

**CONTRACT
BY AND BETWEEN
SAN JACINTO RIVER AUTHORITY
AND
THE CITY OF HOUSTON, TEXAS,
RELATING TO THE ONGOING OPERATION OF THE
LAKE CONROE DAM AND RESERVOIR**

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This **CONTRACT BY AND BETWEEN SAN JACINTO RIVER AUTHORITY AND THE CITY OF HOUSTON, TEXAS, RELATING TO THE ONGOING OPERATION OF THE LAKE CONROE DAM AND RESERVOIR** (the "Lake Conroe Contract") is entered into and executed as of the Effective Date (hereinafter defined) by and between the **SAN JACINTO RIVER AUTHORITY** (hereinafter called the "Authority") and the **CITY OF HOUSTON, TEXAS** (hereinafter called the "City"). Hereinafter, the Authority and the City may at times each be referred to individually and without distinction as a "Party", and collectively as the "Parties."

RECITALS:

WHEREAS, the Authority is a conservation and reclamation district, body politic and corporate and a governmental agency of the State of Texas created and operating under the provisions of Chapter 426, Acts of the 45th Texas Legislature, Regular Session, 1937, as amended (compiled as Vernon's Annotated Texas Civil Statutes, Article 8280-121), enacted pursuant to the provisions of Section 59 of Article XVI of the Texas Constitution (such series of acts being hereinafter collectively referred to as the "Act"); and

WHEREAS, the Authority is authorized by the Act and the general laws of the State of Texas to, among other things, construct dams and reservoirs upon the waters of the San Jacinto River (the "River") and its tributaries in order to adequately and properly conserve the water of

the River and its tributaries and to make same available for industrial, municipal, agricultural, and irrigation purposes; and

WHEREAS, the City is a municipal corporation and home-rule city, principally located and having its City Hall in Harris County, Texas, authorized by its City Charter and the general laws of the State of Texas to, among other things, develop water supplies for industrial, municipal, agricultural, and irrigation purposes and to otherwise meet the demand for water supply in the water utility service area of the City; and

WHEREAS, the Authority was issued Permit to Appropriate State Water No. 1962 ("Permit No. 1962") by the Texas Water Rights Commission for the purpose of constructing a dam, reservoir, and other improvements on, across, and along the West Fork of the River in Montgomery County, Texas, near the City of Conroe, Texas (hereinafter referred to collectively as "Lake Conroe"), and to use, take, divert, and appropriate certain waters therefrom; and

WHEREAS, the rights, privileges, and duties of Permit No. 1962 are now included in Certificate of Adjudication No. 10-4963, as amended (the "Certificate"), attached hereto as **Exhibit A**, which is now administered by the Texas Commission on Environmental Quality (the "TCEQ"); and

WHEREAS, under that certain Contract by and between the Authority and the City dated April 24, 1968, as amended as further described below (the "1968 Lake Conroe Contract"), the City acquired an undivided two-thirds (2/3) interest in Lake Conroe and in the yield thereof permitted under Permit No. 1962, now Certificate of Adjudication No. 10-4963; and

WHEREAS, the 1968 Lake Conroe Contract was amended by the Parties on or about April 23, 1969, and September 1, 1971; and

WHEREAS, now the Parties deem it necessary and convenient to enter into this Lake Conroe Contract relating to the ongoing operation of Lake Conroe to update, supersede, and replace the 1968 Lake Conroe Contract; and

WHEREAS, the Authority is authorized to enter into this Lake Conroe Contract by the Constitution and the laws of the State of Texas including, without limitation, the Act and Sections 49.068(b) and 49.213 of the Texas Water Code, as amended; and

WHEREAS, the City is authorized to enter into this Lake Conroe Contract by the Constitution and the laws of the State of Texas including, without limitation, Section 49.068(b) of the Texas Water Code, as amended, and the City of Houston, Texas Charter and Code of Ordinances.

AGREEMENT:

NOW, THEREFORE, in recognition of the foregoing recitals, the truth of which the Parties acknowledge, and for and in consideration of the premises above and the respective promises and mutual covenants and benefits hereinafter set forth, the Parties contract and agree as follows:

ARTICLE I

Recitals; Definitions

Section 1.01: Incorporation of Recitals. The Recitals set out above are true and correct and are hereby incorporated into this Lake Conroe Contract for all purposes.

Section 1.02: Definitions. In addition to terms defined elsewhere in this Lake Conroe Contract, including the Recitals, and unless the context requires otherwise, the following terms

used in this Lake Conroe Contract have the following meanings and, to the extent applicable, supplement terms defined elsewhere in this Lake Conroe Contract:

“Applicable Laws” shall mean, but not be limited to, limitations, restrictions, conditions, standards, prohibitions, and requirements of any law, statute, ordinance, rule, regulation, order, or determination of any government authority with jurisdiction over the Parties or the relevant Party, including, without limitation, all applicable zoning ordinances, building codes, dam safety regulations, flood rules and regulations, health laws and regulations, and environmental laws.

“Authority” shall mean the San Jacinto River Authority and/or any legal predecessor (e.g., the San Jacinto River Conservation and Reclamation District), successor or assign of such political subdivision, including its governing body.

“Authorized Representative(s)” shall mean the Director or the General Manager, or any other person or person authorized by each Party’s governing body to represent the Party’s interest in the administration of this Lake Conroe Contract, including but not limited to, persons so authorized to receive Notices and grant approvals as provided in this Lake Conroe Contract.

“Certificate” means Certificate of Adjudication No. 10-4963, as amended (the “Certificate”), attached hereto as **Exhibit A**.

“City” shall mean the City of Houston, Texas, and/or any legal successor or assign of such city.

“Director” shall mean the Director of Houston Public Works, also sometimes referred to as the “Utility Official.”

“Effective Date” shall mean the date this Lake Conroe Contract is signed by the Houston City Controller.

“General Manager” shall mean the duly appointed General Manager of San Jacinto River Authority.

“Lake Conroe” shall mean the Lake Conroe dam and reservoir, including all improvements and appurtenances thereto and all real property and interests in real property previously acquired therefor pursuant to the 1968 Lake Conroe Contract. In some instances herein, specific improvements associated with Lake Conroe and included in the definition of Lake Conroe may be mentioned for emphasis and clarification.

“Notice” shall mean all notices required or permitted to be given by a Party to the other Party under the terms and conditions of this Lake Conroe Contract and as specified in Article VIII herein.

ARTICLE II

Interests of the Parties

Section 2.01: Equitable and Beneficial Interests in Lake Conroe. The City shall continue to have an undivided two-thirds (2/3) interest in Lake Conroe and the right to divert, use, dispose of, and sell the water yield of said undivided two-thirds (2/3) of Lake Conroe, as authorized by the Certificate, together with the benefit of all other rights and privileges appurtenant to the Certificate. The Authority shall continue to have the remaining undivided one-third (1/3) interest in Lake Conroe and the right to divert, use, dispose of, and sell the water yield of said undivided one-third (1/3) of Lake Conroe, as authorized by the Certificate, together with the benefit of all other rights and privileges appurtenant to the Certificate.

Section 2.02: Legal Title to Lake Conroe. In accordance with the 1968 Lake Conroe Contract, and notwithstanding Section 2.01 hereof, legal title to the entirety of the real property

constituting Lake Conroe as defined herein shall be held exclusively by the Authority for the benefit of the Parties. The City's undivided two-thirds (2/3) interest in Lake Conroe shall not be construed to create a right of title, possession, or occupancy with respect to Lake Conroe, but does create a right of use and a property interest to the extent set forth in this Lake Conroe Contract.

