

DRAFT Third Amended and Restated Agreement for Design and Implementation of the Advanced Quantitative Precipitation Information System

This third amended and restated agreement (“Third Amended and Restated Agreement” or “Agreement”) is by and between **Sonoma County Water Agency**, a body corporate and politic of the State of California (“Sonoma Water”) and **The Board of Governors of the Colorado State University System, acting by and through Colorado State University**, an institution of higher education of the State of Colorado (“University”). The Effective Date of this Agreement is the date the Agreement is last signed by the parties to the Agreement, unless otherwise specified in Article 5 (Term of Agreement).

RECITALS

- A. University is a comprehensive, land-grant university with experience and resources in a field of mutual interest between University and Sonoma Water.
- B. The San Francisco Bay Area Advanced Quantitative Precipitation Information (“AQPI”) System project is financed under Grant Agreement No. 4600011485 (“Grant”) that is funded by the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006, administered by the State of California, Department of Water Resources (DWR).
- C. Sonoma Water, acting as grantee and lead administrative agency, will manage administration for the AQPI project including contracting with the DWR and project partners.
- D. The National Ocean and Atmospheric Administration (“NOAA”), acting as the Project Director, will direct technical aspects of the project (in conjunction with the Technical Advisory Committee) including coordinating work with University.
- E. The AQPI Technical Advisory Committee (TAC) is comprised of stakeholders such as NOAA; University’s Cooperative Institute for Research in the Atmosphere; Scripps Institute of Oceanography’s Center for Western Weather and Water Extremes; the United States Geological Survey; Morrison and Associates, Inc.; and the Local Project Partners that include, but are not limited to, Sonoma Water, San Francisco Public Utilities Commission, San Clara Valley Water District, and the Bay Area Flood Protection Agencies Association.
- F. Sonoma Water and University first entered into this Agreement on July 1, 2016, in the amount of \$9,944,053.12.
- G. The First Amended and Restated Agreement extended the term end date by two years for a new term end date of March 31, 2024. There was no change to the cost.
- H. In addition, the First Amended and Restated Agreement changed occurrences of “Water Agency” to “Sonoma Water.”
- I. The Second Amended and Restated Agreement extended the term end date by one year for a new term end date of March 31, 2025. There was no change to the cost.

- J. This Third Amended and Restated Agreement adds one year to the Agreement term, at no additional cost to Sonoma Water, for a new term end date of March 31, 2026, to align with the grant extension provided by DWR.
- K. This Third Amended and Restated Agreement supersedes all previous agreements and amendments between the parties.

In consideration of the foregoing recitals and the mutual covenants contained herein, the parties hereto agree as follows:

AGREEMENT

1. RECITALS

- 1.1. The above recitals are true and correct and are incorporated herein.

2. LIST OF EXHIBITS

- 2.1. The following exhibits are attached hereto and incorporated herein:
 - a. Exhibit A: Scope of Work
 - b. Exhibit B: Schedule of Costs
 - c. Exhibit C: Estimated Budget for Scope of Work

3. SCOPE OF SERVICES

- 3.1. *University's Specified Services:* University shall perform the services described in Exhibit A (Scope of Work), within the times or by the dates provided for in Exhibit A and pursuant to Article 9 (Prosecution of Work). In the event of a conflict between the body of this Agreement and Exhibit A, the provisions in the body of this Agreement shall control.
- 3.2. *Cooperation with Sonoma Water:* University shall cooperate with Sonoma Water in the performance of all work hereunder. University shall coordinate the work with Sonoma Water's Project Manager and NOAA's Project Director. Contact information and mailing addresses:

Sonoma Water	University
Project Manager: Dale Roberts 404 Aviation Boulevard Santa Rosa, CA 95403-9019 Phone: 707-547-1979 Email: Dale.Roberts@scwa.ca.gov Remit invoices to: Accounts Payable Same address as above or Email: ap.agreements@scwa.ca.gov	Contact: V. "Chandra" Chandrasekar, Ph.D. Department of Electrical & Computer Engineering and Cooperative Institute for Research in the Atmosphere Colorado State University B117 Engineering 1373 Campus Delivery Fort Collins, CO 80523-1373 Phone: 970-491-7981 Email: chandra@colostate.edu
NOAA	Bill Moseley Sponsored Programs 601 South Howes Street, S Colorado State University Fort Collins, CO 80523-2002 Phone: 970-491-1541 Email: bill.moseley@colostate.edu Remit payments to: Colorado State University Sponsored Programs Campus Delivery 2002 Fort Collins, CO 80523-2002 Phone: 970-491-0439 Email: sp@research.colostate.edu
Contact: Rob Cifelli 325 Broadway, R/PSD Boulder, CO 80305 Phone: 303-497-7369 Email: Rob.Cifelli@noaa.gov	

3.3. *Performance Standard and Standard of Care:* University hereby agrees that all its work will be performed and that its operations shall be conducted in accordance with the standards of a reasonable professional having specialized knowledge and expertise in the services provided under this Agreement and in accordance with all applicable federal, state and local laws, it being understood that acceptance of University's work by Sonoma Water shall not operate as a waiver or release. Sonoma Water has relied upon the professional ability and training of University as a material inducement to enter into this Agreement. If Sonoma Water determines that any of University's work is not in accordance with such level of competency and standard of care, Sonoma Water, in its sole discretion, shall have the right to do any or all of the following: (a) require University to meet with Sonoma Water to review the quality of the work and resolve matters of concern; (b) require University to repeat the work at no additional charge until it is satisfactory; (c) terminate this Agreement pursuant to the provisions of Article 6 (Termination); or (d) pursue any and all other remedies at law or in equity.

