



EDWARDS AQUIFER
AUTHORITY

CONTRACT No. 16-821-HCP
BETWEEN THE
EDWARDS AQUIFER AUTHORITY
AND
BIO-WEST, INC.

FOR STATISTICAL ANALYSIS OF THE SAN MARCOS AND COMAL SPRINGS
AQUATIC ECOSYSTEMS WATER QUALITY AND BIOMONITORING DATASETS

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 BIO-WEST, INC. ("Contractor"), an environmental consulting company with its principal place of business located at 1812 Central Commerce Court, Round Rock, TX 78664. 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 Edwards Aquifer Authority ("EAA") was created by the Edwards Aquifer Authority 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 Board of Directors approved this Contract on November 8, 2016, and authorized the EAA General Manager to execute the Contract; and

WHEREAS, the purpose of this Contract is to implement a portion of the Adaptive Management Program of the Edwards Aquifer Habitat Conservation Plan Program by performing statistical analysis on data from the Comal and San Marcos springs ecosystems, and to develop biological and hydrological statistical questions; and

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

AGREEMENT

NOW THEREFORE, for and in consideration of the mutual promises and agreements set forth in this Contract, 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 January 1, 2017 ("Effective Date"), and terminates on December 31, 2017 ("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") which are attached hereto: (1) the Scope of Work which is attached hereto as Exhibit A ("Scope of Work"); (2) the Budget Estimate which is attached hereto as Exhibit B ("Budget Estimate"); (3) the Labor Categories Rates & Personnel Chart which is attached hereto as Exhibit C ("Labor Categories Rates & Personnel Chart"). 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 of its engagement under this Contract.

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 General Manager. The Board of Directors of the EAA delegates the authority to the General Manager to enter into amendments to this Contract without further authorization by the Board consistent with the General Manager's authority to enter into contracts under Section 4.01 of the EAA's Bylaws.

ARTICLE III – COMPENSATION

Section 3.1. Fees and Expenses. The EAA agrees to pay the Contractor for the Services in accordance with the Scope of Work, Budget Estimate, and Labor Categories, Rates & Personnel Chart, but in no event shall payments to the Contractor exceed \$88,742. The Contractor may not exceed this amount and will be responsible for the payment of all of its other and 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 invoices from the Contractor to the EAA for the Services shall be sent monthly and shall provide an itemization of the Services rendered, costs and expenses incurred. 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 and 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 and agents, 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 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. The Contractor indemnifies and holds harmless the EAA, its officers, employees and directors, from and against any claims brought by any employee, subcontractor or other agent of the Contractor relating in any way to the Services.

Section 5.2. Subcontractors. In performing the Services, the Contractor may retain and utilize as its subcontractors those individuals identified to and approved in writing by the EAA, in advance. The EAA, in consultation with the Contractor, shall have the right to terminate, limit, or alter, at any time, the participation of any subcontractor utilized by the Contractor. No additional subcontractors may be retained by the Contractor to perform any Services without the prior written consent of the EAA, provided that no such consent shall be necessary for the retention of any subcontractor previously approved by the EAA and identified by the Contractor on the Effective Date of this Contract. The Contractor will be responsible for its subcontractors in all respects including their compliance with applicable laws and their safety, including without limitation, all OSHA standards, requirements, and regulations.

Subcontracting services may be provided by:

- Tennessee Technological University

ARTICLE VI – TERMINATION

Section 6.1. Termination. The EAA 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 Contractor. 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, created, or supplied under this Contract by the Contractor, its employees, agents or subcontractors or anyone else, and whether finished or unfinished or in draft or final form, will be the property of the EAA. The EAA shall have unlimited rights to technical and other data resulting directly from the performance of the Services.

Section 7.2. Delivery of Documents upon Termination. Upon termination of this Contract under Sections 1.3 or 6.1, the Contractor will promptly deliver to the EAA all information, property and materials not already in the possession of the EAA.

Section 7.3. Nondisclosure of Documents. The information, documents, property, or materials produced, created or supplied under this Contract by the Contractor, including preliminary technical reports and studies, shall not be disclosed by the Contractor to any third-party without the prior written consent of the EAA. The Contractor shall immediately advise the EAA of any requests for any such information, document, property, or materials by a third-party. The unauthorized disclosure of such information, documents, property, or materials in violation of this section shall, in the sole judgment of the EAA, constitute a breach of this Contract and shall be subject to all applicable remedies at law or equity.

