the Cedar Springs Dam study. Tetra Tech will not collect any new topographic data for this study. We plan to rely on publicly available data and do not assume any liability for use of this data. This hydraulic model will form the analytical basis of the dam breach study and inundation mapping. A sensitivity analysis of dam breach parameters such as breach size, time of formation, and Manning's n value will be conducted to reasonably estimate the inundation zone within the potential range of uncertainty of input data. The hydraulic model will incorporate the Mojave Forks Dam outlet works to estimate the amount of attenuation in peak flow that would occur due to the flood storage capacity of the dam.

Tetra Tech will prepare a report detailing the study effort. This report will include inundation maps from Lake Arrowhead to the model termination point east of Barstow. Tetra Tech will submit the report to San Bernardino County and the DSOD for review and comment. Tetra Tech will respond to one round of comments and revise the report accordingly, assuming no additional analyses are requested.

This task includes up to 270 hours of staff time. If additional budget is needed, we will request approval of a change order.

Task 3: Future Additional Services

This task is included as a future discretionary task for effort not originally contemplated or anticipated as a part of this work. An example of unanticipated effort would include travel to an in-person meeting either with the County or the DSOD. Another example is a request from DSOD for additional analysis beyond their standard regulatory requirements.

This task will not be used unless explicitly authorized by San Bernardino County. We have included \$9,000 in our budget for this task. This amount is equal to 20% of the total costs of Tasks 1 and 2 and would cover an additional 50 hours of Jeff Butson's time.

Other Direct Costs

Tetra Tech has included a budget of \$250 for other direct costs such as postage or delivery services. However, if other direct costs are incurred for this project (such as travel expenses for a trip to San Bernardino County or Sacramento), Tetra Tech will invoice San Bernardino County on a cost-plus-15-percent fee basis for all expenses incurred.

CLARIFICATION OF SERVICES

This proposal is on a Time and Expenses, Not-to-Exceed Fee basis, and allows for versatility in the project approach. It is understood and agreed between the parties that the estimated total fee is for the services set forth herein. However, it is important to note that services may require adjustments during project development that affect the cost estimate. The fee reflects the estimated cost of work to complete each task one time.

DELIVERABLES

Tetra Tech will provide San Bernardino County with an electronic copy of all documents, models, and maps that we prepare and submit. Hard copies can be provided if requested; additional budget may be needed to cover the associated costs.

SCHEDULE

Upon Authorization to Proceed, Tetra Tech will define the schedule through discussions with San Bernardino County and, if needed, the DSOD. The total estimated project duration is five months. The initial discussions on approach and data may require up to one month. Once we determine the approach, we anticipate completing the hydraulic modeling in approximately two months. Report preparation and submittal will require one additional month. We expect to submit the draft report to San Bernardino County and DSOD four months after Authorization to Proceed. An additional month may be required for Tetra Tech to respond to comments and revise the report.

ESTIMATED FEE

This table outlines the cost estimate to complete each task within the Scope of Services above.

Task	Cost Estimate
Task 1: Project Management, Coordination, Meetings, & Miscellaneous Follow-up	\$ 5,200
Task 2: Modeling and Mapping	\$ 39,800
Task 3: Future Additional Services (20% of Total of Task 1 and Task 2)	\$ 9,000
Other Direct Costs	\$ 250
Time and Expenses, Not-to-Exceed Fee	\$ 54,250

TERMS

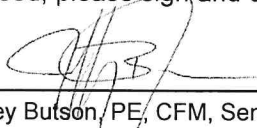
The Estimated Fee information contained within this Scope of Services is valid for 90 days from the date of this document. Services outlined herein will be performed on a Time-and-Expenses basis with a Not-To-Exceed amount. The cost estimates outlined are for budgetary purposes only; actual costs may vary. We will not exceed the total contract amount without prior authorization. If additional services are requested or required, Tetra Tech will submit a Scope of Services Change Request (i.e., change order) for your authorization.

This project will be conducted under the terms of the San Bernardino County Purchase Order.

AUTHORIZATION TO PROCEED

To authorize Tetra Tech to proceed, please sign and date below, and issue executed .

TETRA TECH, INC.
(Project Contact)


Jeffrey Butson, PE, CFM, Senior Engineer

September 30, 2020

TETRA TECH, INC.
(Authorization)


Pamela Hora, AICP,

September 30, 2020

CLIENT
AUTHORIZATION

Signature

Date

Print Name and Title

***This Scope of Services is intended solely for use by San Bernardino County
and is proprietary to Tetra Tech.***