INTERGOVERNMENTAL AGREEMENT between the BAYLOR UNIVERSITY, THE SCOTT LAB and the OKLAHOMA WATER RESOURCES BOARD

This Agreement ("Contract"), dated for convenience of reference the 1st day of July, 2021, but effective as provided herein, by and between BAYLOR UNIVERSITY, THE SCOTT LAB, hereafter "BAYLOR" and the OKLAHOMA WATER RESOURCES BOARD, herein "Board",

WITNESSETH:

WHEREAS, 27A O.S. § 1-3-101 provides in part that the OWRB has a number of jurisdictional areas of environmental responsibility for the State of Oklahoma, including but not limited to administration of a state program for assessing, monitoring, studying and restoring Oklahoma lakes, and establishment and implementation of a statewide beneficial use monitoring program for waters of the state in coordination with the other state environmental agencies; and

WHEREAS, the OWRB has received funding from the Central Oklahoma Master Conservancy District (COMCD) and is in position to receive additional funding to provide services including a core-flux method quantifying internal loading in Lake Thunderbird and related technical assessment; and

WHEREAS, BAYLOR has the personnel, equipment, and facilities available to perform laboratory analysis of water quality samples and conduct a sediment phosphorus and nitrogen (nutrient) flux estimation study for Lake Thunderbird in central Oklahoma; and

WHEREAS, the OWRB and BAYLOR desire to enter into this Agreement for their mutual benefit upon the terms and conditions set forth herein; and

WHEREAS, pursuant to 82 O.S. §1085.2(2) the OWRB is authorized to make such contracts as in the judgment of the OWRB are necessary or convenient to the exercise of any of the powers conferred upon it by law; and

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants provided below, it is agreed:

1. **SERVICES TO BE PROVIDED BY BAYLOR**. BAYLOR shall complete the work and services ascribed to it in "Attachment A - Scope of Work" attached hereto and incorporated by reference herein.

- 2. **COMPENSATION BY OWRB TO BAYLOR.** In consideration of work performed and costs incurred by BAYLOR, and subject to the receipt of funding described in paragraph 4 below, the OWRB shall pay BAYLOR according to the rates stated in Attachment A, subject to a total amount not to exceed Twenty-two Thousand and No/100 Dollars (\$22,000.00) for the term of this Agreement. The BAYLOR shall perform services and incur costs, then subsequently prepare quarterly invoices and submit the same to the OWRB on or before the last business day of each quarter. The invoice shall detail all services performed and costs incurred during the previous quarter. The invoice shall be in a form acceptable to the OWRB. If unacceptable in form, the OWRB will return the same to the BAYLOR with reason(s) for rejection.
- 3. AGREEMENT SUBJECT TO FUNDING. Notwithstanding anything in this Agreement to the contrary, payment by the OWRB to BAYLOR under this Agreement is subject to the OWRB's receipt of funding from COMCD for the aforementioned purposes, and if such funding is reduced, withdrawn, or otherwise not received by the OWRB, then in any such event, the OWRB shall so notify BAYLOR and this Agreement may be terminated or the services and compensation may be adjusted or reduced accordingly.
- 4. **TERM; EXTENSION; TERMINATION**. This Agreement shall become effective after it is approved and executed by all necessary persons and thereafter continue in effect through December 30, 2022. This Agreement may be extended, renewed or modified at any time upon such written terms and conditions as the parties may approve and execute. This Agreement may be terminated by either party for any reason, upon the occurrence of a "Termination Date" which is thirty (30) or more days after the terminating party delivers to the other party a written notice of termination specifying such Termination Date.
- 5. AUDIT. All books, documents, accounting procedures and practices, claims, and other data regardless of type whether in written form, computer data, or other form of BAYLOR relating to BAYLOR's performance under this Agreement shall be subject to examination by OWRB and the State Auditor and Inspector of the State of Oklahoma. BAYLOR shall maintain accurate records and documentation of all expenditures of time and resources in fulfilling its obligations under this Agreement and shall retain the same for three (3) years following completion and/or termination of the Agreement. Access to such records and documentation shall be made available during reasonable business hours to any proper representative of the OWRB and State of Oklahoma for inspection, copying and audit purposes. If an audit, litigation, or other action involving such records is started before the end of the three year period, the records are required to be maintained for three years from the date that all issues arising out of the action are resolved or until the end of the three year retention period, whichever is later.
- 6. **WORKERS COMPENSATION**. Each party agrees, acknowledges and warrants that it currently provides for and shall continue to provide for, in full force and effect during the duration of this Agreement, such workers' compensation insurance and/or liability coverage otherwise as is due, sufficient and required by law (including, but not limited to

85 O.S. § 1 et seq.) and as may be necessary to meet and satisfy any and all acts incidental to the work and services to be or as may be provided and performed by that party hereunder.

IN WITNESS WHEREOF, the parties have approved this Agreement and caused it to be executed by their duly authorized officers on the dates shown below.