Section 2.03: Water Sales; Other Revenues. Notwithstanding Section 2.01 hereof, each Party shall be solely responsible with regard to the use, disposal, or sale of its respective share of the water yield in Lake Conroe as authorized by the Certificate, and any revenues derived from the use, disposal, or sale of the Party's water shall be the separate property of such Party. In this regard, each Party may make provisions for the passing of title to water derived from such Party's share of the water yield in Lake Conroe to third parties in connection with any contract sale or other disposition of such water. Other than revenues derived by each Party from the use, disposal, or sale of its respective share of the water yield in Lake Conroe, incidental revenues derived from the operation of Lake Conroe (e.g., income from marina leases, dock licensing fees, and on-site sanitary sewer facility inspection fees) shall be applied against the costs and expenses to operate and maintain Lake Conroe as reflected in the annual operating budget unless otherwise mutually agreed upon by the Parties.

ARTICLE III

Operation of Lake Conroe

Section 3.01: Operation of Lake Conroe. The Authority shall operate Lake Conroe and maintain and keep in good repair the dam, reservoir, and appurtenances constituting Lake Conroe.

Section 3.02: Lake Conroe Accounting. (a) The Authority shall keep a continuing daily accounting of (i) the amount of water impounded in Lake Conroe, and (ii) the amount water

released/diverted from Lake Conroe for the account of the City and the Authority, respectively. The General Manager and the Director may mutually agree to, and from time to time revise, detailed procedures to account for the water impounded in Lake Conroe and belonging to the City and the Authority, respectively, without the need for formal amendment to this Lake Conroe Contract.

(b) From time to time, the Authority shall furnish or otherwise make available to the City for its review statements showing the results of the accounting performed by the Authority in accordance with subsection (a). Such statements shall be furnished or otherwise made available on a monthly basis, or at more frequent intervals mutually agreed to by the Authorized Representatives.

Section 3.03: Measurement and Reporting of Direct Diversions. (a) All direct diversions from Lake Conroe, whether by the City, by the Authority, or by the respective customers of the City or the Authority, shall be measured by standard metering devices unless other measurement methods are mutually agreed to by the General Manager and the Director. The specifications for metering devices to be installed by the Authority or by the customers of the Authority shall be determined by the General Manager, in his or her discretion. The specifications for metering devices to be installed by the City or by the customers of the City shall be determined by the Director, in his or her discretion. Notwithstanding the foregoing, the Parties agree that metering devices shall have a stated manufacturer's accuracy of $\pm 5\%$ or better, and that the General Manager and the Director may from time to time mutually agree upon more stringent metering requirements to apply to the Parties and their respective customers. All meters shall be calibrated annually to maintain the required accuracy tolerance.

(b) The Parties hereby acknowledge and approve of the Authority's existing procedures for the measurement of water diverted from Lake Conroe by the Authority's non-commercial irrigation customers, a copy of which is attached hereto as **Exhibit B**. Any updates to these procedures by the Authority shall be submitted to the City's Authorized Representative for review and approval in advance of their implementation.

(c) Each Party shall furnish or otherwise make available to the other Party a report of all direct diversions from Lake Conroe by the reporting Party or its customers. Such reports, including any adjustments to prior reports due to meter failure, error, recalibration, or similar causes of inaccuracy, shall be furnished or otherwise made available on an annual basis, or at more frequent intervals mutually agreed to by the General Manager and the Director.

(d) Notwithstanding anything to the contrary in this Lake Conroe Contract, each Party shall be responsible for preparing and submitting to the TCEQ any required reports with respect to the water yield in Lake Conroe diverted, used, disposed of, released, or sold by such Party in accordance with the Certificate.

Section 3.04: Release of Water; Reservoir Levels. If, as and when requested by the City, the Authority will release water to the City from Lake Conroe in the amount and at the rate of release requested by the City, subject to any applicable provisions of the Certificate (including, without limitation, the maximum diversion rate of 700 cubic feet per second as specified therein), consistent with Applicable Laws, and not in excess of the City's two thirds (2/3) interest therein; provided that, unless otherwise mutually agreed upon by the City and the Authority, and approved by the TCEQ if necessary, such releases shall be done in such a manner that elevations of water surface levels in Lake Conroe will remain at levels that will maximize the yield of the Lake Conroe

through such operational procedures. Lake Conroe operations shall not impair or be detrimental to any of the senior water rights of the Authority or the City.

Section 3.05: LIABILITY AND INDEMNIFICATION. IN ANY CASE WHEN LAKE CONROE IS OPERATED CONSISTENT WITH REQUIRED OPERATING AND ENGINEERING STANDARDS, EACH PARTY AGREES THAT IT SHALL BE RESPONSIBLE FOR ANY AND ALL CLAIMS, DEMANDS, DAMAGES, JUDGMENTS, AWARDS, COSTS AND EXPENSES, INCLUDING REASONABLE ATTORNEY'S AND EXPERT WITNESS FEES AND COURT COSTS (INCLUDING ADMINISTRATIVE LAW PROCEEDINGS), FROM BODILY INJURY OR DEATH TO ANY PERSON, OR FOR THE TAKING OF OR DAMAGE TO ANY PROPERTY (WHETHER REAL OR PERSONAL PROPERTY), BROUGHT OR SUFFERED ON ACCOUNT OF, ARISING OR ALLEGED TO HAVE ARISEN DIRECTLY OR INDIRECTLY FROM, OR OCCASIONED BY OR IN CONNECTION WITH SUCH PARTY'S DIVERSION OR RELEASE OF WATER (OR, IN THE CASE OF THE CITY, A RELEASE MADE AT THE REQUEST OF THE CITY) STORED IN THE LAKE CONROE RESERVOIR PURSUANT TO THE CERTIFICATE (COLLECTIVELY, "LOSSES"), AND IT SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE OTHER PARTY AND ITS BOARD/COUNCIL MEMBERS, OFFICERS, MANAGERS, EMPLOYEES, CONTRACTORS, SUBCONTRACTORS, AGENTS, AND CONSULTANTS FROM AND AGAINST ANY AND ALL SUCH LOSSES TO THE MAXIMUM EXTENT ALLOWED BY LAW. THE FOREGOING SHALL NOT APPLY TO CLAIMS, DEMANDS, DAMAGES, JUDGMENTS, AWARDS, COSTS AND EXPENSES, RELATED TO THE RELEASE OF WATER THROUGH THE SPILLWAY GATES OF THE DAM, IF, AS, AND WHEN THE

WATER SURFACE ELEVATION OF LAKE CONROE EXCEEDS 201' ABOVE MEAN SEA LEVEL, WHEN SUCH RELEASES ARE NOT MADE NEGLIGENTLY, RECKLESSLY OR UNSAFELY AND ARE MADE IN ACCORDANCE WITH APPLICABLE LAWS, SOUND ENGINEERING STANDARDS, AS REQUIRED BY THE CERTIFICATE, AND SUCH FLOOD DAMAGE CLAIMS AND ASSOCIATED COSTS AND EXPENSES SHALL BE TREATED AS A NON-RECURRING EXPENSE OF THE PARTIES UNDER SECTION 3.12(a)(4) HEREOF.

THE PARTIES AGREE THAT ANY AND ALL DAMAGES OCCURRING AS A RESULT OF NEGLIGENT, RECKLESS, UNSAFE RESERVOIR OPERATIONS, OR OPERATIONS NOT IN COMPLIANCE WITH APPLICABLE LAWS AND SOUND ENGINEERING STANDARDS ARE THE SOLE RESPONSIBILITY OF THE AUTHORITY, THE RESERVOIR OPERATOR.

Section 3.06: INDEMNIFICATION PROCEDURES. (a) Notice of Claims. If the Authority or the City receives notice of any claim or circumstances which could give rise to an indemnified loss, the receiving Party shall give Notice to the other Party within thirty (30) calendar days. The Notice must include the following:

- (1) a description of the indemnification event in reasonable detail,
- (2) the basis on which indemnification may be due,
- (3) if the claim was submitted by a third party, any quantified monetary amount of the loss identified in the claim by such third party.

This Notice does not estop or prevent either Party from later asserting a different basis for indemnification or a different amount of indemnified loss than that indicated in the Notice. If the Notice to the other Party is not provided within the 30-day period, the lack of Notice does not

waive any right to indemnification except to the extent that the other Party is prejudiced, suffers loss, or incurs expense because of the delay.

