



CONTRACT NO. 25-021-AMS
BETWEEN THE
EDWARDS AQUIFER AUTHORITY
AND
BOARD OF REGENTS OF THE UNIVERSITY OF OKLAHOMA
FOR
ASSESSING THE CAPACITY TO DOWNSCALE EVAPOTRANSPIRATION USING
REMOTELY SENSED OBSERVATIONS

This Contract is made and entered into by and between the EDWARDS AQUIFER AUTHORITY (EAA), a political subdivision of the State of Texas, with its principal place of business located at 900 E. Quincy Street, San Antonio, Texas 78215, and the BOARD OF REGENTS OF THE UNIVERSITY OF OKLAHOMA (Contractor), a constitutional entity of the State of Oklahoma, with its principal place of business located at 201 Stephenson Parkway, Ste 3100, Norman, Oklahoma 73019. Each of these entities is, at times, referred to in this Contract individually as a “Party,” and both are referred to collectively as “Parties.”

RECITALS

WHEREAS, the EAA was created by the Edwards Aquifer Authority Act, Act of May 30, 1993, 73rd Leg., R.S., ch. 626, 1993 Tex. Gen. Laws 2350, as amended (Act); and

WHEREAS, under Section 1.02 of the Act, the EAA is a conservation and reclamation district created by virtue of Article XVI, Section 59, Texas Constitution, and is a governmental agency and body politic and corporate vested with the full authority to exercise the powers and to perform the functions specified in the Act, and other applicable law; and

WHEREAS, under Section 1.08(a) of the Act, the EAA has all the powers, rights and privileges necessary to manage, conserve, preserve, and protect the Edwards Aquifer (Aquifer) and to increase the recharge of, and prevent the waste or pollution of water in, the Aquifer; and

WHEREAS, under Section 1.11(d)(2) of the Act, the EAA may enter into contracts; and

WHEREAS, the EAA’s Board of Directors (EAA’s Board) approved this Contract on November 12, 2025, and authorized the EAA’s General Manager to execute the Contract; and

WHEREAS, the EAA is in need of the development of downscaled projections of actual evapotranspiration (AET) and reference crop evapotranspiration (RCET) for assessment, planning, and mitigation activities related to drought, water conservation, and habitat protection; and

WHEREAS, it is in the public interest that the EAA enter into this Contract.

AGREEMENT

NOW THEREFORE, in consideration of the mutual promises and agreements set forth in this Contract, the sufficiency of which is hereby acknowledged, the EAA and the Contractor agree as follows:

ARTICLE I – TERM; DESCRIPTION OF WORK

Section 1.1. Term. This Contract is effective and commences on November 13, 2025 (Effective Date) and terminates on April 30, 2026 (Expiration Date).

Section 1.2. Services. Subject to the terms and conditions of this Contract, the EAA engages the Contractor to perform, for the benefit of the EAA, the work set forth and described in this Contract and in the following documents (Services): (1) the Scope of Work, which is attached hereto as Exhibit A; and (2) the Project Budget, which is attached hereto as Exhibit B. The Contractor accepts such engagement and agrees to devote its best efforts and abilities, and furnish all necessary labor, machinery, equipment, tools, and transportation necessary in furtherance thereof.

Section 1.3. Commencement and Completion of Services. The Contractor will commence performing the Services immediately upon the date of receipt of the written notice to proceed issued by the EAA's General Manager. All Services will be completed and delivered to the EAA by the Expiration Date and shall be completed in compliance with the schedules, budgets, descriptions, and specifications contained herein and, in the Exhibits, attached hereto. It shall be the Contractor's responsibility to ensure that the completion times for the Services are met. Time is of the essence in the performance of this Contract.

ARTICLE II – AMENDMENTS

Section 2.1. This Contract may be amended only by written agreement of the Parties.

Section 2.2. Amendments by the EAA's General Manager. The EAA's Board delegates the authority to the EAA's General Manager to enter into amendments to this Contract without further authorization by the EAA's Board consistent with the EAA's General Manager's authority to enter into contracts under Section 5.01 of the EAA's Bylaws.

ARTICLE III – COMPENSATION

Section 3.1. Fees and Expenses. The EAA agrees to pay the Contractor for the Services rendered in accordance with the Scope of Work and Project Budget, but in no event shall payments to the Contractor exceed \$78,452. The Contractor may not exceed this amount and will be responsible for the payment of all of its other additional costs and expenses. The Contractor is not authorized to expend any additional funds in excess of this amount without the prior written approval from the EAA. The EAA will not be held accountable for any unauthorized work performed or funds expended by the Contractor in providing the Services.