OKLAHOMA WATER RESOURCES BOARD

Robert L. Stallings Jr., Chairman Date

ATTEST:

Secretary

Date

BAYLOR UNIVERSITY

Printed Name: Title:

Date

ATTACHMENT A

SCOPE OF WORK

Oklahoma Water Resources Board Water Quality Division

STATEMENT OF WORK

Lake Thunderbird Internal Loading Studies

1.0 INTRODUCTION

1.1. Background Information

- 1.1.1. The Department of Central Services, Central Purchasing Division on behalf of The Oklahoma Water Resources Board ("OWRB"), an agency of the state of Oklahoma, is seeking to obtain a two-year agreement from a university research laboratory to conduct a sediment phosphorus and nitrogen (nutrient) flux estimation study Lake Thunderbird in central Oklahoma. The required services shall include the monitoring of Lake Thunderbird to gather water quality and limnological samples, the analytical processing of samples in a research laboratory, the analysis and reporting of data, and the publication of study findings in a peer-reviewed scientific journal.
- 1.1.2. The OWRB lake monitoring program requires the determination of internal nutrient loading flux rates and the occurrence and concentration of certain micronutrients for Lake Thunderbird.

2.0 DEFINITIONS

- 2.1. <u>General Definitions</u>
- 2.1.1. "Contractor" means the supplier who is selected by and enters into a contract with the OWRB to provide the products and services in accordance with this Statement of Work and applicable contract documents.
- 2.1.2. "Date of Execution" shall be the date of award issued by the Department of Central Services, Central Purchasing Division.
- 2.1.3. "Excusable Delays" means delays completely beyond the control of the responsible party, including but not limited to: inclement weather preventing normal operation, power failure, fires, natural disasters other than inclement weather, and forced closure by outside authority (evacuation, etc.).
- 2.1.4. "Proper Invoice" means an invoice submitted by the Contractor that includes all requirements for processing for payment in accordance with the terms of the contract and applicable state or federal statutes, including but not limited to the Contractor's business name and address, invoice number, invoice date, purchase order number, rate, service performed, and such documentation as may be required by the OWRB or State law or regulation.
- 2.1.5. "Section" means the text of any enumerated subdivision of this Statement of Work (e.g., 3.1.1), or group of enumerated subdivisions under a bolded or underscored

heading (e.g., all of the subdivisions numbered 2.1.1 through 2.1.7 under 2.1 <u>General</u> <u>Definitions</u>, or all of the subdivisions numbered 2.1.1 through 2.2.6 under **2.0 DEFINITIONS**), as the context requires.

2.1.6. "Statement of Work" means this Statement of Work document in its entirety.

2.2. <u>Technical Definitions</u>

- 2.2.1. "Chain of Custody" means the set of procedures for documenting the history and possession of a sample from the time of collection through analysis and data reporting.
- 2.2.2. "Core-Flux Method" means a methodology to quantify nutrient release from lake sediments (internal loading). The core-flux method requires collecting intact sediment cores from the lake and then incubating the cores in the laboratory while measuring the change in concentration of nutrients in the overlying water.
- 2.2.3. "Primary Investigator" means the individual with primary managerial and technical responsibility over the design, implementation, management, reporting, and completion of all work requirements and deliverables outlined in the scope of work. Will be regularly abbreviated as PI throughout this document.
- 2.2.4. "Sample Event" means a sampling visit at a single site during a single index period. Will include collection of all cores, sediment, and water during the visit.
- 2.2.5. "Sample Report" means a report of analytical results from a sample event and should include all the relevant site and event information.

3.0 WORK REQUIREMENTS

- 3.1. Contractor shall conduct nutrient core-flux studies and characterize micronutrients on Lake Thunderbird. With input from the chosen contractor, the OWRB will select micronutrients to be characterized. The nutrient core-flux studies will be on Lake Thunderbird during a summer and winter index period at 2 locations. The micronutrients will be collected during the same sampling periods and locations
- 3.2. The contractor will collect intact core samples during each of the index periods. Each of these sample visits will be defined as a sample event. During each sample visit, nine intact core samples will be collected using either a sediment corer or Eckman dredge. Each set of cores will be grouped into three replicates of three different oxygen conditions, one oxic, one anoxic, and one hypoxic. During each visit, the contractor will also collect water samples to be analyzed for micronutrients.
- 3.3. In controlled research laboratory conditions, the contractor will analyze the collected intact core samples from each sample event using the "core-flux" method. Reconstituted lake water will be added to the cores, and at most, eight water samples will be collected over a 10-day period on days 1, 2, 3, 4, 5, 8, and 10. Each sample will be analyzed for a nutrient series consisting of total phosphorus, dissolved reactive-phosphorus, total Kjeldahl nitrogen, ammonia, and nitrate/nitrite. Additionally, all samples will be analyzed for alkalinity and hardness. A sediment sample from the cores will be analyzed for the same nutrient series. Micronutrient samples will be analyzed according to acceptable scientific methods.
- 3.4. For any field work related to the project, the contractor shall provide all needed equipment, including trucks, boats, water quality sondes, corers, and other sampling gear.
- 3.5. For any laboratory work related to the product, the contractor shall use a fully functional limnological research laboratory equipped with analytical equipment equivalent to a

membrane inlet mass spectrometer, Thermo Elemental Analyzer, a Beckman DU Spectrophotometer, and a Lachat Autoanalyzer.