(b) Defense of Claims; Assumption of Defense.

- (1) If both Parties are named in a claim by a third party, then either Party may assume the defense of the claim either jointly or separately. Either Party may seek indemnity from the other Party if the claim involves an indemnified loss.
- (2) In cases where only one Party is named in a claim by a third party, and such Party is to be indemnified by the other Party under the terms and provisions of this Lake Conroe Contract, then the indemnifying Party may assume the defense of the claim at its own expense with counsel chosen by the indemnifying Party. To that end, within ten (10) calendar days after receiving Notice of an indemnification request, the indemnifying Party must advise the indemnified Party regarding whether it will defend the claim. If the indemnifying Party advises that it will defend the claim, then (i) the indemnifying Party shall control the defense and any and all negotiations to settle the claim, subject to the indemnified Party's consent or agreement to the settlement, which consent or agreement shall not unreasonably be withheld, and (ii) the indemnified Party shall have the right, but not the obligation, to retain separate counsel to participate in (but not control) the defense and may participate in (but not control) any settlement negotiations. If the indemnifying Party fails to timely respond to Notice of an indemnification request, or if the indemnifying Party advises that it will not

defend the claim, then the indemnified Party shall assume and control the defense and any and all negotiations to settle the claim, subject to the indemnifying Party's consent or agreement to the settlement, which consent or agreement shall not unreasonably be withheld, and all defense expenses shall constitute an indemnification loss.

Section 3.07: Regulatory Compliance. The Authority shall use reasonable diligence and sound operating protocols to ensure that the operation of Lake Conroe complies with Applicable Laws, including the regulations of any federal, state, or local agency with jurisdiction regarding the operation of Lake Conroe. It is acknowledged, however, that as between the Parties, the Authority is responsible for the daily operations of Lake Conroe and, therefore, the City will provide assistance as necessary and as requested by the Authority to support such compliance.

Section 3.08: Protection of Water Supply. The Authority shall use every reasonable effort to protect the Lake Conroe water supply from unauthorized and illegal pumping, including patrolling the perimeter of Lake Conroe to identify unauthorized pumps and unauthorized diversion sites.

Section 3.09: Quality of Water. The Authority shall use reasonable diligence and sound operating protocols to protect the quality of water in Lake Conroe for the benefit of the Parties including, without limitation, the administration of a program for the inspection and permitting of on-site wastewater facilities in the vicinity of Lake Conroe as authorized by the rules of the TCEQ, and a program for the control of invasive species.

Section 3.10: Annual Budget. (a) The Authority will prepare and submit to the City, not less than sixty (60) calendar days before the beginning of each Authority fiscal year, a budget setting forth in detail proposed expenditures during the ensuing fiscal year of the Authority for the

operation, maintenance, and repair of Lake Conroe. The annual operating budget must be approved by City Council each year, but the annual budget may be amended with the mutual consent and approval of the Parties, including their Authorized Representatives as authorized by their governing bodies and as set forth in this Lake Conroe Contract.

(b) In the event of the failure or refusal of the City Council to approve the annual budget prior to the beginning of each Authority fiscal year, which currently begins on September 1 of each year, the Parties agree that the budget submitted by the Authority to the City for such fiscal year shall be deemed the approved budget for all purposes unless and until all disputes related to such budget are resolved (i) by mutual agreement of the Parties, which may include resolution by mediation in accordance with the provisions of Section 6.03, or (ii) by a final, non-appealable decision issued by a court with competent jurisdiction.

Section 3.11: Annual Operating Payments. (a) The City shall pay the Authority for two-thirds ($2/3$) of the net annual normal direct operation, maintenance, and repair expenses and costs of Lake Conroe (after credits from revenues derived from the operation of Lake Conroe, except the sale of water therefrom) incurred by the Authority and documented in the annual budget ("O&M Costs"). O&M Costs shall be for:

- (1) operation, maintenance, and repair of Lake Conroe;
- (2) prevention of pollution around Lake Conroe;
- (3) enforcement of safety regulations as may be necessary or required of the Authority;
- (4) leases and rentals including lease payments to the National Forest Service;
- (5) all costs of maintaining and operating the necessary gauges and measuring devices and of accounting for water; and

- (6) all other activities necessary or proper to the operation of Lake Conroe.
- (b) For purposes of subsection (a), O&M Costs shall include but are not limited to:
 - (1) compensation and benefits paid to or on behalf of Authority employees for time actually spent on the maintenance and operation of Lake Conroe;
 - (2) purchase or rental of equipment, tools, automobiles, training, and supplies for the maintenance and operation of Lake Conroe; and
 - (3) premiums on insurance policies pertaining to Lake Conroe.
- (c) The City shall also pay an overhead charge of fifteen percent (15%) on the City's two-thirds (2/3) share of O&M Costs. Such overhead charge shall not apply to capital outlays and non-recurring expenses as defined in Section 3.10 hereof.
- (d) The City shall make monthly payments to the Authority under this Section on invoices or similar requisition forms prepared by the Authority and approved by the Director.

Section 3.12: Capital Outlays and Non-Recurring Expenses. (a) In addition to payments under Section 3.09, the City shall pay the Authority for two-thirds (2/3) of:

- (1) all capital outlays incurred by the Authority and documented in the annual budget;
- (2) all documented, non-recurring expenses and costs incurred by the Authority in connection with the operation, maintenance, and repair of Lake Conroe that are not included in the annual budget, including, without limitation, all expenses and costs incurred in connection with major repairs or replacements of Lake Conroe facilities;
- (3) all documented, non-recurring expenses and costs incurred by the Authority in connection with the operation, maintenance, and repair of Lake Conroe

that are not included in the annual budget and not considered maintenance or operating expenses under generally accepted accounting principles (“GAAP”); and

- (4) all expenses and costs incurred in connection with flood damage claims and other claims for damages against the Authority arising out of the operation of Lake Conroe, to the extent consistent with the limitations of INDEMNITY set forth in this Lake Conroe Contract.

(b) The budget for all major repairs and replacements not included in the annual budget shall be subject to the approval of the Director. All settlement of claims for damages shall be subject to the approval of the City Attorney. The Authority shall promptly notify the Director and the City Attorney of any suit filed against the Authority involving the operation, maintenance, or repair of Lake Conroe.

(c) The City shall make payments to the Authority under this Section on invoices or requisition forms prepared by the Authority, accompanied by supporting documentation, and approved by the Director. Unless otherwise agreed to by the General Manager and the Director, the City shall make such payment within thirty (30) calendar days following the City's receipt of the invoice or requisition form and supporting documentation.

Section 3.13: City’s Duty to Pay. The City's duty to pay money to the Authority under this Lake Conroe Contract is limited by the provisions of Article II, Sections 19 and 19a of the City's Charter and Article XI, Section 5 of the Texas Constitution. The City will act in good faith and the Director agrees to take all reasonable and necessary steps to render all payments due to the

Authority under this Lake Conroe Contract and any payments in arrears from the 1968 Lake Conroe Contract.

Section 3.14: Insurance. The Authority agrees that it will at all times keep insured such portions of Lake Conroe as are customarily insured by political subdivisions in the State of Texas operating like facilities under similar circumstances with a responsible insurance company or companies against risks, accidents, or casualties against and in amounts which are customarily carried by such political subdivisions. In the event of any loss or damage to or caused by operation, maintenance, or repair of Lake Conroe, the Authority agrees that it will apply any proceeds of such insurance policies against the expenses incurred or to be incurred by the Parties with respect to same.

