

**AGREEMENT
CITY OF FRESNO, CALIFORNIA
CONSULTANT SERVICES**

THIS AGREEMENT is made and entered into effective the 18th day of June, 2020, by and between the CITY OF FRESNO, a California municipal corporation (hereinafter referred to as "CITY"), and Water Systems Consulting, Inc., a California corporation (hereinafter referred to as "CONSULTANT").

RECITALS

WHEREAS, CITY desires to obtain professional engineering services for development of the 2020 Metropolitan Water Resources Management Plan and Programmatic Environmental Impact Report, and 2020 Urban Water Management Plan, hereinafter referred to as the "Project;" and

WHEREAS, CONSULTANT is engaged in the business of furnishing services as a professional engineer and hereby represents that it desires to and is professionally and legally capable of performing the services called for by this Agreement; and

WHEREAS, CONSULTANT acknowledges that this Agreement is subject to the requirements of Fresno Municipal Code Section 4-107 and Administrative Order No. 6-19; and

WHEREAS, this Agreement will be administered for CITY by its Director of Public Utilities (hereinafter referred to as "Director") or his/her designee.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the covenants, conditions, and promises hereinafter contained to be kept and performed by the respective parties, it is mutually agreed as follows:

1. Scope of Services. CONSULTANT shall perform to the satisfaction of CITY the services described in **Exhibit A**, including all work incidental to, or necessary to perform, such services even though not specifically described in **Exhibit A**.

2. Term of Agreement and Time for Performance. This Agreement shall be effective from the date first set forth above and shall continue in full force and effect through the earlier of complete rendition of the services hereunder or October 18, 2023, subject to any earlier termination in accordance with this Agreement. The services of CONSULTANT as described in **Exhibit A** are to commence upon CITY'S issuance of a written "Notice to Proceed." Work shall be undertaken and completed in a sequence assuring expeditious completion, but in any event, all such services shall be completed within 914 consecutive calendar days from such authorization to proceed.

3. Compensation.

(a) CONSULTANT'S sole compensation for satisfactory performance of all services required or rendered pursuant to this Agreement shall be a total fee not to exceed \$1,823,762, paid on a time and materials basis in accordance with the schedule of fees contained in **Exhibit A**, and a contingency amount not to exceed \$182,000 for any additional work rendered pursuant to Subsection (c) below and authorized in writing by the Director.

(b) Detailed statements shall be rendered monthly and will be payable in the normal course of CITY business. CITY shall not be obligated to reimburse any expense for which it has not received a detailed invoice with applicable copies of representative and identifiable receipts or records substantiating such expense.

(c) The parties may modify this Agreement to increase or decrease the scope of services or provide for the rendition of services not required by this Agreement, which modification shall include an adjustment to CONSULTANT'S compensation. Any change in the scope of services must be made by written amendment to the Agreement signed by an authorized representative for each party. CONSULTANT shall not be entitled to any additional compensation if services are performed prior to a signed written amendment.

4. Termination, Remedies and Force Majeure.

(a) This Agreement shall terminate without any liability of CITY to CONSULTANT upon the earlier of: (i) CONSULTANT'S filing for protection under the federal bankruptcy laws, or any bankruptcy petition or petition for receiver commenced by a third party against CONSULTANT; (ii) 7 calendar days prior written notice with or without cause by CITY to CONSULTANT; (iii) CITY'S non-appropriation of funds sufficient to meet its obligations hereunder during any CITY fiscal year of this Agreement, or insufficient funding for the Project; or (iv) expiration of this Agreement.

(b) Immediately upon any termination or expiration of this Agreement, CONSULTANT shall (i) immediately stop all work hereunder; (ii) immediately cause any and all of its subcontractors to cease work; and (iii) return to CITY any and all unearned payments and all properties and materials in the possession of CONSULTANT that are owned by CITY. Subject to the terms of this Agreement, CONSULTANT shall be paid compensation for services satisfactorily performed prior to the effective date of termination. CONSULTANT shall not be paid for any work or services performed or costs incurred which reasonably could have been avoided.

(c) In the event of termination due to failure of CONSULTANT to satisfactorily perform in accordance with the terms of this Agreement, CITY may withhold an amount that would otherwise be payable as an offset to, but not in excess of, CITY'S damages caused by such failure. In no event shall any payment by CITY pursuant to this Agreement constitute a waiver by CITY of any breach of this Agreement which may then exist on the part of CONSULTANT, nor shall such payment impair or prejudice any remedy available to CITY with respect to the breach.

(d) Upon any breach of this Agreement by CONSULTANT, CITY may (i) exercise any right, remedy (in contract, law or equity), or privilege which may be available to it under applicable laws of the State of California or any other applicable law; (ii) proceed by appropriate court action to enforce the terms of the Agreement; and/or (iii) recover all direct, indirect, consequential, economic and incidental damages for the breach of the Agreement. If it is determined that CITY improperly terminated this Agreement for default, such termination shall be deemed a termination for convenience.

(e) CONSULTANT shall provide CITY with adequate written assurances of future performance, upon Director's request, in the event CONSULTANT fails to comply with any terms or conditions of this Agreement.

(f) CONSULTANT shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of CONSULTANT and without its fault or negligence such as, acts of God or the public enemy, acts of CITY in its contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. CONSULTANT shall notify Director in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, and shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to Director of the cessation of such occurrence.

5. Confidential Information, Ownership of Documents and Copyright License.

(a) Any reports, information, or other data prepared or assembled by CONSULTANT pursuant to this Agreement shall not be made available to any individual or organization by CONSULTANT without the prior written approval of CITY. During the term of this Agreement, and thereafter, CONSULTANT shall not, without the prior written consent of CITY, disclose to anyone any Confidential Information. The term Confidential Information for the purposes of this Agreement shall include all proprietary and confidential information of CITY, including but not limited to business plans, marketing plans, financial information, designs, drawings, specifications, materials, compilations, documents, instruments, models, source or object codes and other information disclosed or submitted, orally, in writing, or by any other medium or media. All Confidential Information shall be and remain confidential and proprietary in CITY.

(b) Any and all original sketches, pencil tracings of working drawings, plans, computations, specifications, computer disk files, writings and other documents prepared or provided by CONSULTANT pursuant to this Agreement are the property of CITY at the time of preparation and shall be turned over to CITY upon expiration or termination of the Agreement or default by CONSULTANT. CONSULTANT grants CITY a copyright license to use such drawings and writings. CONSULTANT shall not permit the reproduction or use thereof by any other person except as otherwise expressly provided herein. CITY may modify the design including any drawings or writings. Any use by CITY of the aforesaid sketches, tracings, plans, computations, specifications, computer disk files, writings and other documents in completed form as to other projects or extensions of this Project, or in uncompleted form, without specific written verification by CONSULTANT will be at CITY'S sole risk and without liability or legal exposure to CONSULTANT. CONSULTANT may keep a copy of all drawings and specifications for its sole and exclusive use.

(c) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this Section 5.

(d) This Section 5 shall survive expiration or termination of this Agreement.

6. Professional Skill. It is further mutually understood and agreed by and between the parties hereto that inasmuch as CONSULTANT represents to CITY that CONSULTANT and its subcontractors, if any, are skilled in the profession and shall perform in accordance with the standards of said profession necessary to perform the services agreed to be done by it under this Agreement, CITY relies upon the skill of CONSULTANT and any subcontractors to do and perform such services in a skillful manner and CONSULTANT agrees to thus perform the services and require the same of any subcontractors. Therefore, any acceptance of such

services by CITY shall not operate as a release of CONSULTANT or any subcontractors from said professional standards.

7. Indemnification. To the furthest extent allowed by law, CONSULTANT shall indemnify, hold harmless and defend CITY and each of its officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury, death at any time and property damage), and from any and all claims, demands and actions in law or equity (including reasonable attorney's fees and litigation expenses) that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of CONSULTANT, its principals, officers, employees, agents or volunteers in the performance of this Agreement.

If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require each subcontractor to indemnify, hold harmless and defend CITY and each of its officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

This section shall survive termination or expiration of this Agreement.

8. Insurance.

(a) Throughout the life of this Agreement, CONSULTANT shall pay for and maintain in full force and effect all insurance as required in **Exhibit B**, which is incorporated into and part of this Agreement, with an insurance company(ies) either (i) admitted by the California Insurance Commissioner to do business in the State of California and rated no less than "A-VII" in the Best's Insurance Rating Guide, or (ii) as may be authorized in writing by CITY'S Risk Manager or his/her designee at any time and in his/her sole discretion. The required policies of insurance as stated in Exhibit B shall maintain limits of liability of not less than those amounts stated therein. However, the insurance limits available to CITY, its officers, officials, employees, agents and volunteers as additional insureds, shall be the greater of the minimum limits specified therein or the full limit of any insurance proceeds to the named insured.

(b) If at any time during the life of the Agreement or any extension, CONSULTANT or any of its subcontractors/sub-consultants fail to maintain any required insurance in full force and effect, all services and work under this Agreement shall be discontinued immediately, and all payments due or that become due to CONSULTANT shall be withheld until notice is received by CITY that the required insurance has been restored to full force and effect and that the premiums therefore have been paid for a period satisfactory to CITY. Any failure to maintain the required insurance shall be sufficient cause for CITY to terminate this Agreement. No action taken by CITY pursuant to this section shall in any way relieve CONSULTANT of its responsibilities under this Agreement. The phrase "fail to maintain any required insurance" shall include, without limitation, notification received by CITY that an insurer has commenced proceedings, or has had proceedings commenced against it, indicating that the insurer is insolvent.

(c) The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The duty to indemnify CITY shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under

the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

(d) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require each subcontractor/sub-consultant to provide insurance protection, as an additional insured, to the CITY and each of its officers, officials, employees, agents and volunteers in accordance with the terms of this section, except that any required certificates and applicable endorsements shall be on file with CONSULTANT and CITY prior to the commencement of any services by the subcontractor. CONSULTANT and any subcontractor/sub-consultant shall establish additional insured status for CITY, its officers, officials, employees, agents and volunteers by using Insurance Service Office (ISO) Form CG 20 10 11 85 or both CG 20 10 10 01 and CG 20 37 10 01 or by an executed manuscript company endorsement providing additional insured status as broad as that contained in ISO Form CG 20 10 11 85.

9. Conflict of Interest and Non-Solicitation.

(a) Prior to CITY'S execution of this Agreement, CONSULTANT shall complete a City of Fresno conflict of interest disclosure statement in the form as set forth in **Exhibit C**. During the term of this Agreement, CONSULTANT shall have the obligation and duty to immediately notify CITY in writing of any change to the information provided by CONSULTANT in such statement.

(b) CONSULTANT shall comply, and require its subcontractors to comply, with all applicable (i) professional canons and requirements governing avoidance of impermissible client conflicts; and (ii) federal, state and local conflict of interest laws and regulations including, without limitation, California Government Code Section 1090 et. seq., the California Political Reform Act (California Government Code Section 87100 et. seq.), the regulations of the Fair Political Practices Commission concerning disclosure and disqualification (2 California Code of Regulations Section 18700 et. seq.) and Section 4-112 of the Fresno Municipal Code (Ineligibility to Compete). At any time, upon written request of CITY, CONSULTANT shall provide a written opinion of its legal counsel and that of any subcontractor that, after a due diligent inquiry, CONSULTANT and the respective subcontractor(s) are in full compliance with all laws and regulations. CONSULTANT shall take, and require its subcontractors to take, reasonable steps to avoid any appearance of a conflict of interest. Upon discovery of any facts giving rise to the appearance of a conflict of interest, CONSULTANT shall immediately notify CITY of these facts in writing.

(c) In performing the work or services to be provided hereunder, CONSULTANT shall not employ or retain the services of any person while such person either is employed by CITY or is a member of any CITY council, commission, board, committee, or similar CITY body. This requirement may be waived in writing by the City Manager, if no actual or potential conflict is involved.

(d) CONSULTANT represents and warrants that it has not paid or agreed to pay any compensation, contingent or otherwise, direct or indirect, to solicit or procure this Agreement or any rights/benefits hereunder.

(e) Neither CONSULTANT, nor any of CONSULTANT'S subcontractors performing any services on this Project, shall bid for, assist anyone in the preparation of a bid for, or perform any services pursuant to, any other contract in connection with this Project.

CONSULTANT and any of its subcontractors shall have no interest, direct or indirect, in any other contract with a third party in connection with this Project unless such interest is in accordance with all applicable law and fully disclosed to and approved by the City Manager, in advance and in writing.

(f) If CONSULTANT should subcontract all or any portion of the work to be performed or services to be provided under this Agreement, CONSULTANT shall include the provisions of this Section 9 in each subcontract and require its subcontractors to comply therewith.

(g) This Section 9 shall survive expiration or termination of this Agreement.