Section 3.2. Payment. All “invoice packets” from the Contractor to the EAA for the Services for each previous month’s activities shall be sent no later than the 15th day of each month beginning December 15, 2025, and shall provide an itemization of the Services rendered, costs and expenses incurred during the billing cycle. Documentation in the invoice packet must be sufficiently itemized and detailed and include invoices and/or receipts for all purchases and expenses (summary credit card charge receipts are not acceptable) to allow the EAA to clearly discern purchases made. Purchases and expenses documented with lost receipt forms are not eligible for reimbursement. Receipts without purchase details or which are not legible are not acceptable at any time. Alcohol purchases will NOT be reimbursed under any circumstances. Mileage will be reimbursed at the current IRS approved rate, if submitted. The monthly invoice packet will be submitted electronically in Adobe Acrobat (pdf) format via email to the Senior Director of Aquifer Science Research and Modeling, Mr. Paul Bertetti at pbertetti@edwardsaquifer.org and accounting@edwardsaquifer.org. The terms of each invoice shall be net thirty (30) days upon EAA receipt and approval of that invoice.

ARTICLE IV – INDEPENDENT CONTRACTOR

Section 4.1. No Employment Relationship. The Parties understand and agree that this Contract does not create a fiduciary relationship between them, that they are separate entities, that the Contractor is an independent contractor with respect to the performance of the Services and is not subject to the direct or continuous control or supervision of the EAA, and that nothing in this Contract is intended to make either Party a subsidiary, joint venturer, partner, employee, agent, servant or representative of the other Party for any purpose whatsoever. The Contractor shall provide any and all equipment, materials and personnel necessary for the performance of the Services. The EAA shall have no right of direction or control of the Contractor, or its employees, agents, or subcontractors, except in the results to be obtained, and in a general right to order the performance of the Services to start or stop as agreed to herein, to inspect the progress of the Services, and to receive reports. The Contractor shall accommodate reasonable requests from the EAA to allow EAA employees, agents or representatives to accompany and observe Contractor personnel, agents, and subcontractors in carrying out the Services.

ARTICLE V – CONTRACTOR PERSONNEL AND SUBCONTRACTORS

Section 5.1. Personnel. The Contractor will provide any and all personnel necessary for its performance of the Services. The Contractor will be responsible for its employees and agents in all respects, including, without limitation, their compliance with applicable laws and their safety, including without limitation, all Occupational Safety and Health Administration (OSHA) standards, requirements, and regulations.

ARTICLE VI – TERMINATION

Section 6.1. Termination. Each Party may terminate this Contract at any time, including at the expiration of each budget or payment period during the term of this Contract, with or without cause, upon ten (10) days’ prior written notice to the other Party. Upon receipt of such termination notice, the Contractor shall immediately stop all work in progress, including all work performed by its employees, agents, or subcontractors. Insofar as possible, all work in progress will be

brought to a logical termination point. Within thirty (30) days of the final invoice following termination, the EAA shall pay the Contractor all moneys then due and owing for the Services rendered, costs and expenses reasonably incurred up to the time of termination.

ARTICLE VII – OWNERSHIP OF MATERIALS

Section 7.1. Ownership. All information, documents, property, or materials produced, supplied, or created jointly under this Contract by the EAA and the Contractor, its employees, agents, or subcontractors or anyone else, and whether finished or unfinished or in draft or final form, will be the jointly owned property of the EAA and the Contractor. All information, documents, property, or materials produced, created solely by either the Contractor or the EAA under this Contract will be the owned property of the respective Party unless expressed otherwise in writing. Each Party shall have unlimited rights to technical and other data resulting directly from the performance of the Contractor's Services under this Contract for academic and non-commercial purposes.

Section 7.2. Deliverables upon Termination. Upon expiration or termination of this Contract under Sections 1.1 or 6.1, the Contractor will promptly deliver to the EAA all deliverables as provided in Exhibit A (Scope of Work) that are produced or created before the Expiration Date or the date of termination, except in instances where there exists a failure to make payments required under Article III.