Section 3.15: Covenant to Fund; Liens and Encumbrances. Each Party covenants and agrees to finance its proportionate share of costs and expenses for Lake Conroe as operational expenses of such Party's raw water system and shall do so without affecting or impairing the other Party's rights, title, privileges, and interests in and to Lake Conroe. Neither Party shall create, or suffer to be created, any lien or other encumbrance of any character whatsoever on the other Party's rights, title, privileges, and interests in and to Lake Conroe without the written consent of the other Party, and any such alienation or assignment without such consent shall be void. The foregoing limitations shall not apply to any Party's application or agreement for participation by the State of Texas, by and through the Texas Water Development Board or any other agency of the State of Texas, in the financing of capital improvements or repairs to Lake Conroe.

Section 3.16: Independent Contractor; Consultation with City. (a) The Authority shall not be an agent of the City in the operation, maintenance, or repair of Lake Conroe but shall be an independent contractor.

(b) Notwithstanding subsection (a), in the event that the City is on reasonable grounds dissatisfied with the manner in which Lake Conroe is being operated, maintained, or repaired by the Authority, the City shall notify the Authority of such dissatisfaction, and the Authority shall review the policies for operation, maintenance, and repair of Lake Conroe and make every effort to comply with the City's suggestions.

(c) Notwithstanding subsection (a), the Authority and the City may jointly cooperate on efforts to mitigate flooding within the Lake Conroe watershed and, as appropriate, the West Fork San Jacinto watershed. Any flood mitigation protocols will be subject to all applicable regulations of any agency with jurisdiction.

(d) Each Party shall have the right to divert its share of the water in Lake Conroe for any authorized use under the Certificate. All diversions from Lake Conroe shall be made subject to the approval of the Director or the General Manager, whichever Party's water is to be diverted.

ARTICLE IV

Reports and Inspections; Incidental Matters

Section 4.01: Annual Audit Report. The Authority will furnish the City with a reasonable number of copies of an annual audit report, to be prepared by the State Auditor or by an independent firm of certified public accountants, relative to Lake Conroe. Such audits shall constitute an operating expense of Lake Conroe.

Section 4.02: Inspection of Lake Conroe and Records. (a) The City shall have the right to inspect Lake Conroe, and the City's agents and representatives shall have full access to all parts of Lake Conroe at all reasonable times for such inspection during regular business hours or otherwise upon twenty-four (24) hours' prior Notice to the Authority.

(b) The City shall also have the right to examine the Authority's books, records, and accounts relating to Lake Conroe during regular business hours and otherwise at reasonable times upon twenty-four (24) hours' prior Notice to the Authority.

Section 4.03: Surplus Property. The Authority may determine that certain real property or interests in real property, personal property, supplies, materials, or other items constitute a surplus and dispose of same in any matter as provided under the Applicable Laws. Disposal of any such surplus property with a value in excess of \$50,000 requires ten (10) calendar days' prior Notice to the City. Any proceeds from the disposition of such surplus property, after all expenses related to same have been deducted, shall be credited to the Parties as income of Lake Conroe.

ARTICLE V

Term

Section 5.01: Term. This Lake Conroe Contract shall be in force and effect on and after the Effective Date and shall supersede and replace the 1968 Contract as of the Effective Date. Unless terminated by mutual agreement of the Parties, this Lake Conroe Contract shall continue in force and effect during the useful life of Lake Conroe.

ARTICLE VI

Default and Notice; Remedies; Mediation

Section 6.01: Default and Notice. Default shall occur in the event either Party (i) fails to timely pay any amounts due hereunder ("Payment Default"), or (ii) fails to perform of any of its other obligations under this Lake Conroe Contract ("Performance Default"). In the event of any such default by a Party, then the other Party shall give Notice to the defaulting Party specifying

the matter with respect to which such Party is in default and requesting that the default be remedied within sixty (60) calendar days of the date of the Notice of default.

Section 6.02: Remedies. (a) In the event a Payment Default is not fully cured within a reasonable time, but not more than sixty (60) calendar days after Notice of default has been given to the defaulting Party, or should the defaulting Party deny or dispute such Payment Default, the non-defaulting Party may submit the matter to non-binding mediation in accordance with the provisions of Section 6.03 or avail itself of any and all remedies existing at law or in equity, including specific performance and mandamus, which shall be cumulative. In no case of any Payment Default by the City of any length of time shall the Authority suspend delivery of water to the City hereunder.

(b) In the event that a Performance Default is not fully cured within a reasonable time, but not more than sixty (60) calendar days after Notice of default has been given to the defaulting Party, or should the defaulting Party deny or dispute such Performance Default, the Parties agree to submit the matter to non-binding mediation in accordance with the provisions of Section 6.03; provided, however, a Party may (i) seek injunctive relief, and only injunctive relief, prior to such mediation in order to preserve the *status quo* or to prevent irreparable harm, or (ii) commence litigation if same could be barred within said sixty (60) day cure period by an applicable law or statute of limitations.

(c) Neither the foregoing provisions of this Section nor any other provision of this Lake Conroe Contract shall be construed as specifying an exclusive remedy for any default, and all remedies existing at law or in equity, including specific performance and mandamus, may be availed of by any Party and shall be cumulative. It is agreed by the Parties, however, that

notwithstanding anything in this Lake Conroe Contract to the contrary, termination of this Lake Conroe Contract in the event of a default shall not be a remedy available to the Parties.

Section 6.03: Mediation. (a) A Party seeking to initiate mediation (the “Initiating Party”) of a dispute arising out of this Lake Conroe Contract shall give Notice to the other Party describing in general terms the nature of the dispute and the Initiating Party's claim for relief, if not previously contained in a Notice delivered under Section 6.01, and identifying one or more individuals with authority to settle the dispute on the Initiating Party's behalf. The Party receiving such Notice (the “Responding Party”) shall have thirty (30) calendar days within which to designate by Notice to the Initiating Party one or more individuals with authority to settle the dispute on such Party's behalf. The individuals so designated shall be referred to hereinafter as the “Authorized Representatives.”

(b) The Authorized Representatives shall be entitled to make such investigation of the dispute as they deem appropriate, but agree to meet promptly, and in no event later than thirty (30) calendar days from the date of the Initiating Party's Notice, to discuss resolution of the dispute. The Authorized Representatives shall meet at such times and places and with such frequency as they may agree. If the dispute has not been resolved within thirty (30) calendar days from the date of their initial meeting, the Parties shall cease direct negotiations and shall submit the dispute to mediation in accordance with the procedure set forth below.

(c) The Authorized Representatives shall have five (5) business days from the date they cease direct negotiations to submit to each other a written list of not less than three (3) acceptable qualified mediators not affiliated with either of the Parties. Such list shall rank the mediators in numerical order of preference (e.g., “1” being the highest rank, “3” being the lowest rank). All mediator candidates must satisfy the qualification standards of Texas law, as prescribed under

Section 154.052, Texas Civil Practice and Remedies Code. Within five (5) business days from the date of receipt of such list, the Authorized Representatives shall rank the mediators submitted by the other Party in numerical order of preference and exchange such rankings. If one or more names are on both lists, the highest-ranking person which appears on both lists shall be designated as the mediator. If no name is on both lists, the person receiving the highest combined ranking shall be designated as the mediator. If such mediator is not available to serve, the Parties shall proceed to contact the mediator who was next highest in combined ranking until they are able to select a mediator. In the event of a tie based on such combined ranking, the Initiating Party shall break the tie.

(d) In consultation with the mediator selected, the Parties shall promptly designate a mutually convenient time and place for the mediation, and unless circumstances require otherwise, such time is to be not later than fifteen (15) calendar days after selection of the mediator.

(e) In the event either Party has substantial need for information in the possession of the other Party in order to prepare for the mediation, the Parties shall attempt in good faith to agree on procedures for the expeditious exchange of such information, with the assistance of the mediator if required.

(f) At least seven (7) calendar days prior to the first scheduled session of the mediation, each Party shall deliver to the mediator and to the other Party a concise written summary of its views on the matter in dispute, and such other matters required by the mediator.

(g) In the mediation, each Party shall be represented by an Authorized Representative and may be represented by counsel. In addition, each Party may, with permission of the mediator, have in attendance such additional persons as are needed to respond to questions, contribute information, and participate in the negotiations.