10. Recycling Program. In the event CONSULTANT maintains an office or operates a facility(ies), or is required herein to maintain or operate same, within the incorporated limits of the City of Fresno, CONSULTANT at its sole cost and expense shall:

- (i) Immediately establish and maintain a viable and ongoing recycling program, approved by CITY'S Solid Waste Management Division, for each office and facility. Literature describing CITY recycling programs is available from CITY'S Solid Waste Management Division and by calling City of Fresno Recycling Hotline at (559) 621-1111.
- (ii) Immediately contact CITY'S Solid Waste Management Division at (559) 621-1452 and schedule a free waste audit, and cooperate with such Division in their conduct of the audit for each office and facility.
- (iii) Cooperate with and demonstrate to the satisfaction of CITY'S Solid Waste Management Division the establishment of the recycling program in paragraph (i) above and the ongoing maintenance thereof.

11. General Terms.

(a) Except as otherwise provided by law, all notices expressly required of CITY within the body of this Agreement, and not otherwise specifically provided for, shall be effective only if signed by the Director or his/her designee.

(b) Records of CONSULTANT'S expenses pertaining to the Project shall be kept on a generally recognized accounting basis and shall be available to CITY or its authorized representatives upon request during regular business hours throughout the life of this Agreement and for a period of three years after final payment or, if longer, for any period required by law. In addition, all books, documents, papers, and records of CONSULTANT pertaining to the Project shall be available for the purpose of making audits, examinations, excerpts, and transcriptions for the same period of time. If any litigation, claim, negotiations, audit or other action is commenced before the expiration of said time period, all records shall be retained and made available to CITY until such action is resolved, or until the end of said time period whichever shall later occur. If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this paragraph. This Section 11(b) shall survive expiration or termination of this Agreement.

(c) Prior to execution of this Agreement by CITY, CONSULTANT shall have provided evidence to CITY that CONSULTANT is licensed to perform the services called for by this Agreement (or that no license is required). If CONSULTANT should subcontract all or any portion of the work or services to be performed under this Agreement, CONSULTANT shall require each subcontractor to provide evidence to CITY that subcontractor is licensed to perform the services called for by this Agreement (or that no license is required) before beginning work.

12. Nondiscrimination. To the extent required by controlling federal, state and local law, CONSULTANT shall not employ discriminatory practices in the provision of services, employment of personnel, or in any other respect on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. Subject to the foregoing and during the performance of this Agreement, CONSULTANT agrees as follows:

(a) CONSULTANT will comply with all applicable laws and regulations providing that no person shall, on the grounds of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity made possible by or resulting from this Agreement.

(b) CONSULTANT will not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. CONSULTANT shall ensure that applicants are employed, and the employees are treated during employment, without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. Such requirement shall apply to CONSULTANT'S employment practices including, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provision of this nondiscrimination clause.

(c) CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of CONSULTANT in pursuit hereof, state that all qualified applicants will receive consideration for employment without regard to race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era.

(d) CONSULTANT will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising such labor union or workers' representatives of CONSULTANT'S commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(e) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this Section 12.

13. Independent Contractor.

(a) In the furnishing of the services provided for herein, CONSULTANT is acting solely as an independent contractor. Neither CONSULTANT, nor any of its officers, agents or employees shall be deemed an officer, agent, employee, joint venturer, partner or associate of CITY for any purpose. CITY shall have no right to control or supervise or direct the manner or method by which CONSULTANT shall perform its work and functions. However, CITY shall retain the right to administer this Agreement so as to verify that CONSULTANT is performing its obligations in accordance with the terms and conditions thereof.

(b) This Agreement does not evidence a partnership or joint venture between CONSULTANT and CITY. CONSULTANT shall have no authority to bind CITY absent CITY'S express written consent. Except to the extent otherwise provided in this Agreement, CONSULTANT shall bear its own costs and expenses in pursuit thereof.

(c) Because of its status as an independent contractor, CONSULTANT and its officers, agents and employees shall have absolutely no right to employment rights and benefits available to CITY employees. CONSULTANT shall be solely liable and responsible for all payroll and tax withholding and for providing to, or on behalf of, its employees all employee benefits including, without limitation, health, welfare and retirement benefits. In addition, together with its other obligations under this Agreement, CONSULTANT shall be solely responsible, indemnify, defend and save CITY harmless from all matters relating to employment and tax withholding for and payment of CONSULTANT'S employees, including, without limitation, (i) compliance with Social Security and unemployment insurance withholding, payment of workers' compensation benefits, and all other laws and regulations governing matters of employee withholding, taxes and payment; and (ii) any claim of right or interest in CITY employment benefits, entitlements, programs and/or funds offered employees of CITY whether arising by reason of any common law, de facto, leased, or co-employee rights or other theory. It is acknowledged that during the term of this Agreement, CONSULTANT may be providing services to others unrelated to CITY or to this Agreement.

14. Notices. Any notice required or intended to be given to either party under the terms of this Agreement shall be in writing and shall be deemed to be duly given if delivered personally, transmitted by facsimile followed by telephone confirmation of receipt, or sent by United States registered or certified mail, with postage prepaid, return receipt requested, addressed to the party to which notice is to be given at the party's address set forth on the signature page of this Agreement or at such other address as the parties may from time to time designate by written notice. Notices served by United States mail in the manner above described shall be deemed sufficiently served or given at the time of the mailing thereof.

15. Binding. Subject to Section 16, below, once this Agreement is signed by all parties, it shall be binding upon, and shall inure to the benefit of, all parties, and each parties' respective heirs, successors, assigns, transferees, agents, servants, employees and representatives.

16. Assignment.

(a) This Agreement is personal to CONSULTANT and there shall be no assignment by CONSULTANT of its rights or obligations under this Agreement without the prior written approval of the City Manager or his/her designee. Any attempted assignment by CONSULTANT, its successors or assigns, shall be null and void unless approved in writing by the City Manager or his/her designee.

(b) CONSULTANT hereby agrees not to assign the payment of any monies due CONSULTANT from CITY under the terms of this Agreement to any other individual(s), corporation(s) or entity(ies). CITY retains the right to pay any and all monies due CONSULTANT directly to CONSULTANT.

17. Compliance With Law. In providing the services required under this Agreement, CONSULTANT shall at all times comply with all applicable laws of the United States, the State of California and CITY, and with all applicable regulations promulgated by federal, state, regional, or local administrative and regulatory agencies, now in force and as they may be enacted, issued, or amended during the term of this Agreement.

18. Waiver. The waiver by either party of a breach by the other of any provision of this Agreement shall not constitute a continuing waiver or a waiver of any subsequent breach of either the same or a different provision of this Agreement. No provisions of this Agreement may be waived unless in writing and signed by all parties to this Agreement. Waiver of any one provision herein shall not be deemed to be a waiver of any other provision herein.

19. Governing Law and Venue. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding, however, any conflict of laws rule which would apply the law of another jurisdiction. Venue for purposes of the filing of any action regarding the enforcement or interpretation of this Agreement and any rights and duties hereunder shall be Fresno County, California.

20. Headings. The section headings in this Agreement are for convenience and reference only and shall not be construed or held in any way to explain, modify or add to the interpretation or meaning of the provisions of this Agreement.

21. Severability. The provisions of this Agreement are severable. The invalidity, or unenforceability of any one provision in this Agreement shall not affect the other provisions.

22. Interpretation. The parties acknowledge that this Agreement in its final form is the result of the combined efforts of the parties and that, should any provision of this Agreement be found to be ambiguous in any way, such ambiguity shall not be resolved by construing this Agreement in favor of or against either party, but rather by construing the terms in accordance with their generally accepted meaning.

23. Attorney's Fees. If either party is required to commence any proceeding or legal action to enforce or interpret any term, covenant or condition of this Agreement, the prevailing party in such proceeding or action shall be entitled to recover from the other party its reasonable attorney's fees and legal expenses.

24. Exhibits. Each exhibit and attachment referenced in this Agreement is, by the reference, incorporated into and made a part of this Agreement.

25. Precedence of Documents. In the event of any conflict between the body of this Agreement and any Exhibit or Attachment hereto, the terms and conditions of the body of this Agreement shall control and take precedence over the terms and conditions expressed within the Exhibit or Attachment. Furthermore, any terms or conditions contained within any Exhibit or Attachment hereto which purport to modify the allocation of risk between the parties, provided for within the body of this Agreement, shall be null and void.

26. Cumulative Remedies. No remedy or election hereunder shall be deemed exclusive but shall, wherever possible, be cumulative with all other remedies at law or in equity.

27. No Third Party Beneficiaries. The rights, interests, duties and obligations defined within this Agreement are intended for the specific parties hereto as identified in the preamble of this Agreement. Notwithstanding anything stated to the contrary in this Agreement, it is not intended that any rights or interests in this Agreement benefit or flow to the interest of any third parties.

28. Extent of Agreement. Each party acknowledges that they have read and fully understand the contents of this Agreement. This Agreement represents the entire and integrated agreement between the parties with respect to the subject matter hereof and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be modified only by written instrument duly authorized and executed by both CITY and CONSULTANT.

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IN WITNESS WHEREOF, the parties have executed this Agreement at Fresno, California, the day and year first above written.

CITY OF FRESNO,
a California municipal corporation

By: _____
Michael Carbajal,
Director
Department of Public Utilities

ATTEST:
YVONNE SPENCE, CMC
City Clerk

By: _____
Deputy

No signature of City Attorney required.
Standard Document #DPU-S 8.3 has been
used without modification, as certified by
the undersigned.

By: fov Glenn A. Knapp, PE
Supervising Professional Engineer
Department of Public Utilities

REVIEWED BY: B.D. Buche
Brock D. Buche, PE, PLS, Assistant Director
Department of Public Utilities

Addresses:
CITY:
City of Fresno
Attention: Glenn A. Knapp, PE,
Supervising Professional Engineer
2101 G. Street, Building A
Fresno, CA 93706
Phone: (559) 621-1624
FAX: (559) 559-498-4126

- Attachments:
1. Exhibit A - Scope of Services
 2. Exhibit B - Insurance Requirements
 3. Exhibit C - Conflict of Interest Disclosure Form

Water Systems Consulting, Inc.,
a California corporation

By: [Signature]

Name: Jason Reynolds

Title: Vice President
(if corporation or LLC, Board
Chair, Pres. or Vice Pres.)

By: [Signature]

Name: JEFFERY SZYTEL

Title: PRESIDENT AND SECRETARY
(if corporation or LLC, CFO,
Treasurer, Secretary or Assistant
Secretary)

Any Applicable Professional License:
Number: C63004
Name: CIVIL ENGINEER
Date of Issuance: 1/25/2002

CONSULTANT:
Water Systems Consultants, Inc.
Attention: Jeffery Szytel,
President
P.O. Box 4255
San Luis Obispo, CA 93403
Phone: 805-457-8833
FAX: 805-888-2764

Exhibit A

SCOPE OF SERVICES

**Consultant Service Agreement between City of Fresno (“City”)
and Water Systems Consulting, Inc. (“Consultant”)**

2020 Metropolitan Water Resources Management Plan and Programmatic Environmental
Impact Report, and 2020 Urban Water Management Plan

PROJECT TITLE

See Attached

2020 Metro Plan & 2020 UWMP Scope of Work

The following scope of work is for the 2020 Metropolitan Water Resources Management Plan (Metro Plan) and the 2020 Urban Water Management Plan (UWMP).

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TASK 0.0 PROJECT MANAGEMENT

0.1 Project Controls

- Provide oversight, manage communication, assign resources, and coordinate work efforts of the Project Team.
- Maintain and monitor the master project schedule. Produce updated schedules as required.
- Compile and monitor budget, cost and earned value information for the Project.
- Monitor scope, including tracking approved out of scope work.
- Administer subcontracts.
- Prepare progress reports to be submitted with each monthly invoice. The reports will include a summary of activities accomplished in the current month. Track individual task budgets and the overall project budget.
- Prepare quarterly status updates that summarize the plan preparation status and major accomplishments that occurred over the last quarter for distribution to City executives and legislative members. The status updates may include PowerPoint presentations when appropriate.

DELIVERABLE(S): Monthly Progress Reports. Quarterly Executive Status Updates, including presentation materials when appropriate.

0.2 City Coordination (Regular Calls)

- Plan, organize, and conduct routine meetings/conference calls with City Staff to:
 - (1) Provide updates on Project progress
 - (2) Present interim results
 - (3) Review progress since last meeting and planned work until next call
 - (4) Discuss other topics of interest as the Project progresses
- Assumptions: The budget is based on an assumed project phase duration of 30 months and City Coordination Calls will be held four times per month, on average, with a duration of up to 1 hour each. However, WSC will adapt the frequency and duration of the City Coordination Meetings to meet the specific needs of the project at the time, within the budgeted level of effort.

