



**INTERLOCAL COOPERATIVE CONTRACT No. 17-837-EX
BETWEEN THE
EDWARDS AQUIFER AUTHORITY
AND
NEW BRAUNFELS UTILITIES
FOR THE DEVELOPMENT AND USE OF AN
AQUIFER STORAGE AND RECOVERY PROJECT**

THIS INTERLOCAL COOPERATION CONTRACT (“Contract”) is entered into under the Interlocal Cooperation Act, Chapter 791, Texas Government Code, by and between the Edwards Aquifer Authority (“EAA”), a conservation and reclamation district and political subdivision of the State of Texas, and New Braunfels Utilities (“NBU”), a municipally-owned utility of the City of New Braunfels with responsibility for operating the electric, water, and sewer systems in the City of New Braunfels service area. Each of these entities is, at times, referred to individually as a “Party,” and both are referred to collectively as “Parties.”

AGREEMENT

NOW, THEREFORE, for and in consideration of the mutual promises and benefits contained herein, the sufficiency of which is hereby acknowledged, the EAA and NBU agree as follows:

1. DEFINITIONS

The following terms as used in this Contract have the meanings provided for in this section:

- (1) **“AF”** means acre-foot or acre-feet according to the context.
- (2) **“Aquifer”** means the Southern (or San Antonio) Segment of the Edwards Aquifer within the boundaries of the EAA as defined in Subsection 1.03(1) of the EAA Act.
- (3) **“Aquifer Source Water”** means any water supply available to NBU that is withdrawn from the Aquifer pursuant to an Initial Regular Permit or a Regular Permit for which the EAA’s permitting data base shows NBU as being the owner or lessee.
- (4) **“Artesian Zone”** means that portion of the Aquifer that resides down dip of the Recharge Zone, where the water contains total dissolved solids (“TDS”) concentrations equal to or less than 1,000 mg/L.
- (5) **“ASR Project”** means the aquifer storage and recovery project owned, operated, and maintained by NBU, and those facilities and works associated therewith, located in Guadalupe

County, which is for the purpose of storing Aquifer Source Water for subsequent recovery for supply to the customers of NBU. The ASR Project is described in Exhibits A (General Description of the ASR Project) and B (Location Map of the ASR Project), attached hereto and incorporated herein.

(6) **“Calendar Year”** means January 1st through December 31st.

(7) **“Cycle Testing”** means a program of recharging, storing, and recovering water from an aquifer for purposes of collecting hydraulic and water quality data on the operation of an ASR well.

(8) **“EAA Act”** means the Edwards Aquifer Authority Act, Act of May 30, 1993, 73rd Leg., R.S., ch. 626, 1993 Tex. Gen. Laws 2350, as amended.

(9) **“Groundwater Withdrawal Permit”** means a permit issued by the EAA under Subsection 1.15(b) of the EAA Act authorizing the withdrawal of groundwater from the Aquifer.

(10) **“Initial Regular Permit”** means a Groundwater Withdrawal Permit issued by the EAA under Subsection 1.16(d) of the EAA Act.

(11) **“LCRA Well”** means State well number DX-68-23-304 located just north of the intersection of Fredericksburg Road and Oakcrest Drive in New Braunfels, Comal County.

(12) **“mg/L”** means milligrams per liter.

(13) **“Municipal Use”** means the use of water within or outside of a municipality and its environs for the certain purposes specified as follows, including:

(A) the use of water for domestic use, the watering of lawns and family gardens, fighting fires, sprinkling streets, flushing sewers and drains, water parks and parkways, and recreation, including public and private swimming pools; and

(B) the use of water in industrial and commercial enterprises supplied by a municipal distribution system.

(14) **“NBU ASR Work Group”** or **“Work Group”** means the group created pursuant to Section 7 and composed of those persons designated by the EAA and by NBU in order to facilitate the administration of and accomplishment of the objectives of this Contract.