(h) The mediator shall determine the format for the meetings, designed to assure that both the mediator and the Authorized Representatives have an opportunity to hear an oral presentation of each Party's views on the matter in dispute, and that the Authorized Representatives attempt to negotiate a resolution of the matter in dispute, with or without the assistance of counsel or others, but with the assistance of the mediator. To this end, the mediator is authorized to conduct both joint meetings and separate caucuses with the Parties. The mediation session shall be private. The mediator will keep confidential all information learned in private caucus with any Party unless specifically authorized by such Party to make disclosure of the information to the other Party. The Parties commit to participate in the proceedings in good faith with the intention of resolving the dispute, if at all possible.

(i) The Parties agree to participate in the mediation procedure to its conclusion. The mediation shall be concluded by (i) failure to timely select a mediator, (ii) the execution of a settlement agreement by the Parties, (iii) a declaration of the mediator that the mediation is terminated, or (iv) a written declaration of a non-defaulting Party to the effect that the mediation process is terminated due to failure of the defaulting Party to mediate timely or in good faith, or at the conclusion of one or more mediation sessions lasting a total of not less than eight (8) hours. If the mediation is terminated without a resolution of the dispute, any Party may commence legal proceedings in addition to any injunctive relief previously sought.

(j) The fees and expenses of the mediator shall be shared equally by the Parties.

(k) Mediation hereunder is a compromise negotiation for purposes of the federal and state Rules of Evidence and constitutes privileged communication under Texas law. Except to the extent required by law, the entire mediation process is intended to be confidential, and no stenographic, visual, or audio record shall be made. All conduct, statements, promises, offers,

views, and opinions, whether oral or written, made in the course of the mediation by any Party or by an Authorized Representative, or by their agents, employees, representatives, or other invitees, and by the mediator are confidential and shall, in addition and where appropriate, be deemed to be privileged. Such conduct, statements, promises, offers, views, and opinions shall not be discoverable or admissible for any purposes, including impeachment, in any litigation or other proceeding involving the Parties, and shall not be disclosed to anyone not an Authorized Representative or an agent, employee, expert, witness, or representative of any of the Parties; provided, however, that evidence otherwise discoverable or admissible is not excluded from discovery or admission as a result of its use in the mediation. The mediator shall be disqualified as a witness, consultant, expert or counsel of any Party with respect to the dispute and any related matters in any subsequent litigation.

Section 6.04: No Waiver. The failure of either Party to insist in any one or more instances upon performance of any term, covenant, or condition of this Lake Conroe Contract shall not be construed as a waiver or relinquishment of the future performance of such term, covenant, or condition by the other Party, and the obligation of such Party with respect to future performance shall continue in full force and effect.

ARTICLE VII

Force Majeure

Section 7.01: Definition. The term “*force majeure*”, as used in this article, shall include, without limitation, the following: hurricanes, storms, floods, washouts, droughts, landslides, lightning, earthquakes, fires, or other acts of God; strikes, lockouts, or other industrial disturbances; acts of the public enemy, including acts of terrorism; orders of any kind of the

government of the United States, the State of Texas, or any civil or military authority other than a Party to this Lake Conroe Contract; insurrections, riots, arrests, restraint of government and people, civil disturbances; epidemics; explosions, breakages, or accidents to machinery, dams, or canals; partial or entire failure of a dam or related improvement; amendment, loss, or revocation of the Certificate or any other permit rights necessary to perform any action under this Lake Conroe Contract; and any inability of either Party, whether similar to those previously set forth or otherwise, that is not within the control of the Party claiming such inability and could not have avoided by the Party by the exercise of due diligence and care.

Section 7.02: Suspension of Performance. In the event either Party is rendered unable, wholly or in part, by *force majeure* to carry out any of its obligations under this Lake Conroe Contract, other than the payment of money, the Party claiming such inability must give Notice and full particulars of such *force majeure* to the other Party as soon as practicable after occurrence of the cause relied upon. If the obligations of the Party giving such Notice of inability to perform by reason of *force majeure*, and the Party uses due diligence to resume performance at the earliest practicable time, then the Party's obligations shall be suspended during the continuance of any inability caused by *force majeure*, but for no longer period. The Party shall make every reasonable effort to remedy the *force majeure* and resume performance of its obligations under this Lake Conroe Contract.

Section 7.03: Strikes and Lockouts. It is understood and agreed that the settlement of strikes or lockouts shall be entirely within the discretion of the Party experiencing the effects of the strike or lockout, and the above requirement that any *force majeure* be remedied with all reasonable dispatch shall not require the settlement of strikes or lockouts by acceding to the

demands of those participating in the strikes or lockouts if doing so is inadvisable in the sole discretion of the Party experiencing the strike or lockout.

ARTICLE VIII

Addresses; Notices; Approvals or Consents

Section 8.01: Addresses. Until the Authority is otherwise notified in writing by the City, the address of the City for Notice is and shall remain as follows:

Houston Public Works
Attn: Director
611 Walker, 25th Floor
Houston, Texas 77002
Email address: PublicWorks@houstontx.gov

Until the City is otherwise notified in writing by the Authority, the address of the Authority for Notice is and shall remain as follows:

General Manager
San Jacinto River Authority
1577 Dam Site Road
Conroe, Texas 77304
E-mail: legalnotices@sjra.net

Section 8.02: Notices. (a) All Notices required or permitted to be given under this Lake Conroe Contract from one Party to the other shall be given in writing by electronic mail to the other Party at the electronic mail address set forth above, with a hard copy of the same Notice mailed within forty-eight (48) hours by certified mail (return receipt requested), with proper postage affixed thereto and addressed to the other Party at the address set forth above or at such other address as the other Party may designate by Notice. Notice shall be effective upon actual delivery of the mailed copy of the same, as reflected on the corresponding return receipt.

(b) All Notices shall specify the section of this Lake Conroe Contract under which the Notice is given and must also state the estimated required date of response by the other Party, calculated based upon the date of the electronic mail transmittal of the Notice to the other Party. The Parties understand and agree that the actual required date of response shall be calculated from the date of delivery of the Notice to the other Party by certified mail.

Section 8.03: Approvals or Consent. (a) Whenever this Lake Conroe Contract requires or permits approval or consent to be given by either Party, the Parties agree that such approval or consent shall not be unreasonably withheld, conditioned, or delayed.

(b) Subject to applicable law, including the Code of Ordinances of the City of Houston, Texas, which includes the City Charter, from and after the Effective Date of this Lake Conroe Contract, decision-making authority regarding the terms and conditions of this Lake Conroe Contract shall vest in the General Manager, the Authorized Representative of the Authority, and the Director, the Authorized Representative of the City. Any approvals or consents required or permitted to be given by the Authority under this Lake Conroe Contract may be given by the General Manager. Any approvals or consents required or permitted to be given by the City under this contract, may be given by the Director to the extent permitted by law, and as authorized by Applicable Law. Any approvals or consents required or permitted to be given by either Party shall not be unduly delayed or withheld.

ARTICLE IX

Miscellaneous Provisions

Section 9.01: Governing Law; Venue. This Lake Conroe Contract shall be governed by and construed in accordance with the laws of the State of Texas. To the extent allowed by law,

venue of all suits brought as a result of any controversy or claim arising out of or relating to this Lake Conroe Contract, or breach thereof, shall be in courts of competent jurisdiction in Travis County, Texas.

Section 9.02: Subject to Laws and Regulations. This Lake Conroe Contract shall be subject to all Applicable Laws.

Section 9.03: Severability and Reformation. If any provision of this Lake Conroe Contract is held by a final and non-appealable decision of a court of competent jurisdiction to be unenforceable or violative of laws, orders, rules, or regulations of the United States of America, the State of Texas, or any regulatory body having jurisdiction, all other parts hereof remain enforceable unless the result materially prejudices either Party. In the event of a determination of material prejudice, the Parties shall have the power and the obligation to adopt and promulgate reasonable and necessary alternative procedures which will carry out the goals and objectives of this Lake Conroe Contract. The Parties hereby agree that they would have entered into this Lake Conroe Contract without regard to such unenforceability or violative procedure.