3.4. *Assigned Personnel:*

- a. University shall assign only competent personnel to perform work hereunder.

- b. Any and all persons identified in this Agreement or any exhibit hereto as the project manager, project team, or other professional performing work hereunder are deemed by Sonoma Water to be key personnel whose services were a material inducement to Sonoma Water to enter into this Agreement, and without whose services Sonoma Water would not have entered into this Agreement. University shall not remove, replace, substitute, or otherwise change any key personnel without the prior written consent of Sonoma Water.
- c. With respect to performance under this Agreement, University shall employ the following key personnel:

<i>Title</i>	<i>Name</i>
Professor	V. "Chandra" Chandrasekar, Ph.D.

- d. In the event that any of University's personnel assigned to perform services under this Agreement become unavailable due to resignation, sickness, or other factors outside of University's control, University shall be responsible for timely provision of adequately qualified replacements.

4. PAYMENT

4.1. *Total Costs:*

- a. Total costs under this Agreement shall not exceed \$9,944,053.12.
- b. No more than \$8,949,647.81 will be paid until receipt of the final report due under Task 5.

4.2. *Method of Payment:* University shall be paid in accordance with the following terms:

- a. University shall be paid in accordance with Exhibit B (Schedule of Costs). University acknowledges and agrees that travel and per diem costs are not allowable costs under the Grant. University shall be reimbursed for pre-approved travel and per diem costs under a separate agreement with Sonoma Water. Labor time while traveling is a reimbursable cost under the Grant.

b. Retention:

- i. State of California is withholding 10% of each invoice as retention, amounting to 10% of the total Agreement.
- ii. Payments made by Sonoma Water to University are subject to this 10% retention.
- iii. Retention amounts will be released by Sonoma Water to University upon submittal of Grant Completion Report by Sonoma Water to State of California.

4.3. *Invoices:* University shall submit its bills in arrears on a quarterly basis, based on work completed for the period, in a form approved by Sonoma Water. The bills shall show or include:

- a. University name and TW 16/17-031C.
 - b. Sonoma Water's Project-Activity Code X0158C004 for costs reimbursable under the Grant.
 - c. Financial reports for each time period of invoice that list the reimbursable materials and expenses.
- 4.4. *Quarterly Reports with Invoices:* Payment of invoices is subject to receipt of the quarterly reports required under Task 6 of Exhibit A.
- 4.5. *Cost Tracking:* University has provided an estimated breakdown of costs, included in Exhibit C (Estimated Budget for Scope of Work). Exhibit C will only be used as a tool to monitor progress of work and budget. Actual payment will be made as specified in Paragraph 4.2 above.
- 4.6. *Timing of Payments:* Unless otherwise noted in this Agreement, payments shall be made within the normal course of Sonoma Water business after presentation of an invoice in a form approved by Sonoma Water for services performed. Payments shall be made only upon the satisfactory completion of the services as determined by Sonoma Water.
- 4.7. Taxes Withheld by Sonoma Water:
- a. Pursuant to California Revenue and Taxation Code (R&TC) section 18662, Sonoma Water shall withhold seven percent of the income paid to University for services performed within the State of California under this Agreement, for payment and reporting to the California Franchise Tax Board, if University does not qualify as: (1) a corporation with its principal place of business in California, (2) an LLC or Partnership with a permanent place of business in California, (3) a corporation/LLC or Partnership qualified to do business in California by the Secretary of State, or (4) an individual with a permanent residence in the State of California.
 - b. If University does not qualify, as described in Paragraph 4.7.a, Sonoma Water requires that a completed and signed Form 587 be provided by University in order for payments to be made. If University is qualified, as described in Paragraph 4.7.a, then Sonoma Water requires a completed Form 590. Forms 587 and 590 remain valid for the duration of the Agreement provided there is no material change in facts. By signing either form, University agrees to promptly notify Sonoma Water of any changes in the facts. Forms should be sent to Sonoma Water pursuant to Article 16 of this Agreement. To reduce the amount withheld, University has the option to provide Sonoma Water with either a full or partial waiver from the State of California.
- 4.8. *State or Grant Funding:* University is informed and aware that this Agreement is funded by a grant from Department of Water Resources (award number 2015 Proposition 84 Integrated Regional Water Management Implementation Grant Agreement No. 4600011485).

5. **TERM OF AGREEMENT**

- 5.1. The term of this Agreement shall be from July 1, 2016 (“Effective Date”) to March 31, 2026, unless terminated earlier in accordance with the provisions of Article 6 (Termination).
- 5.2. Sonoma Water shall have one option to extend this Agreement for a period of one year by providing written notice to University thirty days in advance of the expiration date noted in this Article. The extension shall be formalized in an amended agreement or amendment signed by Sonoma Water and University.