(15) **“Non-Aquifer Source Water”** means any water supply available to NBU that is not withdrawn from the Aquifer, and includes, without limitation: (i) surface water, (ii) groundwater produced from an aquifer other than the Aquifer, including, without limitation, Trinity Aquifer groundwater; and (iii) reclaimed water, as defined in Section 210.3, Title 30 Texas Administrative Code (“T.A.C.”) subject to regulation under Chapter 210, Title 30 T.A.C.

(16) **“Recharge”** means the injection of Aquifer Source Water into the ASR Project through wells for the purpose of increasing the amount of water in storage therein for subsequent recovery for Municipal Use.

(17) **“Recharge Injection Well”** means the one or more injection wells identified in any recharge injection well construction permits that may be issued by the EAA for such wells to be used to recharge the Aquifer for storage at the ASR Project. The Parties agree and understand that a Recharge Injection Well may also be used as a Recharge Recovery Well.

(18) **“Recharge/Recovery Meter”** means the one or more flow meters at the ASR Project identified by NBU, that collectively represent flow into and out of storage associated with the ASR Project.

(19) **“Recharge Recovery Well”** means the one or more recovery wells identified in any recharge recovery well construction permits that may be issued by the EAA for such wells to be used to recover Stored Water from the ASR Project for Municipal Use. The Parties agree and understand that a Recharge Recovery Well may also be used as a Recharge Injection Well.

(20) **“Recharge Zone”** means that area where the stratigraphic units constituting the Aquifer outcrop, including the outcrops of other geologic formations in proximity to the Aquifer, where caves, sinkholes, faults, fractures, or other permeable features create a potential for recharge of surface waters into the Aquifer.

(21) **“Recovery”** means the withdrawal of Stored Water from the ASR Project for delivery to NBU customers for Municipal Use.

(22) **“Regular Permit”** means a Groundwater Withdrawal Permit issued by the EAA after August 12, 2008, resulting from the sale or amendment of an Initial Regular Permit, or the consolidation of two or more such Permits.

(23) **“Saline Zone”** means that portion of the Aquifer that resides down dip of the freshwater/saline water interface with the Artesian Zone, where the water contains total dissolved solids (TDS) concentrations greater than 1,000 mg/L.

(24) **“Stored Water”** means all Aquifer Source Water that has been metered at the Recharge/Recovery Meter and credited to storage in the Saline Zone from the ASR Project for subsequent recovery by NBU.

(25) **“Withdraw/Withdrawn/Withdrawal”** means an act or failure to act that results in taking groundwater from the Aquifer by or through man-made facilities, including pumping, withdrawing, or diversion.

2. PURPOSE

The purpose of this Contract is to implement Section 1.44 of the EAA Act which authorizes the EAA to contract under Chapter 791, Texas Government Code, with another political

subdivision of the state, such as NBU, to provide for the artificial recharge of the Aquifer through injection wells for subsequent retrieval of the recharged water. Specifically, the purpose of this Contract is to authorize NBU to recharge the Saline Zone with Aquifer Source Water, recover such recharge under the terms and conditions of this Contract, and to validate and promote the recharge, augmentation, and management of the Aquifer through the operation of the ASR Project, as described in Exhibits A and B, while ensuring protection of the quality of the Aquifer groundwater and springflow discharges at Comal Springs.

3. WATER AUTHORIZED FOR RECHARGE

A. General Operation in Compliance with Law.

NBU shall operate the ASR Project to ensure that any and all water recharged into the Saline Zone through injection wells is done so in accordance with this Contract, the EAA Act, EAA rules, Chapter 27, Texas Water Code, Chapter 331, Title 30 T.A.C., and other applicable federal, state, and local law. Specifically, the Parties agree and understand that the Aquifer Source Water to be injected into the ASR Project will satisfy the criteria in Subsection 1.44(e)(1) of the EAA Act, Subsection 27.051(i), Texas Water Code, and Subsection 331.19(a), Title 30 T.A.C.