Section 9.04: Reservation of Rights. All rights, powers, privileges, and authority of the Parties not governed, restricted, or affected by the express terms and provisions of this Lake Conroe Contract shall be and are hereby reserved by the Parties and may be exercised and enforced from time-to-time and as often as may be deemed necessary and proper by the Parties.

Section 9.05: Limited Waiver of Immunity, including Sovereign Immunity. (a) The City and the Authority expressly acknowledge that the City is a home-rule city and political subdivision of the State of Texas, and the Authority is a political subdivision of the State of Texas, and nothing in this Lake Conroe Contract will be construed as a waiver or relinquishment by either the City or

the Authority of its right to claim such exemptions, privileges, and immunities, including sovereign immunity, as may be provided by law, with respect to a third party.

(b) The City and the Authority expressly acknowledge and agree that this Lake Conroe Contract constitutes an agreement containing all of the essential terms for the provision of the goods and services contemplated hereby, and is subject to the provisions of the Subchapter I, Chapter 271, Texas Local Government Code, as amended, and any successor statute. In accordance with Sections 271.152 and 271.153 thereof, and only as between the Parties, the Parties hereby waive and acknowledge waiver of all constitutional, statutory, or common law rights to sovereign or governmental immunity from liability or suit and expressly consent to be sued and to be liable, as permitted by law, to the limited extent necessary for a Party to enforce this Lake Conroe Contract against the other Party.

Section 9.06: Parties in Interest. This Lake Conroe Contract shall be for the sole and exclusive benefit of the Parties, their legal successors, and assigns and shall not be construed to confer any rights upon any other person not a party to this Lake Conroe Contract. Nothing in this Lake Conroe Contract shall be construed to confer standing to sue upon any party who did not otherwise have such standing.

Section 9.07: Assignments. This Lake Conroe Contract shall not be assignable by either Party without the other Party's prior written consent, which shall not be unreasonably delayed or denied.

Section 9.08: Amendments. No amendment or modification to this Lake Conroe Contract shall be binding on a Party unless reduced to writing and executed in accordance with Applicable Laws by both Parties.

Section 9.09: Construction and Interpretation of Lake Conroe Contract. (a) This Lake Conroe Contract and all the terms and provisions hereof shall be liberally construed to effectuate the purposes set forth herein and to sustain the validity of this Lake Conroe Contract.

(b) The titles, heading, and captions appearing in the articles of this Lake Conroe Contract and following each numbered section of this Lake Conroe Contract are inserted and included solely for convenience and shall never be considered or given any effect in construing this Lake Conroe Contract, or any provision hereof, or in connection with the duties, obligations, or liabilities of the Parties or in ascertaining intent, if any questions of intent should arise.

(c) Any exhibits attached hereto are incorporated as part of this Lake Conroe Contract for all purposes.

(d) The Parties agree that this Lake Conroe Contract shall not be construed in favor of or against a Party on the basis that the Party did or did not author this Lake Conroe Contract.

Section 9.10: Entire Agreement. This Lake Conroe Contract constitutes the entire agreement between the Parties relative the subject matter hereof.

Section 9.11: Other Contracts. (a) The Parties acknowledge that a Water Supply Contract between the Parties entered into and effective as of October 16, 2009 (the "2009 Water Supply Contract"), makes references to specific sections of the 1968 Lake Conroe Contract. Therefore, it is agreed by the Parties that: (i) the term "Actual Costs" as used in the 2009 Water Supply Contract shall mean and refer to the City's actual share of costs for the operation, maintenance, and repair of Lake Conroe as described in Article III of this Lake Conroe Contract; (ii) the term "Budgeted Costs" as used in the 2009 Water Supply Contract shall mean and refer to the City's share of all budgeted costs for the operation, maintenance and repair of Lake Conroe, as such costs are

described in Sections 3.08 of this Lake Conroe Contract; and (iii) the term "Lake Conroe Contract" as used in the 2009 Water Supply Contract shall mean and refer to this Lake Conroe Contract.

(b) The obligation of each of the Parties to pay amounts that remain due and owing under the 1968 Lake Conroe Contract shall survive until satisfied in full.

Section 9.12: Authority to Enter into Contract; Execution; Binding Obligation. (a) Each Party represents and warrants to the other Party that it is authorized to enter into this Lake Conroe Contract, that the execution of this Lake Conroe Contract by the undersigned person or persons, on behalf of such Party, has been duly authorized and approved in all respects, and that this Lake Conroe Contract represents a binding obligation of such Party.

(b) For purposes of the foregoing, it is agreed and acknowledged by the Parties that (i) the Board of Directors of the Authority has duly authorized the execution of this Lake Conroe Contract by the President and Secretary of the Board of Directors of the Authority, and (ii) the Houston City Council has duly authorized the execution of this Lake Conroe Contract by and through the signatures of the Mayor, the City Secretary, and the City Controller.

IN WITNESS WHEREOF, the Parties have executed this Lake Conroe Contract in multiple copies, each of which is an original. Each person signing this Lake Conroe Contract represents and warrants that he or she is duly authorized and has legal capacity to execute and deliver this Lake Conroe Contract. Each Party represents and warrants to the other that the execution and delivery of this Lake Conroe Contract and the performance of such Party's obligations hereunder have been duly authorized, and that the Lake Conroe Contract is a valid and legal agreement binding on such Party and enforceable in accordance with its terms. The Parties hereby agree that each Party may sign and deliver this Lake Conroe Contract electronically or by

electronic means and that an electronic transmittal of a signature, including but not limited to, a scanned signature page, will be as good, binding, and effective as an original signature.

[SIGNATURES COMMENCE ON THE FOLLOWING PAGE]

ATTEST:

By: *W. J. Jambel*
Secretary, Board of Directors

SAN JACINTO RIVER AUTHORITY:

By: *James W. ...*
President, Board of Directors



ATTEST:

By: _____
City Secretary

SJRA Contract No. _____
Document No. _____

CITY OF HOUSTON, TEXAS:

By: _____
Mayor of the City of Houston

[SEAL]

APPROVED AS TO FORM:

By: *[Signature]*
Senior Assistant City Attorney
L.D. File No. *LD Con - 0000000941*

COUNTERSIGNED:

By: _____
City Controller
Date: _____

APPROVED:

By: *Carol Huddard*
Director, Houston Public Works

Exhibit A

[A true and correct copy of the Certificate begins on the following page.]

Certificate of Adjudication 10-4963

2. USE

A. Owners are authorized to divert or release and use not to exceed 100,000 acre-feet of water per annum from the aforesaid Lake Conroe for purposes as follows:

- Municipal Purposes - - - - - 66,000 acre-feet
- Industrial Purposes - - - - - 28,500 acre-feet
- Mining Purposes - - - - - 5,500 acre-feet

B. Owners are also authorized to use the impounded water for recreation purposes.

DIVERSION

A. Location
At the perimeter of the aforesaid reservoir.

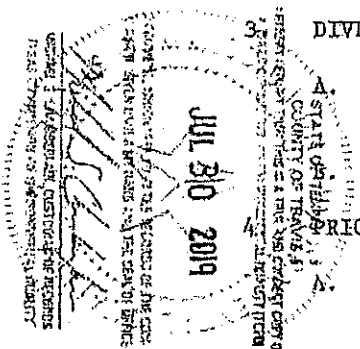
Maximum rate: 700.00 cfs (315,000 gpm).

PRIORITY

- A. The time priority of owners' right is January 12, 1959 for the impoundment of 380,430 acre-feet of water and the diversion and use of water for purposes authorized herein.
- B. The time priority of owners' right is June 28, 1965 for the impoundment of the additional 49,830 acre-feet of water.