6. **TERMINATION**

- 6.1. *Authority to Terminate:* Sonoma Water’s right to terminate may be exercised by Sonoma Water's General Manager and University’s right to terminate may be exercised by a duly authorized representative of University.
- 6.2. *Termination Without Cause:* Notwithstanding any other provision of this Agreement, at any time and without cause, either party shall have the right, in its sole discretion, to terminate this Agreement by giving 30 days written notice to the other party.
- 6.3. *Termination for Cause:* Notwithstanding any other provision of this Agreement, should University fail to perform any of its obligations hereunder, within the time and in the manner herein provided, or otherwise violate any of the terms of this Agreement, Sonoma Water may immediately terminate this Agreement by giving University written notice of such termination, stating the reason for termination.
- 6.4. *Delivery of Work Product and Final Payment Upon Termination:* In the event of termination, University, within 14 days following the date of termination, shall deliver to Sonoma Water all reports, original drawings, graphics, plans, studies, and other data or documents, in whatever form or format, assembled or prepared by University or University’s subcontractors, consultants, and other agents in connection with this Agreement subject to Paragraph 12.12 and shall submit to Sonoma Water an invoice with University’s Financial Report and copies of receipts for reimbursable expenses and non-reimbursable expenses up to the date of termination.
- 6.5. *Payment Upon Termination:* Upon termination of this Agreement by Sonoma Water, University shall be entitled to receive as full payment for all services satisfactorily rendered and reimbursable expenses properly incurred hereunder, an amount which bears the same ratio to the total payment specified in the Agreement as the services satisfactorily rendered hereunder by University bear to the total services otherwise required to be performed for such total payment; provided, however, that if services are to be paid on a per-hour or per-day basis, then University shall be entitled to receive as full payment an amount equal to

the number of hours or days actually worked prior to termination multiplied by the applicable hourly or daily rate; and further provided, however, that if Sonoma Water terminates the Agreement for cause pursuant to Paragraph 6.3, Sonoma Water shall deduct from such amounts the amount of damage, if any, sustained by Sonoma Water by virtue of the breach of the Agreement by University.

- 6.6. *Change in Funding:* University understands and agrees that Sonoma Water shall have the right to terminate this Agreement immediately upon thirty (30) days' written notice to University in the event that (1) any state or federal agency or other funder reduces, withholds or terminates funding which Sonoma Water anticipated using to pay University for services provided under this Agreement or (2) Sonoma Water has exhausted all funds legally available for payments due under this Agreement per the contractually funded amount.

7. LIABILITY

- 7.1. University shall be responsible to the fullest extent allowed under the law for its own negligence, and the negligence of its employees and authorized volunteers acting within the scope of their actual authority. It is expressly understood and agreed that nothing contained in this Agreement shall be construed as an express or implied waiver by University of its governmental and sovereign immunities, as an express or implied acceptance by University of liabilities arising as a result of actions which lie in tort or could lie in tort in excess of the liabilities allowable under the Colorado Governmental Immunity Act, C.R.S. 24-10-101 *et seq.*, as a pledge of the full faith and credit of the State of Colorado, or as the assumption of any of the parties of a debt, contract or liability of each other in violation of Article XI, Section 1 of the Constitution of Colorado. University is liable for breach of contract in the same manner as any private party would be under Colorado law under the same or similar circumstances.

8. INSURANCE

- 8.1. EACH PARTY HERETO AGREES TO BE RESPONSIBLE FOR ITS OWN WRONGFUL OR NEGLIGENT ACTS OR OMISSIONS, OR THOSE OF ITS OFFICERS, AGENTS, OR EMPLOYEES TO THE FULL EXTENT ALLOWED BY LAW. LIABILITY OF UNIVERSITY IS AT ALL TIMES HEREIN STRICTLY LIMITED AND CONTROLLED BY THE PROVISIONS OF THE COLORADO GOVERNMENT IMMUNITY ACT, C.R.S. §§ 24-10-101, ET SEQ. AS NOW OR HEREAFTER AMENDED. NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED AS A WAIVER OF THE PROTECTIONS OF SAID ACT. EACH PARTY REPRESENTS AND WARRANTS THAT IT MAINTAINS COMPREHENSIVE GENERAL LIABILITY INSURANCE AND ALL COVERAGES REQUIRED BY LAW SUFFICIENT FOR THE PURPOSE OF CARRYING OUT THE DUTIES AND OBLIGATIONS ARISING UNDER THIS AGREEMENT. A PARTY WILL FURNISH THE OTHER PARTY A CERTIFICATE EVIDENCING SUCH INSURANCE UPON WRITTEN REQUEST.

9. PROSECUTION OF WORK

9.1. Performance of the services hereunder shall be completed within the time required herein, provided, however, that if the performance is delayed by earthquake, flood, high water, or other Act of God or by strike, lockout, or similar labor disturbances, the time for University's performance of this Agreement shall be extended by a number of days equal to the number of days University has been delayed.

10. EXTRA OR CHANGED WORK

10.1. Extra or changed work or other changes to the Agreement may be authorized only by written amendment to this Agreement, signed by both parties. Changes to lengthen time schedules or make minor modifications to the scope of work, which do not increase the amount paid under the Agreement, may be executed by Sonoma Water's General Manager in a form approved by County Counsel. The parties expressly recognize that Sonoma Water personnel are without authorization to order all other extra or changed work or waive Agreement requirements. Failure of University to secure such written authorization for extra or changed work shall constitute a waiver of any and all right to adjustment in the Agreement price or Agreement time due to such unauthorized work and thereafter University shall be entitled to no compensation whatsoever for the performance of such work. University further expressly waives any and all right or remedy by way of restitution and quantum meruit for any and all extra work performed without such express and prior written authorization of Sonoma Water.