B. Authorized Water.

NBU is authorized to recharge only into the Saline Zone and only through the injection of Aquifer Source Water at the injection wells identified in Section 4.E.

C. Unauthorized Injection.

NBU shall not inject:

1. Any water of any kind whatsoever into the Recharge Zone or Artesian Zone;
2. Non-Aquifer Source Water into the Saline Zone; or
3. Aquifer Source Water that does not comply with Sections 3.A. and 3.B.

D. Purging.

Prior to making any injection of Aquifer Source Water into the ASR Project, NBU agrees to isolate its Non-Aquifer Source Water and take all steps necessary to ensure that only Aquifer Source Water in compliance with Sections 3.A. and 3.B. is injected into the ASR Project. Specifically, prior to injection, NBU shall shut down or isolate its surface water plant and shall isolate its Trinity Aquifer wells from the NBU water distribution system piping that delivers water to the Recharge/Recovery Meter for injection into the ASR Project. All shut down and isolation of Non-Aquifer Source Water shall be performed according to the Purging Protocol described in Exhibit C, attached hereto and incorporated herein. NBU will provide the EAA with advance written notice identifying the date on which the Purging Protocol has been completed and the proposed date of commencement of any injection into the ASR Project. If requested by the EAA,

NBU agrees to allow the EAA to enter any facilities, plants, works, or improvements necessary for the EAA to inspect and confirm compliance with the Purging Protocol under the terms and conditions provided for in Section 10.M.

E. Changes in the Law.

The Parties agree and understand that, contingent upon future changes in current Texas law after the effective date of this Contract, NBU desires to ultimately inject a blend of Aquifer Source Water and Non-Aquifer Source Water into the ASR Project. Before any such operational changes may take place, the Parties agree that written amendments to this Contract must be approved by the Parties prior to the injection of any blended water into the ASR Project. In the event of any applicable changes in the law, the Parties agree to consult and negotiate in good faith and with due diligence to effectuate the intent of this subsection.

4. ADMINISTRATION OF RECHARGE, STORAGE, AND RECOVERY

A. EAA Authorization.

The EAA hereby gives authorization for NBU to: (i) recharge the Saline Zone by injection of Aquifer Source Water; and (ii) store and recover such water in the ASR Project for Municipal Use according to the terms and conditions of this Contract.

B. ASR Project Schedule.

NBU shall implement the ASR Project according to a project schedule to be provided to the EAA as developed and updated through the NBU ASR Work Group.

C. Subsection 1.44(c)(1) Water Accounting not Required.

It is agreed by the Parties that NBU shall not be required to reduce its Stored Water as metered at the Recharge/Recovery Meter by any amount due to losses through discharges at Comal Springs under Subsection 1.44(c)(1) of the EAA Act. The Parties agree and understand that the nature of the Saline Zone will naturally prohibit such a discharge.

D. Subsection 1.44(c)(2) Water Accounting not Required.

It is agreed by the Parties that NBU does not intend to compensate the EAA through the discharge of Stored Water at Comal Springs in lieu of making payment of any aquifer management fees that may be due and payable by NBU to the EAA. For this reason, the Parties agree and understand that NBU shall not be required to reduce its Stored Water as metered at the Recharge/Recovery Meter by any amount to make such an in lieu payment of aquifer management fees to the EAA under Subsection 1.44(c)(2) of the EAA Act.

E. Authorized Points of Recharge and Metering.

NBU may inject Aquifer Source Water into the Saline Zone only at the Recharge Injection Wells associated with the ASR Project at the locations identified in the Recharge Injection Well construction permits issued by the EAA for the ASR Project. All injection must be metered and recorded at the Recharge/Recovery Meters. NBU shall ensure that all Recharge/Recovery Meters are installed, operated, and maintained in compliance with Subchapter M of Chapter 711 of the EAA's Rules, including the calibration periodic accuracy verification requirements contained therein.