0.3 Internal Coordination (Regular Calls)

- Plan, organize and conduct routine meetings/conference calls with the Consultant Team to:
 - (1) Coordinate project activities
 - (2) Review ongoing work and upcoming deliverables
 - (3) Discuss data needs
 - (4) Plan upcoming client meetings

- Assumptions: The budget is based on an assumed project phase duration of 30 months and Internal Coordination Calls will be held three times per month with a duration of 1 hour each.

TASK 1.0 PHASE 1 - EXISTING WATER SUPPLY SYSTEM ASSESSMENT

This phase entails conducting the work to develop the content and prepare the Prepare Phase 1 Report. The Phase 1 Report is expected to include the following topics:

1. Introduction

- 1.1. Project Purpose
- 1.2. Study Process
- 1.3. Previous Metro Plans
- 1.4. Planning Horizons
- 1.5. Study Area

2. Urban Water Demands

- 2.1. Service Area
- 2.2. Significant Water Use
- 2.3. Water System
- 2.4. Local Climate
- 2.5. Historical and Projected Water Service Area Population
- 2.6. Existing and Projected Land Use
- 2.7. Historical Water Production and Consumption
 - 2.7.1. Historical Water Production Records
 - 2.7.2. Unaccounted-For Water
 - 2.7.3. Historical Consumption
- 2.8. Historical Peaking Factors
 - 2.8.1. Maximum Day Peaking Factor
 - 2.8.2. Peak Hour Peaking Factor
- 2.9. Per Capita Based Potable Demand Projections
- 2.10. Land Use Based Potable Demand Projections
 - 2.10.1. Development of Unit Demand Factors
 - 2.10.2. Adjusted Unit Demand Factors
 - 2.10.3. Projected Potable Demands by Customer Class
 - 2.10.4. Comparison of Per Capita and Land Use Based Demand Projections
- 2.11. Recommended Urban Water Demands
 - 2.11.1. Projected 2045 and 2070 Demand Projections

3. Urban Water Supplies

- 3.1. Existing Groundwater Supply
 - 3.1.1. Basin Location
 - 3.1.2. Area Geology
 - 3.1.3. Aquifer Characteristics
 - 3.1.4. Historic and Current Water Levels
 - 3.1.5. Groundwater Quality
 - 3.1.6. Estimated Groundwater Yield
 - 3.1.7. Existing Groundwater Production Capacity
- 3.2. Existing Surface Water Supply

- 3.2.1. USBR Friant Division Contract Supply
 - 3.2.1.1. Quality
 - 3.2.1.2. Reliability
- 3.2.2. Fresno Irrigation District Supply
 - 3.2.2.1. Quality
 - 3.2.2.2. Reliability
- 3.2.3. Reclaimed Wastewater Exchange Supply
 - 3.2.3.1. Quality
 - 3.2.3.2. Reliability
- 3.2.4. East Fresno Stream Group Supply
 - 3.2.4.1. Quality
 - 3.2.4.2. Reliability
- 3.3. Recycled Water Supply
 - 3.3.1.1. Quality
 - 3.3.1.2. Reliability
- 3.4. Demand Management
- 3.5. Storm Water
- 3.6. Exchanges or Transfers
- 3.7. Long-Term Water Supply Yield (Normal Year)
- 3.8. Comparison of Water Supply and Demand
 - 3.8.1. Comparison of Historical Water Supply and Demand
 - 3.8.2. Comparison of Supply and Demand in the Current Year
 - 3.8.3. Comparison of Projected Supply and Demand
 - 3.8.3.1. Normal Year
 - 3.8.3.2. Critical-Low Year
 - 3.8.3.3. Multiple Dry Years
- 3.9. Potential Impacts of Climate Change
- 3.10. Effects of Status Quo Water Supply Strategy
 - 3.10.1. Long-term Implications of Operating at “Status Quo”
 - 3.10.2. Estimated Capital Costs of Operating at “Status Quo”
- 4. Existing Water Resources Systems**
 - 4.1. Drinking Water System
 - 4.1.1. Service Area
 - 4.1.2. Water Supply Sources
 - 4.1.2.1. Groundwater Wells
 - 4.1.2.2. Surface Water Treatment Facilities
 - 4.1.3. Water Distribution System & Storage Facilities
 - 4.1.3.1. Pressures Zones
 - 4.1.3.2. SCADA Zones
 - 4.1.3.3. Water Pipelines
 - 4.1.3.4. Treated Water Storage
 - 4.1.3.5. Booster Stations
 - 4.1.4. Water Distribution System Performance Criteria
 - 4.1.4.1. Conveyance Sizing and Performance (RTM, TGM & Distribution)
 - 4.1.4.1.1. Average Day Demand
 - 4.1.4.1.2. Maximum Day Demand
 - 4.1.4.1.3. Peak Hour Demand
 - 4.1.5. Fresno Water System – Future Without Project Evaluation

- 4.2. Wastewater System
 - 4.2.1. Collection System
 - 4.2.2. Regional Wastewater Reclamation Facility
- 4.3. Recycled Water System
 - 4.3.1. Tertiary Facility
 - 4.3.2. Extraction Wells
 - 4.3.3. Distribution System
- 4.4. Flood Control and Groundwater Recharge System
 - 4.4.1. Facilities
 - 4.4.2. Water Rights
 - 4.4.3. Groundwater Recharge
- 5. Institutional Arrangements**
 - 5.1. Water Systems
 - 5.1.1. Water Suppliers
 - 5.1.2. Water System Interconnections
 - 5.1.3. Surface Water Supply
 - 5.2. Wastewater
 - 5.2.1. Wastewater Recycling
 - 5.3. Flood Control and Storm Drainage
 - 5.3.1. Storm Water Basins
 - 5.3.2. Storm Water Detention Reservoirs
 - 5.4. Groundwater Management
 - 5.4.1. Groundwater Management Plan
 - 5.4.2. Integrated Regional Water Management
 - 5.4.3. Fresno County Export ordinance
 - 5.4.4. Groundwater Contamination
 - 5.4.5. Sustainable Groundwater Management Act
 - 5.5. Governor's Water Resilience Portfolio
 - 5.6. Regional Land Use Planning

- The outline above may be modified based on findings from the analysis in this phase, and with approval from the City.

1.1 Kickoff Meeting, Meetings (2) & Workshops (4)

- Plan, organize, and conduct Meetings and Workshops to support Phase 1 Report development. Anticipated meetings for Phase 1 are:
 - (1) Phase 1 Kickoff Meeting
 - (a) Establish Roles and Responsibilities,
 - (b) Develop project success factors and future water supply plan objectives and goals
 - (c) Walk through overview of key Phase 1 components (i.e. Urban Demand Estimates, Urban Water Supplies, Existing Water Resources, and Institutional Arrangements)
 - (d) Review preliminary data request and data management system
 - (2) Phase 1 Admin Draft Review Meeting

(3) Phase 1 Draft Review Meeting

Anticipated workshops for Phase 1 are:

(4) Urban Demand Workshop

(5) Urban Water Supplies Workshop

(6) Existing Water Resources System Workshop

(7) Institutional Arrangements Workshop

- Assumptions. Workshops/Meetings will be held in-person (if possible under COVID19 response actions) and will last up to 4 hours, attended by up to 3 WSC staff.

DELIVERABLE(S): Electronic copies of agenda and meeting materials at least five (5) working days prior to the meeting. Summary of action items within five (5) working days following the meeting.

1.2 Urban Water Demands

- Review reference documents, compile relevant information, and develop description of City's existing Water Demands.
- Analyze data sources for land use based demands, which are assumed to be available from the City's planning department.
- Update City's demand peaking factors.
- Prepare per capita water demand analysis for Senate Bill x 7-7 compliance and for the purposes of comparison to land use based demand estimates.
- Develop population projections and demand projections for immediate, near-, and long-term periods
- Assumptions. The City will provide historical data and the methodology used to determine demand factors and demand projections in the previous 2015 UWMP and the North Kings GSA Groundwater Sustainability Plan. Recent historical and growth data not included in previous demand estimates will be developed from the City's General Plan and State Department of Finance projections to update previous demand factors and growth projections. Up to eight (8) hours is assumed to conform water consumption data to associate it with a land use and land use intensity unit (e.g., dwelling unit, acres, etc).
- To supplement potable water projections, prepare recycled water demand projections based on existing customers and planned customer connections. Review historical recycled water use information to document past use by customer, including monthly, daily, and hourly variability, if the information is available. If applicable, document discharge flow commitments.

1.3 Urban Water Supplies

- Review reference documents, compile relevant information, and develop description of City's existing Water Supplies. Description of water supply availability will include assessment of the following Water Supply components:
 - (1) Existing Groundwater Supply
 - (a) Assessment of existing groundwater supply will include developing descriptions of: Basin Location; Area Geology; Aquifer Characteristics; Historic and Current Water Levels; Groundwater Quality; and Existing Groundwater Production Capacity
 - (i) Assessment of these parameters will be based on readily available reference documents and information provided by the City. This task will not include new detailed evaluation of these parameters.
 - (b) Existing Groundwater Yield – Estimates of existing groundwater yield will be developed utilizing a water budget analysis for a hydrologic base period that will include the following items: groundwater inflow; seepage from canals; seepage from intermittent streams; intentional recharge; deep percolation from irrigation; groundwater pumpage; consumptive use; and sewer export.
 - (i) It is anticipated that the urban areas will be divided into several quadrants to perform a more granular water budget analysis.
 - (ii) An additional water budget will be prepared for the Regional Wastewater Reclamation Facility that will include the following items: groundwater outflow; effluent percolation from ponds; deep percolation from effluent irrigation; recover well pumping; canal seepage; deep percolation from agriculture irrigation; and private well pumpage.
 - (2) Existing Surface Water Supply - Assessment of existing surface water supply will include developing descriptions and evaluation of the quality and reliability of the City's: USBR Friant Division Contract Supply; Fresno Irrigation District Supply; Reclaimed Wastewater Exchange Supply; and East Fresno Stream Group Supply
 - (a) Assumption: Assessment of these parameters will be based on readily available reference documents and information that quantify and provide estimates for historic and future water supply availability from these sources.
 - (3) Recycled Water Supply – Review available wastewater flow data and projections, including seasonal variations. Coordinate wastewater flow projections with demand projections in Task 1.2. Document quality of recycled water sources (percolation ponds and tertiary treatment systems) for constituents of concern for reuse – particularly salinity.

- (4) Demand Management Measures (DMM)- Update and provide a narrative description of the DMMs implemented by the City based on any changes to DMM implementation since the 2015 UWMP and revised DWR requirements. It is assumed data will be provided to update tables and figures from the 2015 UWMP.
- (5) Stormwater - Assessment of stormwater resources will include evaluation of the City's, Fresno Metropolitan Flood Control District and Fresno Irrigation District's existing and planned stormwater infrastructure and operational data.
 - (a) Assumption: Assessment of these parameters will be based on readily available reference documents and information that quantify and provide estimates of stormwater capture and recharge capacity.
- (6) Exchanges or Transfers – Assessment of existing Exchanges or Transfers will include evaluation of existing or previously completed exchanges or transfer agreements that City has entered into.
- (7) Long-Term Water Supply Yield - Develop estimates of long-term water supply yield based on analysis of the City's existing water supply portfolio. Incorporate supply reliability estimates based on historic hydrology and available estimates of anticipated future water supply reliability for the City's water sources.
- (8) Climate Change – Evaluate potential impacts climate change may have on City water supplies.
 - (a) Assumption: Climate change impact assessments will be based on previously completed studies on impacts of climate change on City and other water supplies.

1.4 Existing Water Resources Systems

- Review reference documents, compile relevant information, and develop description of City's existing Water Resources Systems. Description of water resource systems will include developing summaries of existing and planned infrastructure the following elements:
 - (1) Drinking Water System
 - (2) Wastewater System
 - (3) Recycled Water System
 - (4) Flood Control and Groundwater Recharge System
- Assumption: Assessment of City Water Resource Systems will not include hydraulic modeling. It is understood that hydraulic modeling needed to support assessment of the existing systems will be performed under a separate contract. Additionally, assessments of deficiencies in the existing Water Resource systems will be provided from previously completed studies or assessments.

1.5 Institutional Arrangements

- Review reference documents, compile relevant information, and develop description of City's existing Institutional Arrangements. Institutional Arrangements documentation will include description of existing and planned contractual or other arrangements for the following systems:
 - (1) Water Systems
 - (2) Wastewater Systems
 - (3) Flood Control and Storm Drainage
 - (4) Groundwater Quality and Management
 - (5) Local, State and Federal Water management regulatory and guidance documents
 - (6) Regional Land Use Planning

1.6 Existing System Assessment

- Analyze City's current water supply projections versus demand projections (e.g., status quo or no project alternative). Evaluate based on performance measures such as cost, supply yield, energy intensity/GHG emissions/environmental impact, and others.
- Develop Supply/Demand Evaluation Tool that incorporates historic and future estimates of water supply availability for the City's existing water supply sources and water demand.
- Perform a gap analysis to determine any differences between the City's supply yield and projected demands. Identify any potential surpluses or shortfalls in the City's water supply portfolio.