5. SPECIAL CONDITIONS

- A. Owners are authorized to use the bed and banks of the West Fork San Jacinto River for the purpose of conveying all or any part of the water authorized to be diverted hereunder from the place of impoundment (Lake Conroe) downstream to Lake Houston in Harris County.
- B. Owners shall maintain a suitable outlet in the aforesaid dam authorized herein to allow the free passage of water that the owners are not entitled to divert or impound.
- C. Owners shall install a metering instrument at each diversion point which will automatically record to within five percent of accuracy the total amount of water diverted. Owners shall make daily determinations of water surface elevations in the reservoir by means of a recording gage, set to mean sea level datum, which shall be protected by a well house designed for such purposes. Owners shall also install a recording



Certificate of Adjudication 10-4963

streamflow station, set to mean sea level datum, to measure the inflow from the West Fork San Jacinto River into the reservoir. The Commission shall be furnished complete records of all determinations required herein.

The locations of pertinent features related to this certificate are shown on Pages 5 and 15 of the San Jacinto River Basin Certificates of Adjudication Maps, copies of which are located in the offices of the Texas Water Commission, Austin, Texas.

This certificate of adjudication is issued subject to all terms, conditions and provisions in the final decree of the 155th Judicial District Court of Waller County, Texas, in Cause No. 10,023A, In Re: The Exceptions of the San Jacinto River Authority to the Adjudication of Water Rights in the San Jacinto River Basin dated December 1, 1986 and supersedes all rights of the owner asserted in that cause, provided, however, that no attempt has been made to adjudicate private contractual rights.

This certificate of adjudication is issued subject to senior and superior water rights in the San Jacinto River Basin.

This certificate of adjudication is issued subject to the Rules of the Texas Water Commission and its continuing right of supervision of State water resources consistent with the public policy of the State as set forth in the Texas Water Code.

TEXAS WATER COMMISSION

Paul Hopkins

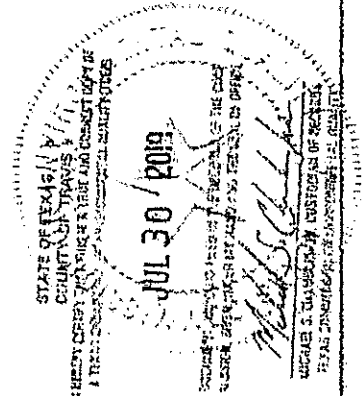
Paul Hopkins, Chairman

DATE ISSUED:

FEB 25 1987

ATTEST:

Mary Ann Hefner
Mary Ann Hefner, Chief Clerk



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



AMENDMENT TO A
CERTIFICATE OF ADJUDICATION

CERTIFICATE NO. 10-4963A

STATE OF TEXAS
COUNTY OF TEXAS
CURRENT COPY OF
CERTIFICATE FILED
JUL 30 2010
CLERK OF COURTS
COUNTY OF TEXAS
P.O. BOX 329
CONROE, TEXAS 77305

Owners: San Jacinto River Authority

Addresses:

City of Houston

P.O. Box 1562
Houston, Texas 77007

Filed: April 29, 2010

Granted: JUL 20 2010

Purpose: Industrial, Agricultural,
Municipal, Mining

Counties: Harris, Montgomery

Watercourse: West Fork San Jacinto,
tributary of San Jacinto River

Watershed: San Jacinto River Basin

WHEREAS, Certificate of Adjudication No. 10-4963 (Certificate) authorizes the San Jacinto River Authority and the City of Houston (Owners) to maintain an existing dam and reservoir (Lake Conroe) on the West Fork San Jacinto River, San Jacinto River Basin and to impound therein not to exceed 430,260 acre-feet of water for recreational purposes in Montgomery County; and

WHEREAS, Owners are also authorized to divert or release and use not to exceed 100,000 acre-feet of water per year from the perimeter of Lake Conroe at a maximum diversion rate of 700 cfs (315,000 gpm) as follows: 66,000 acre-feet for municipal purposes, 28,500 acre-feet for industrial purposes, and 5,500 acre-feet for mining purposes; and

WHEREAS, Owners are also authorized to use the bed and banks of the West Fork San Jacinto River to convey all or any part of the 100,000 acre-feet of water downstream to Lake Houston in Harris County; and

WHEREAS, the priority dates for this right are January 12, 1959 for the impoundment of 380,430 acre-feet of water and the diversion and use of the 100,000 acre-feet of water, and June 28, 1965 for the impoundment of an additional 49,830 acre-feet of water, and

WHEREAS, the Certificate contains Special Conditions; and

WHEREAS, Owners seek an amendment to Certificate of Adjudication No. 10-4963 to add multi-use (municipal, industrial, mining, and agricultural) to the 100,000 acre-feet of water currently authorized for diversion; and

WHEREAS, the Texas Commission on Environmental Quality (Commission) finds that jurisdiction over the application is established; and

WHEREAS, no requests for a contested case hearing were received for the application, and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Commission on Environmental Quality in issuing this amendment,

NOW, THEREFORE, this amendment to Certificate of Adjudication No. 10-4963, designated Certificate of Adjudication No. 10-4963A, is issued to the San Jacinto River Authority and the City of Houston, subject to the following terms and conditions:

1. USE

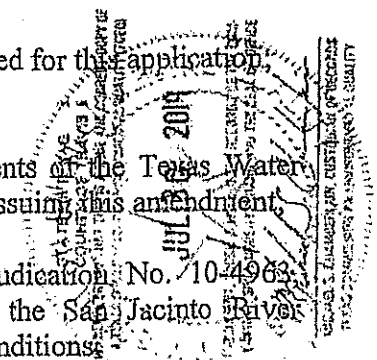
- A. In lieu of the previous authorization to divert or release and use not to exceed 100,000 acre-feet of water per year for municipal purposes (66,000 acre-feet), industrial purposes (28,500 acre-feet), and mining purposes (5,500 acre-feet), Owners are now authorized to divert or release and use not to exceed 100,000 acre-feet of water per year for municipal, industrial, mining, and agricultural purposes.
- B. Any water diverted or released for agricultural purposes pursuant to Use paragraph 1.A. shall be utilized within the Owners' service areas in the San Jacinto River Basin.
- C. Owners are also authorized to use the impounded water for recreation purposes.

2. CONSERVATION

Owners shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, or prevent the pollution of water, so that a water supply is made available for future or alternative uses. Such plans shall include a requirement that in every wholesale water contract entered into, on or after the effective date of this amendment, including any contract extension or renewal, that each successive wholesale customer develop and implement conservation measures. If the customer intends to resell the water, then the contract for resale of the water must have water conservation requirements so that each successive wholesale customer in the resale of the water be required to implement water conservation measures.

This amendment is issued subject to all terms, conditions and provisions contained in Certificate No. 10-4963 except as specifically amended herein.

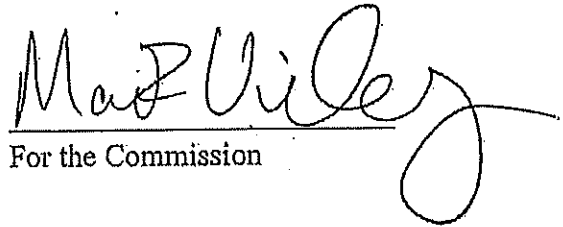
This amendment is issued subject to all superior and senior water rights in the San Jacinto River Basin.



Owners agree to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this amendment.

All other matters requested in the application which are not specifically granted by this amendment are denied.

This amendment is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of State water resources exercised by the Commission.


For the Commission

ISSUED: JUL 20 2010



Exhibit B

[A true and correct copy of the Procedures for Measurement of Water Diverted from Lake Conroe by the Authority's Non-Commercial Irrigation Customers begins on the following page.]