F. Authorized Points of Recovery and Metering.

NBU may recover Stored Water from the ASR Project only from the Recharge Recovery Wells associated with the ASR Project at the locations identified in the Recharge Recovery Well construction permits issued by the EAA for the ASR Project. All recovery must be metered and recorded at the Recharge/Recovery Meters. NBU shall ensure that all Recharge/Recovery Meters are installed, operated and maintained in compliance with Subchapter M of Chapter 711 of the EAA's Rules, including the calibration and periodic accuracy verification requirements contained therein.

G. Purpose of Use.

All Stored Water recovered by NBU from the ASR Project must be used only for Municipal Use.

H. Authorized Recovery Amount.

Subject to the recharge and recovery accounting and reporting requirements contained in Section 4.N., NBU may recover and beneficially use all metered Stored Water from the ASR Project in such amounts as it may determine, in its sole discretion, is most appropriate for the operation and management of the ASR Project and NBU's water system. However, NBU shall not ever withdraw more Stored Water from the ASR Project than the cumulative volume recorded as being in storage at the time of recovery.

I. Permitting Cap not Applicable to Recovered Stored Water.

The Parties agree and understand that the recovery of Stored Water from the ASR Project will not be considered by the EAA to be subject to the 572,000 AF per year cap on permitted withdrawals from the Aquifer as provided for in Subsection 1.14(c) of the EAA Act. For this reason, the Parties agree and understand that the recovery of Stored Water from the ASR Project will not be considered by the EAA to be a withdrawal under, or a part of the authorized groundwater withdrawal amount identified in, any Initial Regular Permit or Regular Permit that the EAA's permitting data base shows NBU as being the owner or lessee.

J. Place of Use.

NBU shall use Stored Water recovered from the ASR Project only within the place of use identified in the Initial Regular Permit or Regular Permit pursuant to which NBU has made the withdrawal of Aquifer Source Water, and within the boundaries of the EAA.

K. Application of EAA Critical Period Management Program.

1. Injection.

The production of Aquifer Source Water for injection into the ASR Project is subject to the requirements and drought reductions of the EAA's critical period management program contained in Subchapter E of Chapter 715 of the EAA's rules.

2. Recovery.

The recovery of Stored Water from the ASR Project is not subject to the requirements and drought reductions of the EAA's critical period management program contained in Subchapter E of Chapter 715 of the EAA's rules.

L. Authorized Period of Recovery; Subsection 1.44(c) inapplicable.

NBU may recover and beneficially use all metered Stored Water from the ASR Project at such times and in such amounts as it may determine, in its sole discretion, is most appropriate for the operation and management of the ASR Project and NBU's water system. The Parties agree and understand that NBU is not required to withdraw Stored Water during the 12-month period stated in Subsection 1.44(c) of the EAA Act, and may recover such water without regard thereto. The Parties agree and understand that the nature of the Saline Zone will naturally prohibit the loss of Stored Water through Comal Springs, regardless of timeframe.

M. Rate of Recharge and Recovery.

NBU may inject Aquifer Source Water into and recover Stored Water from the ASR Project at the rate of injection and recovery as it may determine, at its sole discretion, is most appropriate for the operation and management of the ASR Project and NBU's water system.

N. Groundwater Accounting.

NBU shall measure and record: (1) the total amount of Aquifer Source Water injected into the ASR Project; (2) the amount of Stored Water in storage in the ASR Project; and (3) the amount of Stored Water recovered from storage from the ASR Project. The determination of these amounts will be based on the amounts measured and recorded as provided in this subsection at the Recharge/Recovery Meter.