1.7 Admin Draft Report

- Prepare Admin Draft Report that summarizes the work completed in Phase 1.
- Implement WSC Quality Assurance and Quality Control (QA/QC) practices.
- Submit Admin Draft Report for City review and comment.

DELIVERABLE(S): Seven (7) hard-copies and one electronic copy of the Admin Draft Report.

1.8 Draft Report

- Prepare Draft Report that incorporates comments from the City on the Admin Draft Report.
- Complete WSC QA/QC practices.
- Submit Draft Report for City and stakeholder review and comments.

DELIVERABLE(S): Fifteen (15) hard-copies and one electronic copy of the Draft Report.

1.9 Final Report

- Prepare Final Report that incorporates comments from the City and stakeholders on the Draft Report.

DELIVERABLE(S): Fifteen (15) hard-copies and one electronic copy of the Final Report.

TASK 2.0 PHASE 2 - WATER SUPPLY ALTERNATIVES ANALYSIS

This phase includes assembling supply and infrastructure elements into alternatives to meet near-term and long-range demands, alternatives evaluation, and identification of the preferred alternative(s). The effort will be documented in the Phase 2 Report. The Phase 2 Report is expected to include the following topics:

1. Alternatives Development
 - 1.1. Water Supply Elements
 - 1.2. Element Screening
 - 1.3. Alternative Formulation
2. Alternative Evaluation
 - 2.1. Evaluation Criteria
 - 2.2. Alternatives Evaluation
 - 2.3. Economic Analysis
 - 2.4. Multi-Criteria Analysis
 - 2.5. Sensitivity Analysis
3. Preferred Alternative Summary

The outline above may be modified based on findings from the analysis in this phase, and with approval from the City.

2.1 Kick-off Meeting, Meetings (2) & Workshops (4)

Plan, organize, and conduct Meetings and Workshops to support Phase 2 Report development.

Anticipated meetings for Phase 2 are:

- (1) Phase 2 Kickoff Meeting
 - (a) Establish element screening and alternatives evaluation criteria
 - (b) Review water supply elements to validate applicability
 - (c) Preview potential alternative themes
- (2) Phase 2 Admin Draft Review Meeting
- (3) Phase 2 Draft Review Meeting

➤ Anticipated workshops for Phase 2 are:

- (1) Preliminary Element Screening and Alternative Development Workshop
- (2) Alternative Review Workshop
- (3) Alternative Evaluation Workshop
- (4) Preferred Alternative Review Workshop

- Assumptions. It is assumed that the Workshops/Meetings will be held in-person (if possible under COVID19 response actions) and will last for a duration of 4 hours attended by up to 4 WSC staff.

DELIVERABLE(S): Electronic copies of agenda and meeting materials at least five (5) working days prior to the meeting. Summary of action items within five (5) working days following the meeting.

2.2 Water Supply Elements Development and Screening

- Establish screening criteria for water supply elements, such as maximum high-level cost, minimum yield, reliability and feasibility.
- Develop and summarize Water Supply Elements for potential incorporation into Water Supply Alternatives
 - (1) Up to 20 Water Supply Elements will be identified and characterized. Based on the RFP, the following elements will comprise the initial list of elements: 1 – Wastewater Reuse; 2 – Satellite Wastewater Reuse; 3 – Scattered Wells; 4 – Focused Recharge and Well Field; 5 – Plume Management; 6 – Intentional Recharge; 7 – Regional Surface Water Treatment Facilities; 8 – Small Package Surface Water Treatment Facilities; 9 – Water Conservation; 10 – Wastewater Reuse on Agricultural Lands; 11 – Untreated Surface Water Use for Public Landscape Irrigation; 12 – Additional Storage in the Kings River System; 13 – Additional Storage in the San Joaquin System; 14 – Adapting Flood Control Storage for Storage of Surface Supplies; 15 – Large-scale Water Importation; 16 – Cloud-seeding/Weather Modification; 17 – Desalination of Brackish Agricultural Drainage; 18 – Desalination of Seawater; 19 – Graywater; 20 – Other.
 - (2) Characterize high level cost, yield, and reliability
- Screen water supply elements for potential inclusion in Water Supply Alternatives

2.3 Water Supply Alternatives Development

- Establish screening criteria for water supply alternatives. Based on the RFP, the following criteria will be considered: 1: Capital Costs; 2: Approximate Rate Impacts; 3: Water Budget Impacts; 4: Drought Resiliency; 5: Groundwater Response (qualitative); 6: Response to Regulatory Changes; 7: Compatibility with Phased Construction; 8: Ease of Implementation; 9: Environmental and Socioeconomic Impacts; 10: Ability to Accommodate Changing Land-Use Plans; 11: Maximize Availability of Supplies
- Develop and summarize different Water Supply Alternatives. Develop initial alternatives based on themes, such as surface water emphasis or recycled water emphasis, using screened elements. Alternatives must meet minimum level of service goals established in Phase 1, such as minimum drought yield and maximum unit cost.
 - (1) Up to 10 alternatives or sub-alternatives are assumed, including Status Quo (No Project)

- Define alternatives characteristics to support multi-criteria evaluation, such as lifecycle cost, yield, reliability, permitting, phasing, and implementation considerations. Alternative descriptions will include operational considerations and physical facilities.

2.4 Alternatives Evaluation

- Conduct multi-criteria analysis of water supply alternatives
- Review findings with the City and select up to 3 alternatives for sensitivity and resiliency analysis. The process is iterative, and alternatives will likely be refined as they are evaluated prior to selection of a preferred alternative.
- Conduct sensitivity analysis that considers different criteria weightings and resiliency analysis that considers potential future scenarios, such as climate change or natural disasters. If a portfolio scores well in a sensitivity analysis, the analysis demonstrates the strength of the portfolio independent of weighting factors or scoring.
- Identify recommended alternative

2.5 Admin Draft Report

- Prepare Admin Draft Report that summarizes the work completed in Phase 2.
- Implement WSC QA/QC practices.
- Submit Admin Draft Report for City review and comment.

DELIVERABLE(S): Seven (7) hard-copies and one electronic copy of the Admin Draft Report.

2.6 Draft Report

- Prepare Draft Report that incorporates comments from the City on the Admin Draft Report. Complete WSC QA/QC practices.
- Submit Draft Report for City and stakeholder review and comments.

DELIVERABLE(S): Fifteen (15) hard-copies and one electronic copy of the Draft Report.

2.7 Final Report

- Prepare Final Report that incorporates comments from the City and stakeholders on the Draft Report.

DELIVERABLE(S): Fifteen (15) hard-copies and one electronic copy of the Final Report.

TASK 3.0 PHASE 3 - FUTURE WATER SUPPLY PLAN

This task entails conducting the work to develop the content and prepare the Prepare Phase 3 Report. The Phase 2 Report is expected to include the following topics::

1. Future Water Supply Plan

- 1.1. Summary of Current Supply and Demand Conditions

- 1.1.1.2019 Demand
- 1.1.2.2019 Supply
- 1.1.3.2019 Groundwater Recharge
- 1.2. Summary of Projected Water Demands and Available Supplies
 - 1.2.1. Projected Future Water Demands
 - 1.2.2. Future Available Water Supplies
- 1.3. Future Water Supply Plan Objectives and Goals
- 1.4. Future Supply Components
 - 1.4.1. Water Conservation
 - 1.4.2. Groundwater
 - 1.4.3. Surface Water
 - 1.4.4. Recycled Water
 - 1.4.5. Future New Water
- 2. Future Additional Water Conservation Measures**
 - 2.1. Future Water Conservation Program Objectives, Goals, and Policies
 - 2.1.1. Water Conservation Objectives
 - 2.1.2. Water Conservation Goals
 - 2.1.3. Water Conservation Policies
 - 2.2. Potential Future Water Conservation Measures
 - 2.2.1. Conservation Measure 1
 - 2.2.2. Etc.
 - 2.3. Recommended Conservation Priorities
- 3. Future Groundwater**
 - 3.1. Future Groundwater Objectives, Goals, and Policies
 - 3.1.1. Groundwater Objectives
 - 3.1.2. Groundwater Goals
 - 3.1.3. Groundwater Policies
 - 3.2. Future Groundwater Use
 - 3.2.1. Projected Future Groundwater Pumpage
 - 3.2.2. Projected Groundwater Quality and Treatment Needs
 - 3.3. Future Groundwater Recharge
 - 3.3.1. Natural Groundwater Recharge
 - 3.3.2. Required Future Intentional Groundwater Recharge
 - 3.4. Future Groundwater Response
- 4. Future Surface Water**
 - 4.1. Future Surface Water Objectives, Goals, and Policies
 - 4.1.1. Surface Water Objectives
 - 4.1.2. Surface Water Goals
 - 4.1.3. Surface Water Policies
 - 4.2. Future Surface Water Use
 - 4.2.1. Future Surface Water Treatment and Direct Use
 - 4.2.2. Future Intentional Groundwater Recharge
 - 4.2.3. Future Groundwater Banking
- 5. Future Recycled Water**
 - 5.1. Future Recycled Water Objectives, Goals, and Policies
 - 5.1.1. Recycled Water Objectives
 - 5.1.2. Recycled Water Goals
 - 5.1.3. Recycled Water Policies

- 5.2. Future Recycled Water Use
 - 5.2.1. Future Recycled Water Use Areas
 - 5.2.2. Projected Future Recycled Water Demand
 - 5.2.3. Future Tertiary Plant
- 5.3. Recycled Water Master Plan
- 6. Future New Water Supply Sources**
 - 6.1. New Water Supply Objectives, Goals, and Policies
 - 6.1.1. New Water Supply Objectives
 - 6.1.2. New Water Supply Goals
 - 6.1.3. New Water Supply Policies
 - 6.2. Potential New Water Supplies
 - 6.2.1. Additional Surface Water Supplies from FID
 - 6.2.2. New Surface Water supplies from Temperance Flat Reservoir Project
 - 6.2.3. Groundwater Banking
 - 6.2.4. Water Supply Purchases on the Open Market
 - 6.2.5. Additional Recycled Water
 - 6.2.6. Additional Water Conservation
 - 6.3. Incorporation of Future New Water Supplies
 - 6.3.1. New Surface Water Supplies
 - 6.3.2. Groundwater Banking
 - 6.3.3. Additional Recycled Water Supplies
- 7. Required infrastructure to Support Future Water Supply Plan**
 - 7.1. Surface Water Treatment
 - 7.2. Groundwater Production and Treatment
 - 7.2.1. Groundwater Production
 - 7.2.2. Groundwater Treatment
 - 7.3. Potable Water System
 - 7.3.1. Potable Regional Water Transmission and Transmission Grid Main System
 - 7.3.2. Potable Water Distribution System Storage
 - 7.4. Recycled Water Treatment, Storage, and TGM System
 - 7.4.1. Estimated Recycled Water Deliveries
 - 7.4.2. Recycled Water Distribution
 - 7.4.3. Recycled Water Seasonal Storage
 - 7.5. Recharge Facilities
 - 7.6. Capital Costs for Required Infrastructure
 - 7.6.1. Surface Water Treatment
 - 7.6.2. Groundwater Production
 - 7.6.3. Groundwater Treatment
 - 7.6.4. Regional Water System Transmission and Transmission Grid Main System
 - 7.6.5. Treated Water Storage
 - 7.6.6. Recycled Water Facilities
 - 7.6.7. Recharge Facilities
 - 7.6.8. Summary of Capital Costs
 - 7.7. Operation and Maintenance Costs for Required Infrastructure
 - 7.7.1. Surface Water Treatment
 - 7.7.2. Groundwater Production
 - 7.7.3. Groundwater Treatment
 - 7.7.4. Recycled Water Treatment and Seasonal Storage Facilities

7.7.5. Groundwater Recharge Facilities

7.7.6. Summary of O&M Costs

8. Plan Implementation

8.1. Recommended Facility Prioritization and Operational Strategies

8.1.1. Overview of Recommended Water supply Plan

8.1.2. Recommended Implementation Priorities

8.1.2.1. Water Conservation

8.1.2.2. Surface Water Treatment Facilities

8.1.2.3. Major Transmission Mains and Transmission Grid Mains

8.1.2.4. Groundwater Production and Wellhead Treatment Facilities

8.1.2.5. Groundwater Recharge

8.1.2.6. Recycled Water Facilities

8.1.2.7. New Water Supply Facilities

8.1.3. Recommended Water System Operational Strategies

8.1.3.1. Operational Strategy for Use of Treated Surface Water in Conjunction with Groundwater

8.1.3.2. Operational Strategy for Groundwater Recharge Basins

8.2. Allocation of Future Water Supply Plan Facility Costs

8.2.1. Estimated Costs for the Future Water Supply Plan

8.2.1.1. Capital Costs

8.2.1.2. Operational and Maintenance Costs

8.2.2. Cost Allocation to Existing Rate Payers and New Growth

8.2.2.1. Allocation Methodology

8.2.2.2. Allocation to Existing Rate Payers

8.2.2.3. Allocation to New Growth

8.3. Required Cash Flow

8.4. Potential Funding Sources

8.4.1. Potential Financing Options

8.4.2. Potential Cost-Sharing Opportunities

8.4.3. Potential Grant and Loan Opportunities

8.4.3.1. Federal Funding Programs

8.4.3.2. State Funding Programs

8.4.3.3. Other Potential Funding Programs

8.4.3.4. Applicability to the City's Future Water Supply Plan Projects

8.4.4. Funding Recommendations

8.4.4.1. Future Water System Revenue Bonds

8.4.4.2. Additional Studies

8.4.4.3. Pursuit of Available Grants and Loans

8.5. Institutional Plan

8.5.1. Institutional Plan Elements

8.5.2. Lead Agency Designation

8.5.3. Owner for Key CIP/O&M Components

8.5.4. Required Agreements

8.5.5. Key Planning and Policy changes

8.5.6. New Required Staff

8.5.7. Implementation Schedule

The outline above may be modified based on findings from the analysis in this phase, and with approval from the City.