11. CONTENT ONLINE ACCESSIBILITY

11.1. *Accessibility:* Sonoma Water policy requires that all documents that may be published to the Web meet accessibility standards to the greatest extent possible, and utilizing available existing technologies.

11.2. *Standards:* All consultants responsible for preparing content intended for use or publication on a Sonoma Water managed or funded web site must comply with applicable federal accessibility standards established by 36 C.F.R. section 1194, pursuant to section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. section 794(d)).

11.3. *Certification:* With each final receivable intended for public distribution (report, presentations posted to the Internet, public outreach materials), University shall include a descriptive summary describing how all deliverable documents were assessed for accessibility (e.g., Microsoft Word accessibility check; Adobe Acrobat accessibility check, or other commonly accepted compliance check).

11.4. *Alternate Format:* When it is strictly impossible due to the unavailability of technologies required to produce an accessible document, University shall

identify the anticipated accessibility deficiency prior to commencement of any work to produce such deliverables. University agrees to cooperate with Sonoma Water staff in the development of alternate document formats to maximize the facilitative features of the impacted document(s); e.g., embedding the document with alt-tags that describe complex data/tables.

- 11.5. *Noncompliant Materials; Obligation to Cure:* Remediation of any materials that do not comply with Sonoma Water's Web Site Accessibility Policy shall be the responsibility of University. If Sonoma Water, in its sole and absolute discretion, determines that any deliverable intended for use or publication on any Sonoma Water managed or funded Web site does not comply with Sonoma Water Accessibility Standards, Sonoma Water will promptly inform University in writing. Upon such notice, University shall, without charge to Sonoma Water, repair or replace the non-compliant materials within such period of time as specified by Sonoma Water in writing. If the required repair or replacement is not completed within the time specified, Sonoma Water shall have the right to do any or all of the following, without prejudice to Sonoma Water's right to pursue any and all other remedies at law or in equity:
- a. Cancel any delivery or task order; and/or
 - b. Terminate this Agreement pursuant to the provisions of Article 6 (Termination).
- 11.6. *Sonoma Water's Rights Reserved:* Notwithstanding the foregoing, Sonoma Water may accept deliverables that are not strictly compliant with Sonoma Water Accessibility Standards if Sonoma Water, in its sole and absolute discretion, determines that acceptance of such products or services is in Sonoma Water's best interest.

12. REPRESENTATIONS OF UNIVERSITY

- 12.1. *Status of University:* The parties intend that University, in performing the services specified herein, shall act as an independent contractor and shall control the work and the manner in which it is performed. University is not to be considered an agent or employee of Sonoma Water and is not entitled to participate in any pension plan, worker's compensation plan, insurance, bonus, or similar benefits Sonoma Water provides its employees. In the event Sonoma Water exercises its right to terminate this Agreement pursuant to Article 6 (Termination), University expressly agrees that it shall have no recourse or right of appeal under rules, regulations, ordinances, or laws applicable to employees.
- 12.2. *No Suspension or Debarment:* University warrants that it is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in covered transactions by any federal department or agency. University also warrants that it is not suspended or debarred from receiving federal funds as listed in the List of Parties Excluded from Federal Procurement or Non-procurement Programs issued by the General Services

Administration. If University becomes debarred, University has the obligation to inform Sonoma Water.

- 12.4. *Taxes:* University agrees to file federal and state tax returns and pay all applicable taxes on amounts paid pursuant to this Agreement and shall be solely liable and responsible to pay such taxes and other obligations, including, but not limited to, state and federal income and FICA taxes.
- 12.5. *Records Maintenance:* University shall keep and maintain full and complete documentation and accounting records, in accordance with generally accepted accounting principles and practices, including, but not limited to, books, records, and other documents concerning all services performed that are compensable under this Agreement and shall make such documents and records available to Sonoma Water and the State of California for inspection at any reasonable time. University shall maintain such records for a period of four (4) years following completion of work hereunder or final billing, whichever comes later.
- 12.6. *Conflict of Interest:* University covenants that it presently has no interest and that it will not acquire any interest, direct or indirect, that represents a financial conflict of interest under state law or that would otherwise conflict in any manner or degree with the performance of its services hereunder. University further covenants that in the performance of this Agreement no person having any such interests shall be employed. In addition, if required by law or requested to do so by Sonoma Water, University shall submit a completed Fair Political Practices Commission Statement of Economic Interests (Form 700) with Sonoma Water within 30 calendar days after the Effective Date of this Agreement and each year thereafter during the term of this Agreement, or as required by state law.
- 12.7. *Statutory Compliance:* University agrees to comply, and to ensure compliance by its subconsultants or subcontractors, with all applicable federal, state and local laws, regulations, statutes and policies, including but not limited to:
 - a. Non-discrimination;
 - b. Drug-Free Workplace;
 - c. Conflicts of Interest; and
 - d. False Claims.
- 12.8. *Nondiscrimination:* University shall comply with all applicable federal, state, and local laws, rules, and regulations in regard to nondiscrimination in employment because of race, color, ancestry, national origin, religion, sex, marital status, age, medical condition, pregnancy, disability, sexual orientation or other prohibited basis. All nondiscrimination rules or regulations required by law to be included in this Agreement are incorporated herein by this reference. During the performance of this Agreement, University and its contractors or subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex (gender), sexual

orientation, race, color, ancestry, religion, creed, national origin (including language use restriction), pregnancy, physical disability (including HIV and AIDS), mental disability, medical condition (cancer/genetic characteristics), age (over 40), marital status, and denial of medial and family care leave or pregnancy disability leave. University and its contractors or subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. University and its contractors or subcontractors shall comply with the provisions of United States, Department of Labor, Equal Employment Opportunity Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. University and its contractors or subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