Section 7.4. Record Copies. The Contractor shall retain a record copy of all information, documents, property, or materials developed in the course of performing the Services. Upon request of the EAA, such information, documents, property, or materials will be promptly supplied to the EAA, including after the Expiration Date or the termination of this Contract under Section 6.1. The EAA will reimburse the Contractor for actual cost of time and expenses of reproduction of such materials when requested.

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

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ARTICLE X – BOND COVERAGE

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ARTICLE XI – INSURANCE

Section 11.1. Insurance Coverages. During the term of this Contract, the Contractor shall obtain and maintain in effect, at Contractor's expense, appropriate insurance policies protecting the Contractor and the EAA, and their respective officers, directors and employees, against any loss, liability, personal injury, death, property damage or any expense arising out of the performance of the Services, including, without limitation: (1) worker's compensation insurance in compliance with applicable state law; (2) comprehensive general liability insurance, insuring against property damage, personal injury and death, in an amount of no less than \$1,000,000.00 per occurrence; (3) automobile liability insurance in an amount no less than \$1,000,000.00; (4) umbrella liability insurance in an amount of no less than \$1,000,000.00. Said insurance policies shall be with insurance carriers licensed to do business in Texas. The Contractor shall be responsible for requiring that its subcontractors carry and maintain adequate insurance coverage and shall provide written evidence of such to the EAA.

Section 11.2. Additional Insureds. The Contractor shall name the EAA and its officers, directors and employees as "additional insureds" on all of the insurance policies specified in Subsection 11.1 above, or with respect to the worker's compensation insurance, contain waivers of subrogation by Contractor and the insurance carrier in favor of the EAA. Not later than the date of receipt of the written notice to proceed under Section 1.3, the Contractor must provide the EAA with certificates of insurance to be issued directly to the EAA by the Contractor's insurance agent, identifying the specified coverage. The Contractor, through its agent of record, shall notify the EAA of any changes in coverages within thirty (30) days prior to any effective date of change.

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 indemnity provisions set forth in Section 12.2.

ARTICLE XII – ASSUMPTION OF RISK AND INDEMNIFICATION

Section 12.1. Risk. The Contractor shall assume all risks associated with the Contractor's or its subcontractors' performance under this Contract and shall waive any claim against the EAA and other participants for damages arising out of the performance of the Services.

Section 12.2. Indemnification. The Contractor shall defend, indemnify and hold harmless the EAA, its directors, employees and agents from any and all damages, loss, or liability of any kind whatsoever, including the costs of litigation and attorneys' fees arising from (a) contracts or other arrangements between the Contractor and any third parties entered into to perform the Services, (b) any claims brought by any person relating to this Contract or the Services, or (c) the quality or the performance of the Services.

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
900 E. Quincy Street
San Antonio, Texas 78215
ATTENTION: ROLAND RUIZ, GENERAL MANAGER

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:

BIO-WEST, INC.
1812 Central Commerce Court
Round Rock, TX 78664-8546
ATTENTION: EDMUND L. OBORNY, PROJECT PRINCIPAL

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.

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. Governing Law. This Contract shall be deemed to have been executed and performed in the State of Texas and shall be construed in accordance with and governed by the laws of the State of Texas. Venue for any disputes or claims arising from this Contract shall be exclusively in the proper courts in Bexar County, Texas.

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. Non-Waiver of Immunity. Nothing in this Contract is intended as any waiver by the EAA of any immunity from suit to which it is entitled under Texas law.

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

Section 14.11. Costs. If any legal action, arbitration, or other proceeding is brought by a Party for the enforcement of this Contract or because of an alleged breach or default of this Contract, the prevailing Party shall be entitled to recover reasonable costs incurred, including but

not limited to attorney's fees, in such action or proceeding in addition to any other relief to which it or they may be entitled.

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.

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

EDWARDS AQUIFER AUTHORITY

BIO-WEST, INC.

By: _____
Roland Ruiz
General Manager

By: _____
Edmund L. Oborny
Vice-President

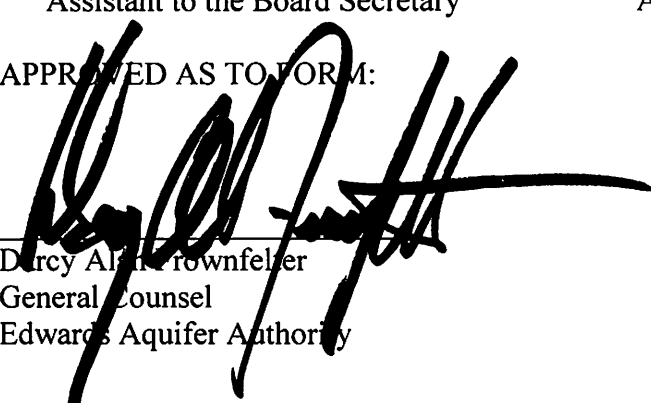
ATTEST:

ATTEST:

By: _____
Jennifer Wong-Esparza
Assistant to the Board Secretary

By: _____
Chimene Oborny
Administrative Assistant

APPROVED AS TO FORM:



Darcy Allen Brownfelter
General Counsel
Edwards Aquifer Authority

EXHIBIT A SCOPE OF WORK

The Contractor will focus specifically on the statistical analysis of the biology of the two spring ecosystems. The Contractor will provide an exploratory, time integrated statistical analysis on three categories of data from the Comal and San Marcos springs ecosystems: water quality/quantity, submerged aquatic vegetation, and the Covered Species populations, and develop biological and hydrological statistical questions related to achieving compliance with the Long Term Biological Goals (LTBG) of the Edwards Aquifer Habitat Conservation Plan (EAHCP), outlined in the tasks below.

Task 1. Data Summarization, Literature Review, and Methodology Development

The Contractor will complete a statistical summary of data related to water quality/quantity, submerged aquatic vegetation, and the Covered Species populations for the San Marcos and Comal springs systems. The datasets for summarization will be provided by EAA staff.

The Contractor will conduct a literature review identifying and summarizing pertinent statistical, biological, and hydrological information. The data summary and literature review will be used to develop project methodologies. The Contractor will provide the scientific rationale for the selection of the methodologies, variables and statistical analysis to the EAHCP Science Committee for peer review.

Task 2. Conduct Applied Research

The Contractor will perform the analyses consistent with the methodologies proposed in Task 1 and approved by the EAHCP Science Committee. The statistical analyses should include spatiotemporal descriptive measures, spatiotemporal trends observations, identification of dependent and independent factors, causal effects for observations, and measures to quantify uncertainty of the analyses. Given the temporal duration of the data set, the analyses should consider the effects of system disturbances (floods, drought, etc.) and associated responses (resilience and/or recovery).

The Contractor will keep a project notebook containing a description of the assumptions and methodologies that is organized in such a way as to allow replication of the steps, calculations, and procedures used to reach the study conclusions, as detailed in the draft final report. In addition, the Contractor will provide computer programs and scripts used to complete the analysis.

Task 3. Draft and Final Reports

The Contractor will provide an interim report to the EAA by June 30, 2017. This interim report should include preliminary results from the statistical analysis, along with draft biological and hydrological statistical questions related to achieving compliance with the EAHCP LTBGs. A presentation to the EAA will suffice for the interim report.

The Contractor will submit a Draft and Final report to the EAA at a date to be determined by the EAA's Chief Science Officer. These reports will include the assumptions and methodologies used by the Contractor in the data analysis, and will provide the biological and hydrological statistical questions recommendations for potential future research. The Contractor will allow a minimum of two weeks for Draft report review by the EAA. The Final Report, along with all data and the project notebook, must be submitted in hard copy and on a flash drive.

Task 4. Meetings and Presentations

The Contractor will attend two meetings with the EAHCP Science Committee to (1) present the literature review, data summarization, and project methodologies, and (2) present the project results.

**EXHIBIT B
BUDGET ESTIMATE**

TASK	ESTIMATED COST
TASK 1 - Methodology Development	\$ 4,436.
TASK 2 - Conduct Applied Research	\$62,120.
TASK 3 - Draft and Final Annual Reports	\$17,748.
TASK 4 - Meetings and Presentations	\$ 4,438.
TOTAL	\$88,742.

The total amount to be paid to the Contractor shall not exceed \$88,742.

EXHIBIT C
LABOR CATEGORIES AND PERSONNEL CHART

Position	Charge Rate/Hour
Project Principal	\$155.87
Senior Researcher	\$138.16
Senior Biologist	\$119.75
Senior Ecologist	\$114.62
Biologist I	\$109.48
Ecologist I	\$102.65
GIS / Senior Editor	\$97.60
Ecologist / Statistician	\$94.09
Technical Editor	\$86.63
Biologist II	\$75.26
Senior Administrative	\$66.72
Biologist III	\$65.01
Technician I	\$58.16
Technician II / Admin	\$51.31
Technician III	\$41.06
Technician IV	\$31.10
Expense	Charge Rate
Mileage	At current IRS rate
Meals	At Cost
Lodging	At Cost
Equipment Rental	At Cost
Supplies	At Cost
Phone/Fax/Copies	At Cost