3.1 Kick-off Meeting, Meetings (2) & Workshops (3)

- Plan, organize and conduct Meetings and Workshops to support Phase 3 Report development.
- Anticipated meetings for Phase 3 are:
 - (1) Phase 3 Kickoff Meeting
 - (a) Review preferred alternative
 - (b) Develop vision for future water supply plan
 - (2) Phase 3 Admin Draft Review Meeting
 - (3) Phase 3 Draft Review Meeting
- Anticipated workshops for Phase 3 are:
 - (1) Future Water Supply Plan Workshop
 - (2) Future Water System Workshop
 - (3) Implementation Plan Workshop
- Assumptions. It is assumed that the Workshops/Meetings will be held in-person (if possible under COVID19 response actions) and will last for a duration of 4 hours, attended by up to 4 WSC staff.

DELIVERABLE(S): Electronic copies of agenda and meeting materials at least five (5) working days prior to the meeting. Summary of action items within five (5) working days following the meeting.

3.2 Future Water Supply Plan

- Develop summary of current and future water supply and demand conditions.
- Develop summary of future water supply planning objectives and goals.
- Refine Supply/Demand Analysis Tool for submittal to City and inclusion with Phase 3 report.

3.3 Future Supplies

- Develop program specific elements from the Preferred Water Supply Alternative and the Future Water Supply Plan for the following supply components:
 - (1) Additional Water Conservation Measures
 - (2) Groundwater
 - (3) Surface Water
 - (4) Recycled Water
 - (5) New Water Supply Sources

(6) Others (if applicable)

3.4 Infrastructure to Support Future Water Supply Plan

- Develop summary of the required infrastructure required to support the individual components of the Preferred Water Supply Alternative and the Future Water Supply Plan.
- WSC will coordinate with the hydraulic model consultant to perform various model scenarios to validate alternative project(s). WSC will provide the model consultant data, shapefiles, and other information needed to perform the necessary modeling scenarios. The hydraulic model consultant has a fully operational model of the City's water system.
- Develop project Capital and Operations and Maintenance cost estimates for each of the required infrastructure components.
- Assumption: Any hydraulic modeling necessary to support the development of the Infrastructure to Support Future Water Supply Plan and other required tasks will be performed under a separate contract.

3.5 Plan Implementation

- Develop an implementation plan that includes:
 - (1) implementation actions, including any potential challenges
 - (2) prioritized list of projects and a detailed 5-year CIP for near-term projects
 - (3) a timeline, including any triggers that would necessitate future water supply projects
 - (4) allocation of costs between existing rate payers and new development
 - (5) identification of financing options
 - (6) institutional planning needs
 - (7) recommended policies that can be used to guide City's water program

3.6 Admin Draft Report

- Prepare Admin Draft Report that summarizes the work completed in Phase 3.
- Implement WSC QA/QC practices.
- Submit Admin Draft Report for City review and comment.

DELIVERABLE(S): Seven (7) hard-copies and one electronic copy of the Admin Draft Report.

3.7 Draft Report

- Prepare Draft Report that incorporates comments from the City on the Admin Draft Report. Complete WSC QA/QC practices.
- Submit Draft Report for City and stakeholder review and comments.

DELIVERABLE(S): Fifteen (15) hard-copies and one electronic copy of the Draft Report.

3.8 Final Report

- Prepare Final Report that incorporates comments from the City and stakeholders on the Draft Report.
- Submit GIS shapefiles used to develop the report figures and Excel-based tool sets developed during preparing of Phase 1, Phase 2, and Phase 3 works, including: Groundwater Water Balance Tool, Decision Support Tool, and Supply / Demand Analysis Tool.
- Prepare PowerPoint Presentation for City Council. Make presentations to City Council.

DELIVERABLE(S): Fifteen (15) hard-copies and one electronic copy of the Final Report. Electronic copy of PowerPoint presentation for City Council.

TASK 4.0 PHASE 4 - PROGRAMMATIC/PROJECT ENVIRONMENTAL IMPACT REPORT

4.1 Kickoff Meeting and Review of Available Studies

- This task includes the steps needed to initiate the CEQA environmental review process, including the kickoff meeting and data gathering. As part of this task, we will undertake ongoing environmental coordination with the City.
- We will prepare for and organize a kickoff meeting with City staff. This meeting will occur at the opportune time in the Plan development process to maximize its value. This meeting will serve as a forum to review and confirm study objectives and establish an operational protocol. Working schedules will be finalized and details for scheduled tasks will be discussed. We will use this opportunity to collect any relevant studies and information not already transmitted. A communication plan will be presented during the kickoff meeting.

4.2 Project Description

- Prepare a Project Description for evaluation in the PEIR.
- Textual, tabular, and graphic presentation will be used as necessary to facilitate a thorough understanding of the proposed Plan Update and the specific projects considered. Any potential state or federal permit or consultation requirements will be noted. The project description will discuss features that have been incorporated into the Plan to minimize potential environmental or land use conflicts. A brief discussion of the environmental setting will also be provided. Up to 6 figures will be provided. The project description will include the following elements:
 - (1) The location and boundaries of the proposed plan
 - (2) A statement of objectives sought by the proposed plan, including the underlying purpose of the plan
 - (3) A comprehensive project description and scope
 - (4) A discussion of the benefits of the project

- (5) A statement briefly describing the intended uses of the PEIR, including a list of the agencies that are expected to use the PEIR in their decision making; a list of permits and other approvals required to implement the project; and a list of related environmental review
 - (6) Consultation requirements required by federal, state, or local laws, regulations, or policies
- Assumption: This scope assumes two rounds of review / comment revisions from the City to be provided in a consolidated and electronic, editable format (i.e. track changes in MS Word)

4.3 Project Scoping

- As directed by the RFP, we have included preparation of a Notice of Preparation (NOP) as part of this scope. When an EIR is determined to be necessary, the lead agency need not prepare an Initial Study (Section 15060 (d) of the State CEQA Guidelines). Given the fact that the City has already determined that an EIR is required and the expeditious schedule for the Plan and accompanying CEQA document it is recommended that an Initial Study not be prepared. The NOP will be distributed to relevant responsible and trustee agencies, all cities and counties bordering the city of Fresno, and interested organizations and individuals; the distribution list for the NOP will be determined in coordination between the CEQA team, the Plan team and the City. Publication of the NOP will initiate a 30-day public scoping period for the PEIR.
- Attend and lead a public scoping meeting for the PEIR. We will prepare a sign-in sheet, comment cards, and a PowerPoint presentation for the meeting. We will review responses to the NOP, summarize the NOP comments in the PEIR, and incorporate responses to the comments into the development of the PEIR. If desired, coordination of a scoping meeting can be provided on a time and materials basis, if authorized in advance by the City.
- Assumption: This scope assumes one round of review and consolidated comments from the City on the NOP and draft distribution list.

4.4 Plan/Project Alternatives

- We will participate with City staff during the development of project alternatives. It is assumed that the City and WSC will select a "Preferred Plan Alternative" to be analyzed in depth in the PEIR and up to five (5) specific projects. State CEQA Guidelines require that the PEIR identify and develop a range of reasonable alternatives to the proposed project that meet most of the project objectives and reduce environmental impacts. The Alternatives section of the PEIR will consider the other alternatives as well as the No Project Alternative. The alternatives will be analyzed at a sufficient level of detail so that they could be adopted as the project if needed.
- Assumption: This scope of work assumes analysis of up to two (2) Plan-level alternatives, in addition to the No Project Alternative along with two alternatives aimed at reducing impacts associated with the specific projects included in the Plan Update.

4.5 Technical Reports

- This task involves the preparation of City-compliant technical studies in support of the PEIR. Detailed technical reports may be required for specific resource areas. This scope assumes that

technical studies to be prepared will consist of a Biological Resources Evaluation and a Cultural Resources Survey Report. Preparation of the technical reports will include consultation with applicable federal and state agencies with jurisdiction over resources in the project area.

- Traffic Impact Assessment – Depending on the type and size of the individual projects, a traffic impact assessment may be needed to support the CEQA analysis. However, because water infrastructure projects typically do not generate high levels of vehicle trips during operation it is anticipated that the traffic study would not be needed. If needed, the study would focus on impacts occurring during construction activities, including: a) calculation of vehicle miles traveled from construction worker trips as well as material transport to and from the site and b) impacts to traffic flow and resulting impacts on emergency access and roadway users from lane closures, staging areas, etc. The specific details around the size, type and location of specific projects, which are not known at this time, will determine whether a traffic impact assessment is necessary as well as the associated cost. For the purposes of this proposed scope of work, we have included a cost estimate of \$20,000 for a future potential traffic impact assessment if needed.
- This list of technical studies represents our best professional estimate at this time regarding the studies likely required to be completed to support the PEIR. However, this list is subject to change through the project scoping process. We will notify the City immediately if additional environmental studies are determined to be necessary. If the public review process leads to a determination that additional issues are required for examination or that particular issues require a greater depth of analysis than proposed, additional budget and a modified scope may be required.
- Biological Resources Assessment - The scope for a biological resources assessment has been developed which represents the industry's standard requirements for a typical biological resources investigation. The scope for a biological resources assessment consists of data procurement, literature and database reviews, field surveys, and report preparation that would include a summary of our findings upon completion of the survey efforts. The objectives of the resultant biological report are to support analysis of impacts and development of avoidance, minimization and mitigation measures in accordance with CEQA.

- (1) Data Procurement. Obtain and evaluate baseline data (e.g., aerial photograph, topographic quadrangle, soil survey).

- (2) Literature and Database Reviews. Review and evaluate background information regarding biological resources in the 2020 Metro Plan area (e.g., previously prepared reports, primary literature, Rincon project files, resource agency guidelines and technical reports). Review the official online species list from the United States Fish and Wildlife Service identifying federally listed, proposed, or candidate species that may potentially occur, or be affected by projects, in the Plan area. Review the California Department of Fish and Wildlife Rare Find (otherwise known as the California Natural Diversity Data Base) for reported occurrences of special status species within the 2020 Metro Plan area. In addition to the aforementioned database reviews, we will review the California Native Plant Society Inventory of Rare and Endangered Plants of California for reported occurrences of special status plant species within the study area.
- (3) Field Survey. For areas identified as low potential for impact to biological resources, a vegetation map and potential species occurrence assessment will be generated based on desktop analysis only. Examples of these areas include urban, residential, and industrial areas, which have a low likelihood to support special-status species. We will conduct a reconnaissance-level biological survey of areas with proposed modifications to existing facilities or new planned facilities that are in areas identified as having moderate or high potential for special status species occurrence. Habitat types present and their suitability to support special status species will be documented. The identification and mapping of potential special-status wildlife species or habitat will be based on a suitability analysis only and does not include definitive presence/absence surveys of the species potentially present. That level of analysis would be premature at this time given the programmatic nature of the analysis.
- (4) Reporting. We will prepare a comprehensive report describing the methods and results of the biological resources assessment, including a figure depicting terrestrial vegetation communities, habitat types and other biological features observed during the field reconnaissance survey. The intent of this report is to assist with future project design and/or mitigation planning efforts. A draft report will be submitted to the City for review and comment.
- (5) Assumptions: It is assumed the project area to be surveyed is no more than 200 acres in size (assumes five project sites up to 40 acres each or a combination of five sites of various sizes totaling 200 acres or 40 miles of unpaved pipeline corridor at less than a 30% slope) and that the survey can be completed by two biologists over a period of two days. In each of these cases it is assumed the survey area is located in areas dominated by urban or suburban development or agricultural resources. If pipelines are located within paved areas, such as along roadway rights-of-way, a greater number of miles could be covered in the same amount of time because the survey would be done via windshield. This scope assumes two rounds of review / comment revisions on the draft report from the City to be provided in a consolidated and electronic, editable format (i.e. track changes in MS Word).