- 12.9. *Drug-Free Workplace Certification (Certification of Compliance)*: By signing this Agreement, University, its contractors or subcontractors hereby certify, under penalty of perjury under Federal regulations, compliance with the requirements of the Drug-Free Workplace Act of 1990 and have or will provide a drug-free workplace by taking the following actions:
- a. Publish a statement notifying employees, contractors, and subcontractors that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees, contractors, or subcontractors for violations.
 - b. Establish a Drug-Free Awareness Program, as required by Drug-Free Workplace Act of 1988 to inform employees, contractors, or subcontractors about all of the following:
 - i. The dangers of drug abuse in the workplace,
 - ii. University's policy of maintaining a drug-free workplace,
 - iii. Any available counseling, rehabilitation, and employee assistance programs, and
 - iv. Penalties that may be imposed upon employees, contractors, and subcontractors for drug abuse violations.
 - c. Provide that every employee, contractor, and/or subcontractor who works under this Agreement:
 - i. Will have access to a copy of University's drug-free policy statement online, and
 - ii. Will agree to abide by terms of University's condition of employment, contract or subcontract.
- 12.10. *Assignment of Rights*: University agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes and other written or graphic work produced in the performance of this Agreement shall be made available to the State of California and shall be in the public domain. University may disclose, disseminate and use in whole or in part, any final form

data and information received, collected and developed under this Agreement, subject to appropriate acknowledgment of credit to the State of California for financial support. University shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so. The State of California, and Sonoma Water, shall have the perpetual royalty free right to use any data described in this Paragraph 12.11 for any public purpose.

12.12. *Authority:* The undersigned hereby represents and warrants that the undersigned has authority to execute and deliver this Agreement on behalf of University.

13. PREVAILING WAGES

13.1. *Prevailing Wage Exemption; No Subcontracting:* Because all work to be performed pursuant to this Agreement will be performed by University employees, the parties agree that the work is exempt from California prevailing wage requirements. University shall not subcontract any portion of the work, except as Sonoma Water may specifically authorize (after a review of any implications under California's prevailing wage laws).

14. DEMAND FOR ASSURANCE

14.1. Each party to this Agreement undertakes the obligation that the other's expectation of receiving due performance will not be impaired. When reasonable grounds for insecurity arise with respect to the performance of either party, the other may in writing demand adequate assurance of due performance and until such assurance is received may, if reasonable, suspend any performance for which the agreed return has not been received. Reasonable performance includes not only the conduct of a party with respect to performance under this Agreement, but also conduct with respect to other agreements with parties to this Agreement or others. After receipt of a justified demand, failure to provide within a reasonable time, but not exceeding thirty (30) days, such assurance of due performance as is adequate under the circumstances of the particular case is a repudiation of this Agreement. Acceptance of any improper delivery, service, or payment does not prejudice the aggrieved party's right to demand adequate assurance of future performance. Nothing in this Article 14 limits either party's right to terminate this Agreement pursuant to Article 6 (Termination).

15. ASSIGNMENT AND DELEGATION

15.1. *Consent:* Neither party hereto shall assign, delegate, sublet, or transfer any interest in or duty under this Agreement without the prior written consent of the other, and no such transfer shall be of any force or effect whatsoever unless and until the other party shall have so consented.

- 15.2. *Subcontracts*: Notwithstanding the foregoing, University may enter into subcontracts with the subconsultants specifically identified herein. If no subconsultants are listed, then no subconsultants will be utilized in the performance of the work specified in this Agreement.
- 15.3. *Change of Subcontractors or Subconsultants*: If, after execution of the Agreement, parties agree that subconsultants not listed in Paragraph 15.2 will be utilized, University may enter into subcontracts with subconsultants to perform other specific duties pursuant to the provisions of this Paragraph 15.3. The following provisions apply to any subcontract entered into by University other than those listed in Paragraph 15.2 above:
- a. Prior to entering into any contract with subconsultant, University shall obtain Sonoma Water approval of subconsultant. Sonoma Water's Board of Directors must approve the selection of any subconsultant if the amount payable to subconsultant under the agreement exceeds \$25,000. In connection with such approval, University shall provide Sonoma Water the names of key personnel who will be performing work under the agreement, and an explanation of University's reasons for choosing the recommended subconsultant and the criteria used.
 - b. All agreements with subconsultants shall (a) contain indemnity requirements in favor of Sonoma Water in substantially the same form as that contained in Article 7, (b) contain language that the subconsultant may be terminated with or without cause upon reasonable written notice, and (c) prohibit the assignment or delegation of work under the agreement to any third party.
- 15.4. *Summary of Subconsultants' Work*: University shall provide Sonoma Water with a summary of work performed by subconsultants with each invoice submitted under Paragraph 4.3. Such summary shall identify the individuals performing work on behalf of subconsultants and the total amount paid to subconsultant, broken down by the tasks listed in the Scope of Work.