1. Monthly.

For each month, NBU shall make and record meter readings for the recharge of Aquifer Source Water into, and the recovery of Stored Water from the ASR Project in such a manner to reflect the amount of recharge and recovery during each month. No later than the 15th day of each following month, NBU will provide the EAA with a monthly report for the previous month's activities on a form prescribed or approved by the EAA that provides an accounting of:

- a. The total amount of Aquifer Source Water injected into the ASR Project during the previous month, including a daily record of the amounts injected;
- b. The total amount of Stored Water recovered from the ASR Project during the previous month, including a daily record of the amounts recovered; and
- c. The total amount of Stored Water remaining in storage within the ASR Project as of the last day of the previous month.

2. Annually.

For each Calendar Year, NBU shall make and record meter readings for the recharge of Aquifer Source Water into and recovery of Aquifer Source Water from the ASR Project in such a manner to reflect the amount of recharge and recovery during each Calendar Year. No later than January 31st of the year following the reporting period, NBU will provide the EAA with an annual report for the previous Calendar Year's activities on a form prescribed by the EAA that provides an accounting of:

- a. The total amount of Aquifer Source Water injected into the ASR Project during the previous Calendar Year, including a monthly record of the amounts injected;
- b. The total amount of Stored Water recovered from the ASR Project during the previous Calendar Year, including a monthly record of the amounts recovered; and
- c. The total amount of Stored Water remaining in storage within the ASR Project as of December 31st of the previous Calendar Year.

O. Data Sharing.

NBU will promptly share with the EAA all records, information, and data regarding the ASR Project, its operations, and impacts on the Aquifer and Comal Springs that it obtained during any phase of the ASR Project, including but not limited to: any cores of the stratigraphic units overlying the Aquifer and of the Aquifer itself, demonstrations of recharge and recovery activities, and Cycle Testing.

5. WATER QUALITY PROTECTION AND MONITORING.

A. In General.

NBU agrees to take all steps necessary and appropriate to ensure that the water quality of the Aquifer will be protected due to the operations of the ASR Project. In so doing, the Parties agree and understand that the rights of other users of the Aquifer will be protected as required by

Subsection 1.44(b)(2) of the EAA Act. In order to effectively and adequately monitor any potential impacts to the Artesian Zone that may result by injection of Aquifer Source Water into the ASR Project, NBU will establish a set of monitoring wells and employ a water quality sampling/monitoring plan (“WQS/MP”) as set out in Section 5.D. and approved by the EAA to identify any potential migration of the Saline Zone into the Artesian Zone. The WQS/MP shall be designed to ensure protection of the quality of the Aquifer groundwater, including protecting and maintaining the quality of groundwater in the Artesian Zone.

B. Monitoring Wells.

1. New Monitoring Wells.

NBU shall own, install, operate, maintain, and monitor up to five (5) new monitoring wells between the ASR Project site and Comal Springs and at other locations as mutually agreed upon by the Parties. These wells will be used by the Parties to monitor changes in the hydraulic head in the Saline Zone between the ASR Project site, and the Artesian Zone and Comal Springs. The first monitoring well location will be proximate to NBU’s first Recharge Injection Well and will be constructed and in operation prior to the start of any injection of Aquifer Source Water at the ASR Project. Up to four (4) subsequent monitoring wells will be installed at increasing distances from the ASR Project site. After construction of each monitoring well, NBU will equip the well with the monitoring equipment deemed appropriate and approved by the EAA to allow for monitoring of water level/water pressure, conductivity, and other reasonably-related water quality parameters, as determined by the EAA. Final well locations, well construction plans and specifications, construction schedules, monitoring requirements, and monitoring parameters for all monitoring wells will be recommended through the NBU ASR Work Group and approved by the EAA. At a minimum, NBU shall complete construction and equipping of the appropriate number of new monitoring wells with the approval of the EAA, and the EAA shall approve such construction and equipping, prior to the start of any injection of Aquifer Source Water at the ASR Project. The EAA may require the installation of additional monitoring wells after the start of any injection of Aquifer Source Water at the ASR Project as long as the total well count for new monitoring wells does not exceed five.