Section 7.3. Intentionally left blank

Section 7.4. Intentionally left blank

Section 7.5 Publications. For publications of documents prepared under this Contract, the publishing Party shall provide the other Party a thirty-day (30) period in which to review the proposed publications, identify proprietary or confidential information, and to submit comments. The publishing Party will give full consideration to all comments before publication. All publications created by the Contractor pertaining to this Contract shall acknowledge that research performed by Contractor was funded by the EAA.

ARTICLE VIII – NON-PERFORMANCE

Section 8.1. The Contractor warrants that it will perform all Services in a good and workmanlike manner, strictly in accordance with the standards of the Contractor's profession, the Scope of Work, and as otherwise provided in this Contract and the Exhibits hereto. The Contractor's failure to timely perform the Services as warranted and agreed shall constitute a breach of this Contract and shall be subject to all applicable remedies at law or equity. Judgment of nonperformance shall rest solely with the EAA.

ARTICLE IX – LIQUIDATED DAMAGES

THIS ARTICLE INTENTIONALLY LEFT BLANK

ARTICLE X – BOND COVERAGE

THIS ARTICLE INTENTIONALLY LEFT BLANK

ARTICLE XI – INSURANCE

Section 11.1. Insurance Coverages. The Contractor is self-insured in accordance with the terms of the Oklahoma Governmental Tort Claims Act and agrees to provide insurance to the limits of the attached Certification of Self -Insurance. The Certificate of Self Insurance is included as Exhibit C to this Contract.

Section 11.2. Intentionally left blank

Section 11.3. No limitations. Contractor's obligation to obtain and maintain the foregoing policy or policies in the amounts specified shall not be limited in any way by reason of any insurance which may be maintained by the EAA, nor shall Contractor's performance of this obligation relieve it of liability under the provisions set forth in Section 12.1.

ARTICLE XII – ASSUMPTION OF RISK

Section 12.1. Liability. Each Party agrees to be responsible for the negligent or intentional acts or omissions of its respective employees, agents, representatives, divisions, and affiliates that arise out of or are related to the performance of the obligations under this Contract, with the Contractor's liability governed by the terms of the Oklahoma Governmental Tort Claims Act, 51 O.S. § 151 *et seq.*

Section 12.2. Intentionally left blank

Section 12.3. Sovereign Immunity. Nothing herein shall constitute a waiver of either Party's right to assert sovereign immunity.

ARTICLE XIII – NOTICES

Section 13.1. Notices to the EAA. All notices or communications under this Contract to be mailed or delivered to the EAA shall be in writing and shall be sent to the EAA's principal place of business as follows, unless and until the Contractor is otherwise notified:

EDWARDS AQUIFER AUTHORITY
ATTENTION: Shelly Hendrix, Controller/Sr. Director of Finance
900 E. Quincy Street
San Antonio, Texas 78215
contracting@edwardsaquifer.org

Section 13.2. Notices to the Contractor. All notices or communications under this Contract to be mailed or delivered to the Contractor shall be in writing and shall be sent to the address of the Contractor as follows, unless and until the EAA is otherwise notified:

UNIVERSITY OF OKLAHOMA- OFFICE OF RESEARCH SERVICES
ATTENTION: Gayle Parker, Senior Award Administrator
201 Stephenson Parkway, Ste. 3100
Norman, Oklahoma 73019
gparker@ou.edu

Section 13.3. Effective Date of Notice. Any notices or communications required to be given in writing by one Party to the other shall be considered as having been given to the addressee on the date the notice of communication is posted by the sending Party. Electronic notices shall be deemed delivered as of the stamp date generated by the receiving Party's system.

ARTICLE XIV – MISCELLANEOUS

Section 14.1. Entire Agreement. This Contract and the attached Exhibits constitute the entire agreement between the Parties regarding the Services to be performed by the Contractor and there are no representations, warranties, agreements, or commitments between the Parties except as set forth herein. Unless otherwise authorized herein, no amendments or additions to this Contract shall be binding on the Parties unless in writing and signed by the Parties.

Section 14.2. Non-Waiver. No delay or failure by either Party to exercise any right under this Contract, nor any partial or single exercise of that right, shall constitute a waiver of that or any other right, unless otherwise expressly provided herein.

Section 14.3. Headings. Headings in this Contract are for convenience only and shall not be used to interpret or construe its provisions.