- Cultural Resources Evaluation - The Cultural Resources Technical Report will include a discussion of the archaeological and historical characteristics of the 2020 Metro Plan area, based upon readily available information. We will summarize applicable federal, state and local cultural resources regulations. The analysis will assess the existing setting information, and qualitatively determine the likelihood of impacting resources within the 2020 Metro Plan area as a result of future projects. As an industry standard, cultural resources studies are considered valid for up to five years; therefore, future projects within the current study area occurring more than five years from now may require reanalysis. The programmatic analysis does not include site visits or formal pedestrian surveys of the study area.

- (1) For the five specific projects included in the 2020 Metro Plan, we will prepare a project-level assessment at a level of detail commensurate with the level of detail and information available for each project at the time.
- (2) Cultural Resources Background Search. We will conduct a California Historical Resources Information System records search of the 2020 Metro Plan area at the Southern San Joaquin Valley Information Center (SSJVIC) located at California State University, Bakersfield. The primary purpose of the records search is to identify any previously recorded cultural resources known to exist within or near the Plan area. In addition to the archaeological inventory records and reports, an examination will be made of historical maps, the National Register of Historic Places, California Register of Historical Resources, the California Historical Resources Inventory, and the listing of California Historical Landmarks. The records search will also reveal the nature and extent of any cultural resources work previously conducted within the Plan area and adjacent vicinity. A map showing the results of the literature search including areas previously inventoried and previously recorded sites will be provided.

We assume the SSJVIC will conduct this records search within a maximum direct expense of \$1500. As part of the background research, we will request a records search of the Sacred Lands File from the Native American Heritage Commission (NAHC) and will contact individuals and/or organizations who may have knowledge of, or concerns with, historic properties in the area. As many as two telephone calls will be made to each of the contacts from the NAHC and local organizations to document “good-faith” efforts to follow-up and the results will be documented in a table.

- (3) Cultural Resources Technical Study. Upon completion of the records search and literature review, we will conduct a survey of the five project-level site locations. Upon completion of the survey effort, we will prepare a technical report documenting the results of the cultural resources analysis, as well as provide programmatic management recommendations for cultural resources within the 2020 Metro Plan area. The report will be prepared following the California Office of Historic Preservation's Archaeological Resource Management Reports: Recommended Contents and Format, and will include a historic context, methods and impacts considerations. The report will include figures depicting the area surveyed and studied for cultural resources. Draft copies of the report (digital pdf) will be submitted to the lead agency for review and approval. We assume two rounds of comments from the local and federal lead agencies will be necessary. Once reviewed, digital copies of the final report will be prepared and submitted.
- (4) Assumptions: No cultural resources requiring recordation or updating will be identified by the records search or field survey at any of the project-specific locations. Up to 50% of the specific project area will be in undeveloped or rural areas and will be surveyed on foot; the remainder of the specific project area will be in urban or built up areas and will be surveyed via windshield survey only. The cultural resources survey can be conducted by one cultural resources specialist over a period of five days and the survey will not identify any archaeological resources that require recordation or updating. A maximum of three built environment resources will be recorded and evaluated from the field survey. Included in this assumption is that up to 50% of the specific project area will be in undeveloped or rural areas and will be surveyed on foot; the remainder of the specific project area will be in urban or built up areas and will be surveyed via windshield survey only. The cultural resources survey can be conducted by one cultural resources specialist over a period of five days and the survey will not identify any archaeological resources that require recordation or updating. This equates to either 200 acres or approximately 40 miles of pipeline route. This estimate assumes the pipeline route is unpaved and is in terrain in less than 30 degrees slope. For pipeline located within paved areas, such as along roadway right-of-way, a greater number of miles could be covered in the same amount of time because the survey would be done via windshield. Should any additional cultural resources be identified during the survey, the budget would need to be augmented to record or update the resources. No subsurface testing will be conducted, nor will any artifacts, samples, or specimens be collected.

4.6 Admin Draft PEIR

- The PEIR will be prepared in accordance with the State CEQA Guidelines, which set the standards for adequacy of an EIR. Specifically, the State CEQA Guidelines declare that:

- An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible.
- The analysis will rely on available technical reports to streamline the analytical effort, including the previous certified EIR for the Metro Plan. The overall approach to the analysis will be to verify and utilize existing data, supplemented where necessary with new information or modeling, to create a PEIR that maximizes the use of performance standards and/or policies to ensure that implementation of future projects under the 2020 Metro Plan requires minimal or no subsequent environmental review as the design progresses.
- Prepare an Admin Draft PEIR for review by the City. This shall include completion of a table of contents, preparers and reference chapters. This scope assumes two rounds of review by the City, with all comments in each round being provided in a compiled and editable format (i.e. track changes).
- Meet with the City to discuss any concerns, modifications, and input to the analysis and proposed mitigation measures. We assume all comments will clearly indicate the requested changes. It will be the responsibility of City staff to resolve internal inconsistencies among the various commenters.
- Executive Summary - We will prepare a summary of the proposed project and associated environmental consequences. This information will be presented in tabular format to simplify review by decision-makers and the general public. This section will summarize project impacts and proposed mitigation measures. The summary will also note areas of known controversy and will summarize the alternatives reviewed and their associated impacts. The summary will also identify the environmentally superior alternative and rationale for its selection as such.
- Introduction and Environmental Setting - We will prepare an Introduction and Environmental Setting for inclusion in the PEIR. This section will introduce the proposed project and summarize the PEIR process and purpose/use of the PEIR. This section will also explain how the PEIR will be used for subsequent environmental reviews of projects under the 2020 Metro Plan. In addition, the Introduction will provide relevant background information discussion, including but not limited to the organization of the PEIR and previous planning efforts.

The environmental setting will provide narrative and map descriptions of the existing environment. The 2020 Metro Plan area and facilities will be illustrated on mapping. In addition, the geographic character of the area will be described and illustrated here, including land use/zoning, vegetation, wetlands, floodplains and wildland fire hazard zones.
- Environmental Impact Analysis - Each environmental issue addressed in the PEIR will have four main subsections:

(a) Setting

- (b) Impact analysis
- (c) Mitigation measures
- (d) Level of significance after mitigation

The prelude to the topic-specific environmental analysis will include an explanation of how the impact analysis will proceed. It is important to set forth the general analytical framework for addressing the potential impacts and mitigation of future projects under the 2020 Metro Plan. The PEIR will evaluate impacts of the overall program, and detailed impacts of up to five specific projects for a hybrid analysis approach. Where possible, impacts will be quantified. If existing data does not allow definitive quantification, reasonable assumptions will be used to qualitatively forecast potential impacts. Mitigation will take the form of a mitigation framework for future projects in conjunction with the subsequent environmental review process, as needed, and will be based upon mitigation measures identified in the 2014 PEIR for the 2014 Metro Plan, where practicable.

All environmental topics identified in the 2020 CEQA Guidelines will be addressed in the PEIR for the 2020 Metro Plan. The discussion below provides an overview of the approach and anticipated impact types for each environmental topic. As each impact analysis section is prepared, we will compile source reports and other data for inclusion in the administrative record. The State CEQA Guidelines include the following topics:

- (1) Aesthetics
- (2) Agricultural Resources
- (3) Air Quality
- (4) Biological Resources
- (5) Cultural Resources
- (6) Energy
- (7) Geology and Soils
- (8) Greenhouse Gas Emissions
- (9) Hazards and Hazardous Materials
- (10) Hydrology and Water Quality
- (11) Land Use/Policy Consistency
- (12) Mineral Resources
- (13) Noise
- (14) Population/Housing
- (15) Public Services

- (16) Recreation
- (17) Transportation
- (18) Tribal Cultural Resources
- (19) Utilities and Service Systems
- (20) Wildfire

The technical approach to analyzing each potential environmental issue is described below. Based on our understanding of the project, the following environmental issues will be addressed in detail in the EIR: Aesthetics, Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use, Noise, Public Services and Utilities and Service Systems. The remaining issue areas will be address in a section termed Effects Found Not to be Significant.

- Aesthetics, Light and Glare - Construction of the projects considered in the 2020 Metro Plan may cause impacts to the visual environment due to the presence of construction vehicles and equipment. In general, project components are anticipated to be visually compatible with existing and surrounding land uses once constructed. Aesthetic impacts will be evaluated from public viewpoints. The analysis will include review of the visual resource sensitivity of the Plan area, including any scenic resources identified in local planning documents (such as scenic vistas, and scenic highway designation). Photos showing views of the five project sites will be provided to help depict the visual character of the specific sites and the immediate project areas. If necessary, mitigation measures may include screening to buffer views of the project sites from nearby sensitive resources.

- (1) Assumptions: This scope does not include preparation of visual simulations for any of specific projects included in the Plan.

- Agriculture and Forestry Resources - The majority of the service area is designated as “Urban-Built Up Land.” The PEIR will confirm whether there will be an effect on farmland or forestland and whether the 2020 Metro Plan would convert such lands to another use. The analysis will be based on a desktop review only and no field work is anticipated to be required.
- Air Quality - The air quality section will be prepared in accordance with the methodologies outlined in the San Joaquin Valley Air Pollution Control District (SJVAPCD) guidelines. The PEIR will include a detailed discussion of the current air quality setting within the local airshed along with local climatic and air pollution data from local air monitoring stations. Emission factor data, when not identified in the SJVAPCD guidelines, will be obtained from EPA AP-42, Compilation of Air Pollutant Emissions Factors, Third Edition, and any updates published by the U.S. EPA. The motor vehicle constituents of concern include reactive organic gases, nitrogen oxide, carbon monoxide, and particulate matter. Significance criteria will be based on SJVAPCD thresholds.

Construction emissions will be estimated for the Preferred Alternative using estimates of the types of equipment needed for individual construction projects for the worst-case day during construction using the California Emissions Estimator Model (CalEEMod) software. It is

anticipated that the worst-case day analysis at the Plan level will provide a reasonably conservative estimate of the emissions also associated with the five specific projects and a separate air quality model run for each project will not be required.

The section will include a qualitative discussion and analysis of odor or improvements to control due to types of facilities expected to be proposed.

Where necessary, the PEIR will identify programmatic measures required to mitigate air quality impacts identified, such as:

- (1) Dust control measures during construction
 - (2) Measures to minimize or avoid stationary source emission impacts
 - (3) Proposed measures to minimize odor impacts
 - (4) Community Plan design guidelines or standards to promote alternative trip modes
 - (5) Measures to minimize engine idling
 - (6) Development of an air impact fee program
- Biological Resources - The impact analysis will be based on the Biological Resources Assessment and will evaluate the Plan's impacts relative to both state and federal requirements as well as locally recognized thresholds of significance. It will include analysis of both direct and indirect impacts as well as temporary impacts that may occur during construction of projects envisioned by the Plan. The Biological Resources Assessment prepared under Task 5.1 will inform the analysis in this section of the PEIR.
- Avoidance, minimization, and mitigation measures will be developed for all impacts identified. Mitigation measures will focus on measures that will be required to ensure the proposed project adequately avoids, minimizes, and mitigates potential impacts to regulated biological resources.
- Cultural Resources - The PEIR section will be based on the Cultural Resources Study described previously and will include a discussion of the archaeological and historical setting of the Plan area along with the sites of the five projects identified in the Plan, a description of impacts based on the cultural resources technical report and any additional information, and identification of mitigation measures for identified impacts. The section will summarize applicable federal, state and local cultural resources regulations. The analysis will assess the existing setting information and qualitatively determine the likelihood of impacting resources resulting from Plan implementation. Mitigation measures will be proposed, as appropriate, to reduce potential impacts to cultural resources, where practicable.

- Energy - As of January 3, 2019, Appendix G of the State CEQA Guidelines now requires a discussion of the energy impacts of proposed projects, with an emphasis on avoiding or reducing wasteful consumption of energy and supporting applicable renewable energy plans. The analysis will consider at a programmatic level the Plan's energy requirements and quantify, as feasible, the energy use efficiencies by amount and fuel type at a programmatic level, including construction and operation of the individual projects, and the degree to which the Plan complies with existing energy standards and local plans for energy efficiency. This analysis will describe program commitments, design features, and mitigation measures, if necessary, to minimize and reduce the Plan's consumption of fuel and energy.
- Geology and Soils - The 2020 Metro Plan area is largely previously disturbed and developed. The analysis in the PEIR will summarize the results of existing geotechnical investigations prepared for previous projects, if available, and identify existing regional and site-specific geology and soils constraints (such as liquefaction, compressible soils, and subsidence).