2. Existing Monitoring Wells.

The following existing monitoring wells will be utilized by the EAA to monitor for water level/head pressure and conductivity in the vicinity of Comal Springs, as well as for baseline monitoring and other additional monitoring as agreed to by the Parties due to their locations and completion depths:

- The LCRA Well;
- DX-68-23-616 and DX-68-23-623, a dual completion Saline Zone well located off Paradise Alley Road; and
- DX-68-23-619 and DX-68-23-624, a dual completion Saline Zone well located off Fredericksburg Road.

Upon agreement of the Parties, the number of existing monitoring wells used to monitor the ASR Project may decrease or increase depending on the results of monitoring activities over time.

NBU is responsible for paying for and equipping any such existing wells used to monitor the ASR Project with the monitoring equipment deemed appropriate and approved by the EAA. The EAA, at its own cost, is responsible for conducting all monitoring and obtaining, compiling, and reporting all information for which the existing monitoring wells are capable of recording, including the development of the background water level and water quality report (“BWL/WQR”) set out in Subsection 5.D.4. All information obtained by the EAA using the existing monitor wells will be promptly shared with NBU.

NBU will equip the LCRA Well with instrumentation to monitor the location and behavior of the interface between the Saline Zone and the Artesian Zone in near real time as approved by the EAA prior to any injection of any Aquifer Source Water at the ASR Project. Monitoring will continue in the LCRA Well during all demonstration and operational phases of the ASR Project. The LCRA Well shall be used to provide the data point that triggers the determination by the EAA to invoke any applicable mitigation measures set out in the water quality mitigation plan provided for in Section 6 that are necessary for the protection of the water quality of the Artesian Zone or Comal Springs.

C. EAA Monitoring Stations.

The EAA currently maintains monitoring equipment at or proximate to the Comal Springs. This equipment monitors water quality from discharges from Comal Springs at spring runs 3 and 7 at 15-minute intervals for: conductivity, dissolved oxygen (DO), temperature, turbidity and pH. The EAA agrees to continue to monitor the water quality of spring discharges at these locations at the Comal Springs for these parameters and to utilize the data to ascertain any changes in water quality discharging from Comal Springs to assist in making the determination by the EAA to invoke any applicable mitigation measures set out in the water quality mitigation plan provided for in Section 6 that are necessary for the protection of the water quality of the Artesian Zone or Comal Springs.

D. Water Quality Sampling/Monitoring Plan.

1. Duty to Implement.

NBU shall develop and implement a water quality sampling/monitoring plan (“WQS/MP”) as provided in this section.

2. Plan Contents.

The WQS/MP developed in consultation with the NBU ASR Work Group must address the selection, location, and installation of equipment at each of the designated monitoring wells proximate to the ASR Project and between the ASR Project and the Comal Springs. The WQS/MP must be designed to accomplish effective monitoring of water levels in both the Saline Zone and

Artesian Zone and for the following water quality parameters: conductivity, dissolved oxygen (DO), temperature, pH, and any other as may be recommended and agreed to by the NBU ASR Work Group. In addition, the WQS/MP shall include a sampling schedule for each water quality parameter to be sampled by NBU. The WQS/MP shall be approved by the EAA General Manager after review, comment, and recommendation of the NBU ASR Work Group as provided in Subsection 5.D.3. prior to the construction of any Recharge Injection Wells. NBU may not begin recharging Aquifer Source Water at the ASR Project for its interim phase until the WQS/MP has been approved by the EAA General Manager.