Section 14.4. Intentionally left blank

Section 14.5. Counterparts. This Contract may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

Section 14.6. Binding Effect. The provisions of this Contract shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns; provided, however, that the Contractor may not assign any of its rights nor delegate any of its duties hereunder without the EAA's prior written consent.

Section 14.7. Validity. The invalidity of any provision or provisions of this Contract shall not affect any other provision of this Contract, which shall remain in full force and effect, nor shall the invalidity of a portion of any provision of this Contract affect the balance of such provision.

Section 14.8. Intentionally left blank

Section 14.9. Survival. Termination of this Contract for breach shall not constitute a waiver of any rights or remedies available at law or in equity to a Party to redress such breach. All remedies, either under this Contract or at law or in equity or otherwise available to a Party, are cumulative and not alternative and may be exercised or pursued separately or collectively in any order, sequence, or combination. In addition to these provisions, applicable provisions of this Contract shall survive any termination of this Contract.

Section 14.10. Attachments. The Exhibits, schedules and/or other documents attached, referred to in this Contract, are incorporated in and made a part of this Contract for all purposes. As used herein, the expression "Contract" means the body of this Contract and such Exhibits, schedules and/or other documents attached, and the expressions "herein," "hereof," and "hereunder" and other words of similar import refer to this Contract and such exhibits, schedules and/or other documents as a whole and not to any particular part or subdivision thereof.

Section 14.11. Intentionally left blank

Section 14.12. Authority to Contract. Each Party represents and warrants for the benefit of the other Party that: (1) it has the legal authority to enter into this Contract; (2) this Contract has been duly approved and executed; (3) no other authorizations or approvals are or will be necessary in order to approve this Contract and to enable that Party to enter into and comply with the terms and conditions of this Contract; (4) the person executing this Contract on behalf of each Party has the authority to bind that Party; and (5) the Party is empowered by law to execute any other agreement or documents and to give such other approvals, in writing or otherwise, as are or may hereafter be required to implement and comply with this Contract.

Section 14.13. Officers or Agents. No officer or agent of the Parties is authorized to waive or modify any provision of this Contract. No amendment to or rescission of this Contract may be made except by a written document signed by the Parties' authorized representatives.

Section 14.14. Intentionally left blank.

Section 14.15. Intentionally left blank.

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IN WITNESS WHEREOF, this Contract is executed as of the day and date first written above, in Section 1.1.

EDWARDS AQUIFER AUTHORITY

BOARD OF REGENTS OF THE UNIVERSITY OF
OKLAHOMA

By: _____
Roland Ruiz
General Manager

By: _____
Michael Purcell
Associate Vice President for Research and
Partnerships

ATTEST:

ATTEST:

By: _____
Jennifer Wong-Esparza
Assistant to Board Secretary

By: _____
Leslie Flenniken
Associate Director, Award Administration

APPROVED AS TO FORM:

Deborah Trejo
General Counsel
Edwards Aquifer Authority

EXHIBIT A SCOPE OF WORK

BACKGROUND

The EAA has identified a critical need for downscaled projections of actual evapotranspiration (AET) for assessment, planning, and mitigation activities related to drought, water conservation, and habitat protection. AET data is useful to understand the spatiotemporal variations in soil water deficit and recharge rates of the Edwards Aquifer, which could influence the long-term sustainability of groundwater resources and subsequent management actions.

A previous EAA project focused on developing and validating downscaled AET predictions at several selected locations as a benchmark. This benchmark project produced a viable method to generate downscaled AET projections using satellite-based observations in place of in situ observations from flux towers for training. The resulting downscaled AET projections at four sites produced plausible and informative results. For example, projections showed a decrease in AET during summer months, indicating the potential for more severe drought conditions in future summers. In contrast, projected AET during the winter and fall showed little to no change, with a slight increase in most cases.

Building on the success of this benchmark study, the EAA is interested in applying this method to generate gridded AET projections across the entire Edwards Aquifer Region (EAR).

PROJECT SUMMARY

Prior work in the EAR has evaluated the use of remotely sensed evapotranspiration records to produce statistically downscaled projections of AET as a benchmark, and hence, the previous work primarily focused on individual locations of interest and did not cover all the information needs of the EAA. Therefore, this project will expand the prior work to produce gridded projections of AET for the EAR through the year 2100.