San Jacinto River Authority

P.O. Box 329 • Conroe, Texas 77305
(T) 936.588.1111 • (F) 936.588.1114
www.sjra.net

To: City of Houston

From: Jace Houston (SJRA), David Parkhill (SJRA), Bret Raley (SJRA), Jordan Austin (SJRA)

Subject: Residential Irrigation Accounting (An approach to calculate residential irrigation use on Lake Conroe)

Date: October 13, 2016

Introduction

The SJRA has historically estimated and reported residential irrigation use on Lake Conroe to the City of Houston and to TCEQ under COA 10-4963 based on a conservatively high landscape usage rate of 0.75 acre-feet per year for each private irrigator. This typical usage rate was applied to each permitted lot; however, it does not accurately capture the differences in the size of the various properties around the lake and inherent weather variability. This memo outlines a revised approach which is proposed to more accurately estimate these variable differences and to provide a more realistic (but still conservative) estimate of the annual water use. This revised approach is proposed for reporting future water use to the City and TCEQ and in lieu of requiring installation of water meters for the existing ~712 contract customers who currently irrigate with Lake Conroe water supply.

Customer Data

The attached map shows the location of private property owners located along the shoreline who are currently contracting with SJRA to use Lake Conroe raw surface water for landscape irrigation. Contracts are issued each year after payment of the required annual fee (currently set at \$150). Most shoreline property owners use a small submersible pump located at or under

their private boat docks to supply a conventional spray irrigation system that waters the landscaped areas around their home. The pump intakes for these systems are typically set on or near the bottom of the lake which typically varies at each location with 3-8 feet of water depth when the reservoir is at normal conservation pool elevations.

Proposed Methodology

SJRA proposes to use an approach developed by Texas A&M's Water Management department which generates water budgets using a crop-specific coefficient for standard turf while factoring in environmental climate data designed to more accurately estimate the amount of water needed for irrigation purposes. The approach uses a simple formula consisting of five variables as follows:

$$WB (gal) = Irrigable Area (ft^2) \times (Kc \times PET (in) - Rainfall (in)) \times 0.6 gal/sqft$$

This water budget formula reflects total *Irrigable Area* in square feet multiplied by the crop coefficient (*Kc*), multiplied by potential evapotranspiration (*PET*) minus *Rainfall* in inches, multiplied by a factor of 0.6 gallons of water needed per square foot, resulting in the total number of gallons needed (*WB*) to irrigate the *Irrigable Area*. The factor of 0.6 gallons per square foot is the researched value of total water needed for turf grass to grow. SJRA proposes to use this methodology at the end of each calendar year to calculate the estimated irrigation water used that specific year, as further described below.

- The previous year's average daily rainfall and evapotranspiration data for the nearest Lake Conroe gages will be used as inputs for both PET and rainfall.
- The irrigable area will be calculated for all current licensed accounts using SJRA's GIS maps and the official Montgomery County Appraisal District records.
- The crop coefficient used in the formula is provided by Texas A&M and is calculated for St. Augustine grass as $Kc=0.6$.

Further Description of Data

The irrigation area for each irrigated homeowner lot has been approximated by utilizing SJRA's GIS mapping data and the Montgomery County Appraisal District's data on structure size. This requires a simple calculation of subtracting the size of the structure from total acreage of the

individual lot and making an appropriate adjustment for additional impervious area typical for most lots to account for driveway, sidewalks, pools, etc. The structure size as provided by the County is determined based on whether the structure is a one or two-story home and assuming a conservative 10% factor for the additional impervious area. The existing accounts have been classified into four different categories by the resulting amount of irrigable area.

- Class 1 = $0 \leq 0.50$ acres;
- Class 2 = $0.51 \leq 1.00$ acres;
- Class 3 = $1.01 \leq 2.00$ acres;
- Class 4 = > 2.00 acres.

The majority of these accounts are under 0.50 acres of irrigable area, but there are approximately 36% that fall into class 2-4. For these larger properties with over 0.50 acres of potential irrigation area, there are typically vegetated areas that are left with native vegetation and are not irrigated. Therefore, the use on only a 10% factor in non-irrigable area is considered highly conservative.

Potential Evapotranspiration (PET) is defined as the amount of evaporation that would occur if a sufficient water source were available and which is "offset" by rainfall. SJRA will derive the PET and rainfall values to be used in the formula from the daily average of actual PET and rainfall during each day of the year. The factor of 0.6 gallons per square foot equals approximately one inch of water on the landscaped area; therefore, since other than St. Augustine turf grass, most conventional landscape used in this region requires a lesser amount of water, this approach remains highly conservative.

An example calculation is provided below using this formula for calendar year 2015 which was an extremely wet year. The example calculation uses monthly averages for PET and rainfall (rather than daily as proposed) and results in 436 acre-feet computed for residential irrigation use around Lake Conroe for the calendar year 2015. This resulting estimated irrigation use is, as would be expected, less than the previously reported 525 acre-feet which was estimated and reported to TCEQ under the previous methodology for that calendar year.

Drought Contingency Plan

Lake Conroe's normal conservation pool elevation is 201 feet. All residential irrigation users are required by contract to follow SJRA's Drought Contingency Plan in which Stage 1 is triggered by Lake Conroe elevation falling to 199 feet. The plan requires all residential irrigation

customers to voluntarily reduce irrigation during Stage 1, and if the lake reaches elevation 197 feet or lower, all residential irrigation users are advised that no new annual contracts will be issued until the reservoir returns to Stage 1 or is no longer in any drought stage. During this time, the lake water level can be located below most residential irrigator's intakes; consequently, the pumps can no longer physically divert water supplies without significant intake modifications. Any homeowner who continues to irrigate without a contract will be in violation of SJRA's Rules and Regulations for Lake Conroe and will be fined accordingly. The estimated water use during this period will be appropriately adjusted based on the stage of drought that has occurred.

Summary

In summary, SJRA's revised approach provides additional accuracy compared to previous estimates but remains a very conservative method to compute the annual residential irrigation use from Lake Conroe. The total estimated water use will be computed and reported using this improved methodology based on; 1) the actual accounts under contract in each calendar year, 2) the daily PET amounts reported by the Lone Star Ground Water District, and 3) the daily Rainfall amounts recorded by SJRA at the Lake Conroe gage. The amount of private homeowner irrigation use which is calculated using this approach will be applied to SJRA's allotted 33,333 acre-feet/year and reported to the City of Houston and TCEQ.

Attachment

$$WB \text{ (gal)} = \text{Irrigable Area (ft}^2\text{)} \times \{ (0.6 \times \text{Daily Avg. PET (in)}) - \text{Daily Avg. Rain (in)} \} \times 0.6 \text{ g/sqft}$$

Month	Days in Month	Total Irrigable Area (sqft)	Daily Average PET (inches)	Co-Efficient (Kc)	Daily Average Rainfall (inches)	Monthly Water Use (WB in acre-feet)
January	31	16,268,271	0.02	0.60	0.14	0
February	29	16,268,271	0.07	0.60	0.03	10
March	31	16,268,271	0.00	0.60	0.21	0
April	30	16,268,271	0.07	0.60	0.13	0
May	31	16,268,271	0.10	0.60	0.53	0
June	30	16,268,271	0.15	0.60	0.16	0
July	31	16,268,271	0.44	0.60	0.01	236
August	31	16,268,271	0.39	0.60	0.08	143
September	30	16,268,271	0.17	0.60	0.05	47
October	31	16,268,271	0.26	0.60	0.24	0
November	30	16,268,271	0.09	0.60	0.15	0
December	31	16,268,271	0.17	0.60	0.21	0
					Total:	436

Sample Calculation for the month of February:

$$WB \text{ (gal)} = (16,268,271 \text{ (ft}^2\text{)} \times \{ (0.6 \times 0.07 \text{ (in)}) - 0.03 \text{ (in)} \} \times 0.6 \text{ g/sqft}) \times 29 \text{ days}$$

$$WB = 3,396,815 \text{ gallons}$$

$$WB = 10 \text{ acre-feet}$$