16. **METHOD AND PLACE OF GIVING NOTICE, SUBMITTING BILLS, AND MAKING PAYMENTS**

- 16.1. *Method of Delivery*: All notices, bills, and payments shall be made in writing and shall be given by personal delivery, U.S. Mail, courier service, or electronic means. Notices, bills, and payments shall be addressed as specified in Paragraph 3.2.
- 16.2. *Receipt*: When a notice, bill, or payment is given by a generally recognized overnight courier service, the notice, bill, or payment shall be deemed received on the next business day. When a copy of a notice, bill, or payment is sent by electronic means, the notice, bill, or payment shall be deemed received upon transmission as long as (1) the original copy of the notice, bill, or payment is deposited in the U.S. mail and postmarked on the date of the electronic transmission (for a payment, on or before the due date), (2) the sender has a

written confirmation of the electronic transmission, and (3) the electronic transmission is transmitted before 5 p.m. (recipient's time). In all other instances, notices, bills, and payments shall be effective upon receipt by the recipient. Changes may be made in the names and addresses of the person to whom notices are to be given by giving notice pursuant to this Article 16.

17. MISCELLANEOUS PROVISIONS

- 17.1. *No Bottled Water:* In accordance with Sonoma Water Board of Directors Resolution No. 09-0920, dated September 29, 2009, no Sonoma Water funding shall be used to purchase single-serving, disposable water bottles for use in Sonoma Water facilities or at Sonoma Water-sponsored events. This restriction shall not apply when potable water is not available.
- 17.2. *No Waiver of Breach:* The waiver by Sonoma Water of any breach of any term or promise contained in this Agreement shall not be deemed to be a waiver of such term or promise or any subsequent breach of the same or any other term or promise contained in this Agreement.
- 17.3. *Construction:* To the fullest extent allowed by law, the provisions of this Agreement shall be construed and given effect in a manner that avoids any violation of statute, ordinance, regulation, or law. The parties covenant and agree that in the event that any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions hereof shall remain in full force and effect and shall in no way be affected, impaired, or invalidated thereby. University and Sonoma Water acknowledge that they have each contributed to the making of this Agreement and that, in the event of a dispute over the interpretation of this Agreement, the language of the Agreement will not be construed against one party in favor of the other. University and Sonoma Water acknowledge that they have each had an adequate opportunity to consult with counsel in the negotiation and preparation of this Agreement.
- 17.4. *Consent:* Wherever in this Agreement the consent or approval of one party is required to an act of the other party, such consent or approval shall not be unreasonably withheld or delayed.
- 17.5. *No Third-Party Beneficiaries:* Except as provided in Article 7 (Liability), nothing contained in this Agreement shall be construed to create and the parties do not intend to create any rights in third parties.
- 17.7. *Captions:* The captions in this Agreement are solely for convenience of reference. They are not a part of this Agreement and shall have no effect on its construction or interpretation.
- 17.8. *Merger:* This writing is intended both as the final expression of the Agreement between the parties hereto with respect to the included terms and as a

complete and exclusive statement of the terms of the Agreement. Each Party acknowledges that, in entering into this Agreement, it has not relied on any representation or undertaking, whether oral or in writing, other than those which are expressly set forth in this Agreement. No modification of this Agreement shall be effective unless and until such modification is evidenced by a writing signed by both parties.

17.9. *Survival of Terms:* All express representations, waivers, liabilities, and limitations of liability included in this Agreement will survive its completion or termination for any reason.

17.10. *Time of Essence:* Time is and shall be of the essence of this Agreement and every provision hereof.

17.11. *Counterpart; Electronic Signatures:* The parties agree that this Agreement may be executed in two or more counterparts, each of which shall be deemed an original, and together which when executed by the requisite parties shall be deemed to be a complete original agreement. Counterparts may be delivered via electronic means, or other transmission method, and any counterpart so delivered shall be deemed to have been duly and validly delivered, be valid and effective for all purposes, and shall have the same legal force and effect as an original document. This Agreement, and any counterpart, may be electronically signed by each or any of the parties through the use of any commercially-available digital and/or electronic signature software or other electronic signature method in compliance with the U.S. federal E-SIGN Act of 2000, California's Uniform Electronic Transactions Act (Cal. Civil Code § 1633.1 et seq.), or other applicable law. By its use of any electronic signature below, the signing party agrees to have conducted this transaction and to execution of this Agreement by electronic means.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date last signed by the parties to the Agreement.

TW 16/17-031C

Approved as to form:

By: _____
Adam Brand, Deputy County Counsel

Insurance Documentation is on file with
Sonoma Water

Date/TW Initials: _____

Sonoma County Water Agency

**The Board of Governors of the Colorado
State University System, acting by and
through Colorado State University, an
institution of higher education of the State of
Colorado**

By: _____
Grant Davis
General Manager
Authorized per Sonoma County Water
Agency's Board of Directors Action on
December 3, 2024

By: _____
Name: _____
Title: _____

Date: _____

Date: _____

Exhibit A

Scope of Work

1. COMMENCEMENT OF WORK

- 1.1. University is authorized to proceed immediately with the performance of this Agreement upon the Effective Date of this Agreement.