These projections will align with the same spatial grid and Coupled Model Intercomparison Project Phase 6 Global Climate Models (CMIP6 GCMs) used in the prior work. The resulting gridded AET projections can be used with previously developed projections of gridded precipitation and temperature to evaluate potential impacts of climate change on groundwater, spring flow, and aquifer recharge. Moreover, this case study will lay the groundwork for future efforts to enhance the current capacity to generate needed AET projections for the South Central Climate Adaptation Science Center region.

PROJECT DURATION AND TASKS:

This project is anticipated to be completed in six-months and includes the following task steps:

Task 1: Gather and prepare MODIS satellite-estimated AET and CMIP6 global climate model (GCM)-simulated AET for a downscaling procedure. The GCMs, scenarios, and time periods used will be consistent with those from the previous EAA downscaled projections efforts to ensure methodological continuity and comparability.

Task 2: Downscale historical period GCM AET and evaluate the downscaling accuracy against MODIS training data. The downscaling method will be the same as that used in the previous report benchmark study on AET.

Task 3: Downscale GCM-projected AET and calculate projected changes in AET across the EAR.

DELIVERABLES

Prior to May 31, 2026, the Contractor will provide a report describing and summarizing methods used to select datasets, perform the downscaling, and analyzing the accuracy and usefulness of the downscaled AET projections. Downscaled gridded projections and associated data will be delivered to EAA in a suitable format, similar to previous downscaled datasets, as agreed upon by EAA and the Contractor.

EXHIBIT B
PROJECT BUDGET

CATEGORY	ESTIMATED BUDGET
Salary and Wages	\$ 37,492
Fringe Benefits	\$13,122
Indirect Costs	\$27,838
Total	\$78,452

Salary and Wages (\$37,492)

The Principal Investigator (PI) for the project will receive 0.4725 FTE of salary, which is requested for PI Wootten for data preparation, analysis, and production of AET projections in the EAA region. The salary includes reporting and communication with the EAA. Starting salary for PI Wootten will not exceed \$79,452.

Fringe Benefits (\$13,122)

The current fringe benefits rates for the University of Oklahoma (OU), as negotiated with the Department of Health & Human Services (DHHS), are 35.00% for senior personnel, 19% for postdoctoral associates, 9.50% for graduate research assistants and 0.20% for undergraduates. These benefits may include FICA, workers' compensation, unemployment compensation, retirement, and life, dental, and health insurance. The fringe benefits have been computed based on the negotiated OU rates and assigned positions of project personnel. The OU fiscal year is July 1 to June 30. Project year may vary from the fiscal year and normally consists of increments of 12 months from project start.

Indirect Costs (\$27,838)

Indirect Costs (IDC) are calculated using OU's current federal negotiated pre-determined rate for on-campus research which is 55% of modified total direct costs (MTDC) per agreement with DHHS dated 04/02/2025. The MTDC base excludes equipment costing \$5,000 or more, tuition remission, and subaward amounts in excess of \$25,000. IDC represents research support costs incurred by OU. IDC expenses include the cost of laboratories and facilities usage, building maintenance, utilities, general grant administration and accounting, and other OU services. Cognizant agency & contact: DHHS, Birol Hasan, 214.767.3261. URL: <https://ou.edu/research-norman/research-services/rates-and-reports>

EXHIBIT C
CERTIFICATE OF SELF INSURANCE

RISK MANAGEMENT DIVISION
P.O. BOX 53364
Oklahoma City, Oklahoma 73152

CERTIFICATE OF SELF INSURANCE

Name of Insured: State of Oklahoma

Cert. #760

Name and Address of Certificate Holder:

UNIVERSITY OF OKLAHOMA
660 PARRINGTON OVAL, ROOM 213
NORMAN, OK 73069-8813

The State of Oklahoma is self-insured for the following coverage to the limits indicated pursuant to the "Tort Claims Act" (Title 51 § 151, et. seq.).

TYPES OF COVERAGE	LIABILITY LIMITS Applies to All Types of Coverage
General Tort Liability Vehicle Liability Water Craft Liability	\$ 175,000 per person, any loss other than property \$ 25,000 per person, property damage \$1,000,000 per occurrence, all claimants and coverage

Should any of the above described coverage be withdrawn, the State will attempt to mail 30 days written notice to the certificate holder. If you have any questions or need to report an incident, call Risk Management at (405)521-4999.

Policy Period: Perpetual unless coverage is changed by statute.

In the event of a change in statute, State Risk Management will notify each certificate holder.