Under the 2020 CEQA Guidelines, Paleontological Resources will also be addressed under Geology and Soils. We will conduct a paleontological resources assessment to identify the geologic units within the 2020 Metro Plan area, determine the paleontological sensitivity of geologic units, assess potential for impacts to paleontological resources, and recommend mitigation measures to avoid, minimize or mitigate impacts to scientifically significant paleontological resources. We will conduct a formal paleontological locality search to provide documentation of any previously recorded paleontological resources from within the Plan area or within outcrops of the same geologic units that occur in the vicinity. Published and unpublished literature and geologic maps will be reviewed in order to assess the paleontological resource potential of the study area. The analysis of paleontological resources will discuss the regulatory setting for paleontological resources, the geology of the project area in terms of paleontological sensitivity, present the results of the paleontological sensitivity analysis, summarize and discuss previously recorded fossil localities within the project areas (if any), provide an assessment of potential impacts to paleontological resources from project development, and present paleontological resource mitigation recommendations.

(1) Assumption: Direct cost of the formal locality search will not exceed \$500 and no paleontological field survey will be required.

- Greenhouse Gas Emissions - The PEIR will evaluate impacts related to greenhouse gases (GHGs) and climate change. We will analyze impacts associated with construction and operational GHG from the project, as well as project consistency with available local plans. The analysis will quantitatively assess project-related GHG emissions using CalEEMod. We will briefly describe the status of applicable regulations such as Assembly Bill 32 (Global Warming Solutions Act), Senate Bill 97, and Senate Bill 32, taking into account the Senate Bill 32 GHG reduction target of 40 percent below 1990 levels by 2030. If significant GHG emissions impacts are identified, mitigation measures will be developed to avoid, minimize or mitigate such impacts to less than significant levels, if feasible.

The scientific knowledge, governmental regulations, and case law surrounding the analysis of GHG emissions under CEQA is constantly evolving and is currently being litigated in a variety of court cases across California. Additionally, lead agencies have discretion to develop their preferred approach to performing climate change analysis for projects and may adjust their views on acceptable methodologies on pace with changes in scientific knowledge and regulatory schemes. As such, the appropriate methodologies to evaluate the significance of project-level GHG emissions are subject to change at any time. This scope represents our best understanding of currently accepted methodologies.

We will work closely with the City to coordinate information regarding sustainability features that may be included in the projects considered under the Plan. If the projects will include features to reduce energy use at the site, GHG emissions reductions from project sustainability features will be calculated using CalEEMod, and the net decrease in total Plan GHG emissions will be identified.

- Hazards and Hazardous Materials - Hazard conditions associated with the proposed project will be examined in the PEIR, based upon publicly available data from agency databases, field observations, and technical studies provided by the City, if any. This scope does not include site-specific soil contamination studies due to the programmatic nature of the PEIR. Should analysis of the existing environment for hazards indicate that study of site-specific soil contamination conditions is warranted for future work on a given project site, we will recommend that analysis be conducted at a project level, rather than programmatic. We will provide program-level mitigation, if needed, establishing performance standards to address hazardous materials concerns if site-specific analysis is to be conducted at a later date.

(1) Assumption: No site-specific soil contamination studies will be prepared.

- Hydrology and Water Quality - We will summarize existing water quality conditions in the Plan area. The characteristics of the local watershed will be characterized, impaired streams within the watershed will be identified, and flood hazard zones will be described using FEMA and other publicly available mapping. We will assess existing runoff conditions and character of surface water features and will programatically evaluate the impacts of the Plan on surface runoff and changes in drainage patterns. Changes to the groundwater table as a result of Plan implementation will be based on the results of the water budget analysis. We will summarize the hydrologic and water quality setting, relevant regulatory framework, potential impacts, level of significance, and mitigation measures necessary to reduce impacts.
- Land Use/Policy Consistency - This section will discuss general land use compatibility, as necessary, but will focus on the consistency of the 2020 Metro Plan with the applicable local and regional planning documents, such as the City of Fresno General Plan. The 2020 Metro Plan projects are expected to be consistent with existing policies and ordinances, and this will be confirmed in the analysis.

- Mineral Resources - According to the City of Fresno General Plan EIR, the San Joaquin River resource area, which contains a high concentration of aggregate materials, is located in the City's sphere of influence. This section will discuss impacts to mineral resources and will determine whether any project elements of the 2020 Metro Plan overlap with the San Joaquin River resource area. Impacts to mineral resources are not anticipated based on information from applicable plans and regulations.
- Noise - No long-term increase in peak hour trip generation is anticipated from the 2020 Metro Plan; therefore, the analysis will focus on long-term changes to equipment noise throughout the Plan area. The analysis will review applicable City noise and land use compatibility criteria for the Plan area. For each of the five specific projects, up to three short-term noise level measurements will be conducted on and around the sites (up to 15 total measurements).

Construction noise will be estimated at nearby sensitive receptors and evaluated in terms of maximum levels (Lmax) and hourly equivalent continuous noise levels (Leq). Impacts associated with construction vehicular traffic will be assessed using the U.S. Federal Highway Traffic Noise Model (TNM) based on information to be provided by the City. In some cases, the individual components of the proposed projects may contribute to an overall reduction in noise generated by on-site equipment, given ongoing improvements in technology. Mitigation measures will be provided as necessary that establish noise performance standards to reduce impacts to less than significant levels.

(1) Assumption: Up to 15 short-term noise measurements will be conducted; 24-hour noise measurements are not anticipated to be required and are not included in this scope.

- Population/Housing - Implementation of the 2020 Metro Plan would occur in line with the current City of Fresno General Plan, including with respect to growth projections for population and housing. The PEIR will provide information and analysis to demonstrate that the 2020 Metro Plan would not result in growth inducement or residential displacement.
- Public Services - This analysis will evaluate the 2020 Metro Plan's effects related to the provision of services, including fire, law enforcement, educational, and recreational services. Data sources will include readily available documents, including contact with local service providers. The 2020 Metro Plan is not anticipated to impede or require expanded or revised public services.
- Recreation - The PEIR will assess potential impacts of the 2020 Metro Plan to nearby recreational resources and opportunities. The 2020 Metro Plan is not anticipated to affect recreational facilities, resources, or opportunities.

- Transportation - The PEIR will qualitatively describe traffic and transportation conditions in the 2020 Metro Plan service area. This section will qualitatively analyze anticipated operational and construction-related impacts resulting from implementation of the 2020 Metro Plan. Operation of projects considered by the Plan are anticipated to result in trip generating uses similar to current conditions. However, construction of the project could have the potential to create temporary increases in trips, and temporary impacts to transportation facilities (e.g. lane closures associated with installation of in-road facilities). Mitigation is likely to focus on control measures, such as coordination with agencies and effective development and implementation of traffic control plans during construction. Also, given the timing of the EIR a vehicle-miles traveled (VMT) analysis will be required per the updated State CEQA Guidelines. While VMT increases are anticipated to short-term and temporary and related primarily to construction activities, the analysis will make an estimate of construction-related VMT and characterize this construction phase impact; anticipated to be less than significant.
 - (1) Assumption: Based on information available at this time it is assumed a qualitative analysis will be sufficient to inform the analysis of the project and a quantitative traffic impact analysis prepared by a traffic engineering firm will not be required. However, if based on discussions with the City and/or the scoping process it is determined a full traffic impact analysis is needed, we have established relationships with a number of local traffic firms who we would bring on in a subconsultant role to assist with this effort.
- Tribal Cultural Resources - Tribal cultural resources were not addressed in the 2014 PEIR and will be addressed in accordance with the 2020 CEQA Guidelines. Under Assembly Bill 52, the CEQA lead agency is required to begin consultation with California Native American tribes traditionally and culturally affiliated with the project area prior to the release of the CEQA document. We will assist the City with undertaking a good faith effort at consultation for Assembly Bill 52 as described below.
 - (1) Preparation of the Tribal Cultural Resources section of the PEIR will analyze the 2020 Metro Plan's potential impacts on tribal cultural resources. To prepare this analysis, we will review the draft plan and proposed future projects as well as information obtained during Assembly Bill 52 consultation between the City and interested tribes. We will assist the City with government-to-government Native American consultation as follows:
 - (a) Prepare the Assembly Bill 52 consultation letters to be placed on City letterhead
 - (b) Prepare and submit a Native American Heritage Commission (NAHC) Sacred Lands File request
 - (c) Prepare a tracking sheet and instructions to be provided to the City; instructions will include details regarding schedule and timelines associated with Assembly Bill 52 to ensure timely consultation

- (d) If meetings with Native Americans are necessary, we will be available to provide additional assistance on a time-and-materials basis, if requested.

We will collect regional background information on tribal cultural resources that could be affected by the 2020 Metro Plan. The collected information will include the NAHC Sacred Lands File Search, reviews of regional ethnographic information, information from relevant past projects, and information provided through government-to-government tribal consultation in accordance with Assembly Bill 52. We are acutely sensitive to tribal concerns in the area and will provide the support necessary to facilitate a communicative and streamlined consultation process.

- Utilities and Service Systems - The PEIR will evaluate the 2020 Metro Plan's potential impacts to existing infrastructure, including with respect to water, wastewater, and solid waste facilities. Construction activities would temporarily generate solid waste such as soil, concrete, and other removed materials; the PEIR will describe that solid waste generated by construction of individual projects would be disposed of in accordance with all applicable statutes and regulations and will evaluate whether nearby landfills have the capacity to accept solid waste generated by project construction activities. This section will further discuss how the project relates to conformance with applicable Regional Water Quality Control Board wastewater treatment requirements, the impacts on-or of- any related utility improvements (e.g. stormwater improvements), required water supply entitlements, or wastewater expansion.
- Wildfire - This section will include a discussion of the Plan area along with mapping of very high fire hazard severity zones with respect to facilities included in the Plan. This section will address the potential for implementation of the Plan to impair an emergency response plan or emergency evacuation plan; exacerbate wildfire risks due to slope, prevailing winds or other factors; require installation or maintenance of infrastructure which may exacerbate fire risk; expose people or structures to downstream flooding or landslides from postfire slope instability or drainage changes.
- Alternatives - The alternatives developed as described above will be evaluated at a level of detail that will provide decision-makers and the public adequate information to decide among alternatives. For each of the selected alternatives, each environmental issue area will be briefly evaluated in a qualitative manner to determine whether the alternative would have the potential to result in greater, similar, or reduced environmental impacts when compared to the impacts of the preferred alternative. Where appropriate and feasible, quantitative comparisons will be provided. The results of the alternatives analysis will be summarized graphically in a comparison matrix. This section will also identify the "environmentally superior alternative." If the No Project Alternative is determined to be environmentally superior, the PEIR will identify the environmentally superior alternative among the remaining scenarios.
- Other CEQA-Required Sections - The PEIR will include all other sections required by the State CEQA Guidelines, including growth inducing impacts and irreversible significant effects.

The growth-inducing impacts section of the PEIR will focus on the extent to which implementation on the 2020 Metro Plan will serve as the removal of a barrier to growth. This evaluation will be based on project growth trends relative to infrastructure capacity, as coordinated in local and regional planning documents, such as the General Plan and its PEIR.

DELIVERABLE(S): Seven (7) hard-copies and one electronic copy of the Admin Draft PEIR.

4.7 Public Draft PEIR

- After receiving comments regarding the Administrative Draft PEIR, we will revise the PEIR to address comments, and produce the public Draft PEIR with Technical Appendices. Upon receiving clearance, we will print and deliver 15 printed copies, one electronic PDF file and one electronic MS Word document. We will be responsible for posting of all notices, including posting the Notice of Availability with the County Clerk and State Clearinghouse. We will coordinate with the City to prepare a list of recipients of the Notice of Availability and prepare the Notice of Availability, which can also function as the newspaper notice.
- The consultant team shall prepare for and attend two public hearings or meeting in support of the project. The public hearings/meetings will include a presentation of environmental components of the PEIR and a response to technical questions that arise during the public hearing. Following the public hearings/meetings, meeting notes will be prepared, and written and oral comments will be collected and summarized for submittal to the City for review.
- Assumption: This scope includes up to two rounds of consolidated comments from the City on the Administrative Draft PEIR prior to preparation of the Public Review Draft PEIR. We assume the City will be responsible for publication of the Notice of Availability in a newspaper of general circulation and payment of any publication and filing fees. We can coordinate these efforts, if desired, for an additional cost.
- Complete WSC QA/QC practices.

DELIVERABLE(S): Fifteen (15) hard-copies and one electronic copy of the Public Review Draft PEIR.

4.8 Final PEIR and MMRP

The final formal stages of the PEIR process involve responding to comments, public hearings, and final publication tasks.

- Response to Comments/Administrative Final PEIR - Following the close of the public review period, we will review the comments and schedule a meeting with the City to discuss key comments and approaches for response. Comment letters will be annotated to relate comments with responses. Responses will focus on comments raising an environmental concern and generally rely on substantial evidence already in the Draft PEIR, as well as supplemental clarification or explanation. We will prepare draft Response to Comments for City review. Revisions to the Draft PEIR will be in an Errata format/section indicating what section is being modified, with content changes identified in a strikeout (for deletions) and underline format (for additions).