2. TASKS

2.1. Task 1: X-Band Dual-Polarimetric Radars

- a. Participate in identification of site locations for deployment of four X-band radars.
- b. Provide guidance on site environmental reviews, if required.
- c. Acquire, augment, and deploy four X-band dual-polarimetric radars at four sites, focused on the San Francisco Bay Area.
- d. Operate the X-band radars for the duration of this Agreement
- e. Responsibilities and Coordination:
 - i. Coordinate with NOAA and the AQPI TAC on radar deployment locations.
 - ii. Develop an initial site option list based on technical viability and access to each site. Each site on the list will include information on where the equipment would potentially be located. AQPI TAC will evaluate the proposed sites for ownership and viability, leasing options, access, and communications. Meet with AQPI TAC to finalize the list and rank the sites. After a site is selected, individual AQPI TAC members will negotiate and permit the sites and provide power, access, and security. Consult with AQPI TAC to prepare the sites.
 - iii. Coordinate with NOAA to establish real-time data feeds to AQPI System

Deliverable	Due Date
Four X-Band Radar Systems	To be determined.
Radar System Installation Document	45 calendar days after each installation

2.2. Task 2: C-band Radar

- a. Participate in identifying a site location for C-band radar deployment.
- b. Provide guidance on environmental review, if required.
- c. Acquire and deploy a C-band radar.
- d. Operate the C-band radar for the duration of this Agreement.
- e. Coordinate with NOAA to establish real-time data feeds for C-band radar data to AQPI System.

- f. Responsibilities and Coordination:
 - i. Coordinate with NOAA and AQPI TAC to prioritize location of the C-band radar site.
 - ii. Develop an initial site option list based on scientific viability and access. Each site on the list will include information on the where the equipment would potentially be located. AQPI TAC will evaluate the proposed sites for ownership and viability, leasing options, access, and communications. Meet with AQPI TAC to finalize the list and rank the sites. After a site is selected, AQPI TAC will negotiate and permit the sites and provide power, access, and security. Consult with AQPI TAC to prepare the sites.
 - iii. Ensure that the C-band radar system is installed and operating according to specifications

Deliverable	Due Date
One C-band Radar System	March 31, 2026
Radar System Installation Document	45 calendar days after installation
Radar System Operations Document	March 31, 2026

2.3. Task 3: Methodology to Generate Multi-sensor Precipitation Monitoring Products

- a. Identify monitoring sensors to be used in multi-sensor quantitative precipitation estimation (“QPE”) products.
- b. Develop software for single-sensor products that will be used in the multi-sensor systems
- c. Test different QPE approaches (radar-only, bias adjusted radar, and “fused” radar-gauge) and determine best solution to monitor rainfall over the Bay Area.
- d. Test and then, as required, establish data assimilation configurations for QPE data.
- e. Develop design for QPE system.
- f. Conduct evaluation of QPE.
- g. Work with NOAA to transfer QPE system to AQPI System.
- h. Responsibilities and Coordination:
 - i. Work with NOAA staff to advance QPE application to entire San Francisco Bay Area.
 - ii. Work with NOAA to coordinate with AQPI TAC, National Weather Service, and other agencies that operate monitoring sensors for QPE.

Deliverable	Due Date
Develop and present design document for QPE system	September 2023
Transition QPE System from University to AQPI System	September 2023

- 2.4. Task 4: Hi-Resolution (1-km) Nowcasting
- a. Develop design for Nowcast system.
 - b. Configure Nowcast System to run on AQPI System using X-Band and C-Band data as appropriate.
 - c. Conduct evaluation of Nowcast products
 - d. Work with NOAA to generate data for display in AQPI.
 - e. Responsibilities and Coordination: Coordinate with AQPI TAC and NOAA.

Deliverable	Due Date
Develop and present design document for Nowcast system	July 2023
Transition Nowcast System from University to AQPI System	October 2023

- 2.5. Task 5: Reports
- a. Task 1 Reports:
 - i. Prepare a Site Report assessing the technical viability of each site for X-band radar deployment.
 - ii. Prepare an X-band Installation Report providing technical specifications used to procure the equipment, data sheets and/or manuals from vendors, design drawings and layouts for the site, spare parts inventory, and manufacturer-recommended care and maintenance procedures (if any or available).
 - b. Task 2 Reports:
 - i. Prepare a Site Report assessing the technical viability of each site for C-band radar deployment.
 - ii. Prepare a C-band Installation Report providing technical specifications used to procure the equipment, data sheets and/or manuals from vendors, design drawings and layouts for the site, spare parts inventory, and manufacturer-recommended care and maintenance procedures (if any or available).
 - c. Task 3 Report:
 - i. In partnership with NOAA, prepare a QPE Report that includes evaluation of instantaneous, 5 minute, 15 minute, 30 minute, and 1 hour QPE products.
 - ii. Deliver Final Report to TAC Sonoma Water for distribution to AQPI TAC.
 - d. Task 4 Reports:
 - i. In partnership with NOAA, prepare a Nowcast Evaluation Report that includes 5 minute, 10 minute, 30 minute, and 1 hour Nowcasts.
 - ii. Deliver Final Report to Sonoma Water for distribution to TAC.