- 3.6. Prior to any field work, the contractor will submit for review and approval by the OWRB Water Quality Division Chief a Monitoring and Reporting Plan.
- 3.7. Prior to any field work, the contractor will submit for review and approval by the OWRB Water Quality Division Chief a Quality Assurance Project Plan written in accordance with OWRB and United States Environmental Protection Agency guidelines and requirements.

4.0 DELIVERABLES

- 4.1. Contractor shall generate a Sample Report for each sample event which shall include the following:
- 4.1.1. Each individual Sample Report shall be entered into a Microsoft Excel or Access compatible format and shall be provided to the OWRB as a hardcopy and as an electronic copy.
- 4.1.2. Each Sample Report shall include all information contained on the sample login sheet (e.g., station name, station ID, GPS coordinates, county, type of collection, date collected and sub-sampled, etc.).
- 4.1.3. Each Sample Report shall enumerate each individual result with proper notation of core characteristics.
- 4.1.4. Each Sample Report shall include all analytical data as outlined in section 3.3 of this document
- 4.1.5. All completed Sample Reports must be delivered to OWRB no later than ninety (90) calendar days after Sample Receipt.
- 4.2. Semi-annual Progress Reports will be provided on June 30 and December 31 of each project year during the term of the project. The June report shall address work conducted from January to June and the December report shall address work conducted from July to December during the respective reporting periods. The Semi-annual Progress Report shall summarize the following information: 1) progress on project milestones and commitments, 2) major/key accomplishments during the reporting period, 3) problems or obstacles encountered and remedial action taken, 4) work planned for the next six month period.
- 4.3. A Draft Final Technical Report shall be delivered to the OWRB no later than 240 days after the completion of field sampling. The Technical Report shall include: 1) introduction and project objective, 2) description of sites sampled, sample locations, and sample collected, 3) description of study design and analyses including a description of the core-flux methodology and other field and lab methods employed, 4) all validated data, final flux rate results for each sample event, concluding information on the internal loading flux rates for each site during each index period, characterization of micronutrients, 5) discussion and conclusions, 6) maps, tables, and figures, as applicable, and 7) necessary references and appendices. The OWRB shall have 60 days to review and provide comments on the draft final report. Upon return of the reviewed Draft Final Report, the contractor will complete the Final Technical Report within 60 days and deliver by e-mail, in print, and on a compact disc, in a Microsoft Word® related format. All final data shall be delivered in an Excel® or Access® compatible format.
- 4.4. Study results shall be published in peer-reviewed scientific journal within 2 years of study completion.

5.0 GOVERNMENT FURNISHED ITEMS OR SERVICES

5.1. The OWRB shall provide, if needed, a crew member for each sampling event.

6.0 INSPECTION/REPORTING REQUIREMENTS [Not applicable for this agreement.]

7.0 UNUSUAL OR SPECIAL CONDITIONS

- 7.1. This agreement may be terminated by the OWRB with final approval by Department of Central Services, Central Purchasing Divison at any time due to lack of funding to support the agreement or OWRB's final, non-review able determination that the Contractor has not met the specific terms of the agreement.
- 7.2. The initial agreement may be renewed for up to one additional one-year periods at the option and by the mutual agreement of both parties, with the same terms and conditions and charges not to exceed original bid amounts.
- 7.3. Excusable Delays shall not be held against either party.
- 7.4. The term of the agreement shall extend 730 days after the Date of Execution.
- 7.5. The Contractor selected to provide the services described in this Statement of Work will be chosen using "Best Value" criteria. Please see Attachment A for details on the evaluation process.

8.0 APPLICABLE LAWS, REGULATIONS, PUBLICATIONS, FORMS

- 8.1. This Statement of Work, the accompanying Request for Proposal and each of its components and any contract that may be awarded are all governed by and subject to the laws of the State of Oklahoma.
- 8.2. If payment is received by the Contractor in excess of 45 calendar days after the later of the date of a Proper Invoice, the date the OWRB receives a Proper Invoice from the Contractor, or the date of receipt by the OWRB of the goods or services in an acceptable condition specified by the contract or purchase order, the Contractor may be entitled to claim an interest penalty. Oklahoma Statutes Title 62, Sections 41.4a through 41.4d; and Oklahoma Administrative Code Title 260, Chapter 10. For a copy of these rules, Contractor may contact the Office of State Finance, Room 122, State Capital Building, Oklahoma City, Oklahoma 73105.
- 8.3. The "General Provisions" included with this Statement of Work are incorporated herein by reference and made a part hereof.