- (1) Assumption: No more than 20 comment letters will be received, and no more than 60 hours of professional time will be required to respond to public comments on the Draft PEIR. This scope assumes two rounds of review/comment revisions from the City, with comments provided in a consolidated and editable format (i.e. track changes).
- Publication of the Final PEIR - We will revise the Final PEIR based on City comments. We will distribute the responses to comment to agencies which commented on the Draft PEIR, via certified mail or other trackable delivery means. In accordance with CEQA requirements, distribution will take place at least 10-days prior to certification of the PEIR by the City. We will provide 15 printed copies, one electronic PDF file and one electronic MS Word document.
- (1) Assumption: The consultant team shall prepare for and attend one public hearing on the Final PEIR.
- Findings of Fact - We will prepare the CEQA findings for the project. CEQA Guidelines §15091 requires that no public agency approve or carry out a project, for which an EIR has been completed and identifies one or more significant effects, unless the public agency prepares findings for each significant effect. The findings will include information related to whether those significant impacts identified in the PEIR will be reduced to below a level of significance by mitigation measures identified in the PEIR. CEQA Guidelines §15093 requires when an agency approves a project which will have a significant adverse environmental effect that is unavoidable, the agency must make a Statement of Overriding Considerations. If a significant and unavoidable impact is identified in the PEIR, we will prepare the Statement of Overriding Considerations. We will provide an administrative draft of the CEQA findings to the City for review and comment, and then incorporate one round of consolidated City comments into a final document.
 - Notice of Determination - We will prepare and file the Notice of Determination with the County Clerk and the State Clearinghouse in conjunction with the City. We assume the City will provide the required administrative and California Department of Fish and Wildlife filing fees prior to filing.
 - Mitigation Monitoring and Reporting Program - A Mitigation Monitoring and Reporting Program (MMRP) will be prepared in accordance with CEQA. The MMRP will be provided as a separately bound document from the Final PEIR. The MMRP will be prepared with the Final PEIR, to capture potential revisions associated with reviews of the Draft PEIR. The MMRP will include implementation measures appropriate for future projects under the 2020 Metro Plan, and will identify the appropriate party responsible for implementation, monitoring, capital costs, and confirmation of implementation. The MMRP will be designed to facilitate accomplishment of the 2020 Metro Plan goals.
- (2) Assumption: This scope assumes two rounds of review / comment revisions from the City to be provided in a consolidated and electronic, editable format (i.e. track changes in MS Word).

DELIVERABLE(S): Fifteen (15) hard-copies and one electronic copy of the Draft Report.

TASK 5.0 2020 UWMP

Develop a 2020 UWMP according to the 2020 DWR UWMPs Guidebook for Urban Water Suppliers and meet all requirements of California Water Code, §10610-10656 and §10608. The guidebook has not been released. Therefore, the scope and level of effort are based on our understanding of potential requirements. This may need to be revisited once the guidebook is released.

- Assumption: It is assumed that the City's existing Water Shortage Contingency Plan (WSCP) and related information will be used to update the WSCP. WSC will provide suggestions for modifying the WSCP to the City on how the existing plan might be modified to be consistent with guidelines established by DWR. It is assumed that WSC will adapt existing information to DWR's new requirements to the extent possible with information provided by the City. Any additional analysis or information needed to meet DWR's requirements is not included within the Cost Proposal for this task.

5.1 Kickoff Meeting & Workshops (3)

- By January 2021, plan, organize, and conduct Kickoff Meeting
 - (1) Discuss and agree on assumptions for use in the UWMP knowing that the Phase 2 Metro Plan work will not be complete in time for full incorporation into the UWMP. Key assumptions include: supply projections and priorities; conservation measures
- Attend and conduct up to three (3) workshops with City staff to develop chapters, concepts, goals.

5.2 Preliminary UWMP Sections

- Prepare UWMP sections as the content is developed during Phase 1 Metro Plan activities.

5.3 Admin Draft UWMP

- Compile full UWMP report consistent with legislative and DWR guideline requirements.
- Implement WSC Quality Assurance and Quality Control (QA/QC) practices.
- Submit to the City for review and comment.

DELIVERABLE(S): Seven (7) hard-copies and one electronic copy of the Admin Draft UWMP.

5.4 Public Draft UWMP

- Prepare Public Draft UWMP that incorporates comments from the City on the Admin Draft Report. Complete WSC QA/QC practices.
- Submit Public Draft UWMP to City for distribution.
- Prepare PowerPoint Presentation for Public Outreach Events.

DELIVERABLE(S): Twenty (20) hard-copies and one electronic copy of the Public Draft UWMP

5.5 Final Draft UWMP

- Review comments on the Public Draft UWMP with the City. Prepare the Final Draft UWMP that incorporates agreed upon comments. Complete WSC QA/QC practices.
- Submit Final Draft UWMP to City for City review and comment.
- Prepare PowerPoint Presentation for City Council. Make presentations to City Council for Public Hearing and subsequent plan adoption.

5.6 Final UWMP

- Prepare Final UWMP that incorporates comments from the City on the Final Draft Report. Complete WSC QA/QC practices.
- Submit Final UWMP and Excel tables to the City for posting to DWR.
- Submit UWMP database for modification for future reporting requirements.
- Revise UWMP to address comments from DWR, if any, and provide copies of revised chapters.

DELIVERABLE(S): Twenty (20) hard-copies and one electronic copy of the Final UWMP

Excluded Services

Optimatics Analysis

- This scope of work does not include the use of Optimatics optimization techniques to support the water supply alternatives analysis.

Hydraulic Modeling

- This scope of work does not include detailed hydraulic modeling to support to the evaluation of the existing water resource systems or potential future alternatives.

Master Plans

- This scope of work does not include completion of detailed Master Plans for the Water, Wastewater, Recycled Water, Stormwater or other water related treatment and conveyance systems.

Public Relations and Strategic Communications

- This scope of work does not include public relations or strategic communications support, such as Council or Commission hearing presentations or attendance, informational handouts, etc. *in addition to the materials included as deliverables in the scope of work.* It is assumed that City Staff will lead public and elected official outreach efforts related to the development of the update Metro Plan.

SCHEDULE OF FEES

[See Attached]



2020 Classifications and Rates

Labor Classification	Hourly Rate
Engineers / Project Managers / Planners / Hydrogeologists	
Engineering Intern	\$115
Assistant	\$135
Staff I	\$145
Staff II	\$155
Staff III	\$165
Associate I	\$180
Associate II	\$190
Associate III	\$200
Senior I	\$220
Senior II	\$230
Senior III	\$240
Principal I	\$250
Principal II	\$280
Principal III	\$305
Outreach and Communications	
Communications Support I	\$120
Communications Support II	\$140
Communications Support III	\$160
Outreach Specialist/Facilitator I	\$175
Outreach Specialist/Facilitator II	\$220
Outreach Specialist/Facilitator III	\$265
CAD Design Services	
Technician/Designer I	\$120
Technician/Designer II	\$135
Technician/Designer III	\$155
Inspection Services	
Inspector I	\$125
Inspector II	\$140
Inspector III	\$165
Inspector (Prevailing Wage)	\$170
Administrative Services	
Administration/Clerical I	\$120
Administration/Clerical II	\$130
Administration/Clerical III	\$145

10% mark-up on direct expenses; 10% mark-up for sub-contracted services

Standard mileage rate \$0.57 per mile (or current Federal Mileage Reimbursement Rate)

Airplane mileage rate \$1.27 per mile (or current Federal Airplane Mileage Reimbursement Rate)

Rates are subject to revision as of January 1 each year.

Exhibit B

INSURANCE REQUIREMENTS

Consultant Service Agreement between City of Fresno (“CITY”) and Water Systems Consulting, Inc. (“CONSULTANT”)

2020 Metropolitan Water Resources Management Plan and Programmatic
Environmental Impact Report, and 2020 Urban Water Management Plan

PROJECT TITLE

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for “bodily injury,” “property damage” and “personal and advertising injury” with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under “Minimum Limits of Insurance.”
2. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto).
3. Workers’ Compensation insurance as required by the State of California and Employer’s Liability Insurance.
4. Professional Liability (Errors and Omissions) insurance appropriate to CONSULTANT’S profession.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, or any party the CONSULTANT subcontracts with, shall maintain limits of liability of not less than those set forth below. However, insurance limits available to CITY, its officers, officials, employees, agents and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

1. **COMMERCIAL GENERAL LIABILITY:**
 - (i) \$1,000,000 per occurrence for bodily injury and property damage;
 - (ii) \$1,000,000 per occurrence for personal and advertising injury;
 - (iii) \$2,000,000 aggregate for products and completed operations; and,

- (iv) \$2,000,000 general aggregate applying separately to the work performed under the Agreement.

2. **COMMERCIAL AUTOMOBILE LIABILITY:**

\$1,000,000 per accident for bodily injury and property damage.

3. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.

4. **EMPLOYER'S LIABILITY:**

- (i) \$1,000,000 each accident for bodily injury;
- (ii) \$1,000,000 disease each employee; and,
- (iii) \$1,000,000 disease policy limit.

5. **PROFESSIONAL LIABILITY** (Errors and Omissions):

- (i) \$2,000,000 per claim/occurrence; and,
- (ii) \$4,000,000 policy aggregate.

UMBRELLA OR EXCESS INSURANCE

In the event CONSULTANT purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the CITY, its officers, officials, employees, agents and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the CITY'S Risk Manager or his/her designee. At the option of the CITY'S Risk Manager or his/her designee, either:

- (i) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, agents and volunteers; or
- (ii) CONSULTANT shall provide a financial guarantee, satisfactory to CITY'S Risk Manager or his/her designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

1. CITY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds. CONSULTANT shall establish additional insured status for the City and for all ongoing and completed operations by use of ISO Form CG 20 10 11 85 or both CG 20 10 10 01 and CG 20 37 10 01 or by an executed manuscript insurance company endorsement providing additional insured status as broad as that contained in ISO Form CG 20 10 11 85.
2. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, officials, employees, agents and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
3. For any claims relating to this Agreement, CONSULTANT'S insurance coverage shall be primary insurance with respect to the CITY, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, agents and volunteers shall be excess of CONSULTANT'S insurance and shall not contribute with it. CONSULTANT shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against CITY, its officers, officials, employees, agents and volunteers.

If the Professional Liability (Errors and Omissions) insurance policy is written on a claims-made form:

1. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.
2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five (5) year discovery period.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by CONSULTANT, CONSULTANT must purchase "extended reporting" coverage for a minimum of five (5) years completion of the Agreement work or termination of the Agreement, whichever occurs first.

4. A copy of the claims reporting requirements must be submitted to CITY for review.
5. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty (30) calendar days written notice by certified mail, return receipt requested, has been given to CITY. CONSULTANT is also responsible for providing written notice to the CITY under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish CITY with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen (15) calendar days prior to the expiration date of the expiring policy.

Should any of the required policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by any defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish CITY with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the CITY'S Risk Manager or his/her designee prior to CITY'S execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of CITY, CONSULTANT shall immediately furnish City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

SUBCONTRACTORS - If CONSULTANT subcontracts any or all of the services to be performed under this Agreement, CONSULTANT shall require, at the discretion of the CITY Risk Manager or designee, subcontractor(s) to enter into a separate Side Agreement with the City to provide required indemnification and insurance protection. Any required Side Agreement(s) and associated insurance documents for the subcontractor must be reviewed and preapproved by CITY Risk Manager or designee.

If no Side Agreement is required, CONSULTANT will be solely responsible for ensuring that its subcontractors maintain insurance coverage at levels no less than those required by applicable law and is customary in the relevant industry.

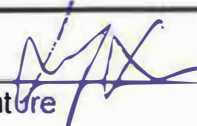
Exhibit C

DISCLOSURE OF CONFLICT OF INTEREST

2020 Metropolitan Water Resources Management Plan and Programmatic Environmental Impact Report and 2020 Urban Water Management Plan
PROJECT TITLE

		YES*	NO
1	Are you currently in litigation with the City of Fresno or any of its agents?		X
2	Do you represent any firm, organization or person who is in litigation with the City of Fresno?		X
3	Do you currently represent or perform work for any clients who do business with the City of Fresno?		X
4	Are you or any of your principals, managers or professionals, owners or investors in a business which does business with the City of Fresno, or in a business which is in litigation with the City of Fresno?		X
5	Are you or any of your principals, managers or professionals, related by blood or marriage to any City of Fresno employee who has any significant role in the subject matter of this service?		X
6	Do you or any of your subcontractors have, or expect to have, any interest, direct or indirect, in any other contract in connection with this Project?		X
* If the answer to any question is yes, please explain in full below.			

Explanation: _____


 Signature _____

5/7/2020
 Date _____

JEFFERY SEYTEL
 (name) _____

WATER SYSTEMS CONSULTING, INC
 (company) _____

P.O. Box 4255
 (address) _____

SAN LUIS OBISPO, CA 93903
 (city state zip) _____

Additional page(s) attached.