3. Approval of the Plan.

Once NBU provides a draft of the WQS/MP to the NBU ASR Work Group, the Work Group will have thirty (30) business days to review, comment, and make recommendations to NBU on the draft WQS/MP. After NBU receives the Work Group's comments, NBU will review such comments and incorporate any changes that are agreed upon by the Work Group. NBU will provide a proposed final of the WQS/MP to the Work Group for review, comment, and recommendation to the EAA General Manager for approval. If the Work Group cannot reach a consensus on a recommendation to the EAA General Manager to approve the WQS/MP, the Work Group agrees to continue to work in a good faith effort to resolve any issues and attempt to promptly reach agreement on a recommendation to the EAA General Manager regarding the contents of the WQS/MP. Upon receipt of the proposed WQS/MP, the EAA General Manager shall review the plan, and approve the plan if, in his judgment, the plan is properly designed to accomplish effective monitoring of water levels in both the Saline Zone and Artesian Zone and for the relevant water quality parameters stated in Subsection 5.D.2.

4. Background Water Level and Water Quality Report.

The existing monitoring wells identified in Subsection 5.B.2. shall also be used to collect background data for water levels and water quality parameters. The equipping of the identified existing wells by NBU shall take place promptly after execution of this Contract by both Parties, and collection of data by the EAA shall begin promptly thereafter. The EAA will develop a background water level and water quality report ("BWL/WQR") and provide it to the Work Group for review, comment and recommendation to the EAA General Manager for approval. If the Work Group cannot reach a consensus on a recommendation to the EAA General Manager to approve the BWL/WQR, the Work Group agrees to continue to work in a good faith effort to resolve any issues and attempt to promptly reach agreement on a recommendation to the EAA General Manager regarding the contents of the BWL/WQR. The BWL/WQR shall be completed and approved by the EAA General Manager prior to NBU making any injections into the ASR Project.

6. WATER QUALITY MITIGATION PLAN

A. Duty to Implement.

NBU shall develop and implement a water quality mitigation plan ("Mitigation Plan") as provided in this section.

B. Plan Contents.

The Mitigation Plan developed in consultation with the NBU ASR Work Group will establish the parameters that will trigger remedial actions, if any, required to be implemented by NBU to mitigate any negative water quality impacts on the Artesian Zone or Comal Springs due to the operation of the ASR Project. The Mitigation Plan must be designed to include a migration threshold of change in the vertical location of the freshwater/saline water interface of the Aquifer at each of the existing monitoring wells described in Subsection 5.B.2. that, when reached, shall require NBU to cease or reduce, as appropriate, the injection activities at the ASR Project in order to protect the water quality of the Artesian Zone or Comal Springs, until further notice is given by the EAA. The Mitigation Plan shall include a process for the NBU ASR Work Group to develop, evaluate, and make recommendations to the EAA General Manager on whether injections of Aquifer Source Water into the ASR Project by NBU should be suspended or reduced, the data and information that will be relied on in making such recommendations, the process to be used when consensus cannot be reached on a recommendation, the process to be used by the EAA General Manager in issuing and rescinding notices of suspension of or reductions in the injection of Aquifer Source Water into the ASR Project, the time period such notices will be in effect, and the legal effect of the issuance of such notices. In addition, the Mitigation Plan shall identify predictive indicators of the need to initiate mitigation actions. The Mitigation Plan shall also establish a definition for a safe amount of deviation from water levels, water quality, and water pressure at specific interface locations to be identified after construction of the new monitoring wells described in Subsection 5.B.1. The Mitigation Plan shall be approved by the EAA General Manager after review, comment, and recommendation of the NBU ASR Work Group as provided in Section 6.C. prior to the EAA's issuance of authorization to commence recharge or recovery activities associated with the ASR Project. The EAA may not issue any authorization to commence recharge or recovery activities at the ASR Project using permanent wellhead facilities until the Mitigation Plan has been approved by the EAA General Manager.