- e. Review and Finalization of Reports:
 - i. Review. Submit each report to Sonoma Water for review.
 - a) First Draft: Prepare each report in draft form and submit to Sonoma Water for review and approval in accordance with the appropriate date listed for each deliverable.
 - b) Subsequent Draft(s): If Sonoma Water requests revisions, revise the appropriate draft report and resubmit one copy of the report for Sonoma Water approval.
 - ii. Final: Following Sonoma Water approval and prior to Sonoma Water’s acceptance of work under this Agreement, submit the final approved report to Sonoma Water, in accordance with the appropriate date listed for each deliverable, for Sonoma Water distribution to TAC.

Deliverable	Due Date
Task 1: Draft Site Report re X-band Radar Deployment	December 2022
Task 1: Final Site Report re X-band Radar Deployment	December 2022
Task 1: Draft Installation Report re X-band Radars	45 days after each installation
Task 1: Final Installation Report re X-band Radars	10 days after receiving Sonoma Water’s written comments on draft
Task 2: Draft Site Report re C-band Radar Deployment	December 2022
Task 2: Final Site Report re C-band Radar Deployment	December 2022
Task 2: Draft Installation Report re C-band Radars	45 days after installation
Task 2: Final Installation Report re C-band Radars	10 days after receiving Sonoma Water’s written comments on draft
Task 3: Draft QPE Evaluation Report	September 2024
Task 3: Final QPE Evaluation Report	December 2024
Task 4: Draft Nowcast Evaluation Report	November 2024
Task 4: Final Nowcast Evaluation Report	December 2024

- 2.6. Task 6: Quarterly Progress Reports
 - a. Prepare quarterly progress reports. Submit one copy to Sonoma Water in accordance with the date listed for this deliverable.
 - b. Include the following in each quarterly progress:
 - i. A detailed list of work performed

- ii. Dates and subject of meetings conducted, meeting attendees, and summary of meeting results
- iii. Copies of final studies and reports complete during period
- iv. Copies of any presentations given during period
- v. Photographs of radar installation progress including pre-installation, installation, and post installation.
- vi. Other information as appropriate or as requested by Sonoma Water

Deliverable	Due Date
Quarterly Progress Report	Quarterly with invoices

3. DELIVERABLES

- 3.1. Submit one electronic copy in PDF format (emailed or on CD) and three hard copies of each final deliverable to Sonoma Water.
- 3.2. Comply with requirements of Paragraph 11 (Content Online Accessibility).
- 3.3. Include Agreement title and TW 16/17-031C on first page or cover of each deliverable.

Exhibit B

Schedule of Costs

<u>Item</u>	<u>Rate</u>	<u>Inflation Rate</u>
Chandrasekaran Venkatachalam salary	\$197,966/9 mo	3%
Francisco D Junyent Lopez salary	\$104,236/yr	3%
Joan E. Kerr salary	\$67,387/yr	3%
TBN Admin. Pro. 1 salary	\$75,000/yr	3%
TBN Admin. Pro. 2 salary	\$79,000/yr	3%
TBN Admin. Pro. 3 salary	\$60,000/yr	3%
TBN Admin. Pro. 4 salary	\$60,000/yr	3%
TBN GRA 1 salary	\$36,317/yr	3%
TBN GRA 2 salary	\$60,000/yr	3%
TBN GRA 3 salary	\$60,000/yr	3%
TBN Postdoc I salary	\$70,000/yr	3%
Admin. Pro. Fringe	27.60%	1%
State Classified Fringe	42.60%	1%
GRA Fringe	10.50%	1%
1st Year Postdoc Fringe	13.20%	1%
CSU Negotiated Indirect Cost Rate	52%	0%
GRA Tuition - MTDC exempt	\$6,017/semester (for Fall 2017/ Spring 2018)	8%
Publication page charges	\$145/page (AMS rate)	3%
Shipping costs	based on historical record	3%
Report Publication	based on historical record	3%
Materials & Supplies (spare parts)	based on historical record	3%
(4) X band dual-polarization radar with radome	\$2,400,000	0%
(1) C band radar	\$2,000,000	0%

Exhibit C

Estimated Budget for Scope of Work

DESIGN AND DEVELOPMENT OF AQPI SYSTEM							
SONOMA COUNTY WATER AGENCY							
CHANDRA VENKATACHALAM							
				BUDGET	ESTIMATED SPENDING TO 12/31/21	REMAINING TO SPEND THROUGH 3/31/24	
PERSONNEL				\$ 2,702,350.77	\$ 242,389.68	\$2,459,961.09	
MATERIALS & SUPPLIES				\$ 892,853.89	\$ 122,076.77	\$ 770,777.12	
GENERAL SERVICES				-	\$ 18,458.96	\$ (18,458.96)	
PUBLICATION PAGE CHARGES				\$ 62,754.41	\$ 135.00	\$ 62,619.41	
SHIPPING				\$ 45,633.92	\$ 25,579.28	\$ 20,054.64	
EQUIPMENT				\$ 4,400,000.00	\$ 2,780,799.00	\$1,619,201.00	
INDIRECT				\$ 1,840,460.13	\$ 206,566.18	\$1,633,893.95	
				\$ 9,944,053.12	\$ 3,396,004.87	\$6,548,048.25	