C. Approval of the Plan.

Once NBU provides a draft of the Mitigation Plan to the NBU ASR Work Group, the Work Group will have thirty (30) business days to review, comment, and make recommendations on the draft Mitigation Plan to NBU. After NBU receives the Work Group's comments, NBU will review such comments and incorporate any changes that are agreed to by the Work Group. NBU will provide a proposed final of the Mitigation Plan to the Work Group for review, comment, and recommendation to the EAA General Manager for approval. If the Work Group cannot reach a consensus on a recommendation to the EAA General Manager to approve the Mitigation Plan, the Work Group agrees to continue to work in a good faith effort to resolve any issues and attempt to promptly reach agreement on a recommendation to the EAA General Manager regarding the contents of the Mitigation Plan. Upon receipt of the proposed WQS/MP, the EAA General Manager shall review the plan, and approve the plan if, in his judgment, the plan is properly designed to include a migration threshold of change in the vertical location of the freshwater/saline water interface of the Aquifer at the LCRA Well that, when reached, shall require NBU to cease or reduce, as appropriate, the injection activities at the ASR Project, and appropriate procedures are employed to determine how and when cessation or reduction triggers should be invoked and rescinded.

D. Analytical Model.

In consultation with the NBU ASR Work Group, NBU shall develop an analytical model to evaluate the potential impacts to the Artesian Zone resulting from the recharge, storage, and recovery activities occurring at the ASR Project. The analytical model shall be completed and submitted to the EAA prior to the construction of any permanent ASR wellhead facilities at the ASR Project.

7. NBU ASR WORK GROUP

A. Objective.

NBU and the EAA shall establish an NBU ASR Work Group to facilitate the implementation of the terms and conditions of this Contract. The Work Group shall be responsible for performing all of the duties and obligations specifically assigned to it by this Contract. The EAA and NBU will each bear their own costs and expenses in participating in the Work Group.

B. Members.

The NBU ASR Work Group will be composed of up to five members appointed by each Party. The appointed members shall have expertise in aquifer recharge, storage, and recovery activities, drought conditions, factors affecting Aquifer levels and springflows at Comal Springs, Aquifer and Comal Springflow modeling, water quality of the Aquifer and the Comal Springs, or related expertise as may be determined appropriate by each of the Parties. NBU and EAA will appoint their respective members at their sole discretion.

C. Meetings.

Unless a meeting is requested by NBU or the EAA, the ASR Work Group shall meet quarterly, or as mutually agreed upon by the Parties. Meetings will be conducted at any suitable and convenient location agreed to by the Parties. NBU will provide reasonable advance notice of the meetings via email to the members of the Work Group. Meetings of the ASR Work Group are not subject to the Texas Open Meetings Act, Chapter 551, Texas Government Code, nor are they otherwise generally open to the public.

D. Other Research Opportunities.

In addition to facilitating the implementation of this Contract, the NBU ASR Work Group may also recommend to the Parties cooperative opportunities for additional Aquifer-related research that may logically extend from the ASR Project activities. Any such cooperative opportunity would be subject to a separate agreement by the Parties with funding as may be agreed upon by the Parties. No such additional cooperative opportunity shall be considered to be subject to the terms and conditions of this Contract.

8. PERMITS NECESSARY TO IMPLEMENT THE ASR PROJECT

NBU shall obtain and maintain all applicable local, state, and federal permits, licenses, or other approvals, necessary to implement the ASR Project, including but not limited to EAA recharge injection and recharge recovery well construction permits and Texas Commission on Environmental Quality injection well permits. Issuance of any EAA permits and other authorizations required under this Contract are contingent upon the EAA General Manager's approval of the WQS/MP and Mitigation Plan, and the development by NBU of the analytical model under Section 6.D. NBU shall promptly provide to the EAA copies of any permit, license, or other authorization issued for the ASR Project to the EAA by any federal, state, or local governmental entity.

9. COSTS

NBU shall bear all costs related to the design, construction, operation, and maintenance of the ASR Project. NBU shall have no right to demand payment by the EAA from any funds of any kind whatsoever to implement this Contract or the ASR Project. In the performance of their respective duties and obligations under this Contract, each Party agrees and understands that the costs and expenses to implement this Contract shall be borne as follows:

- a. Any and all costs associated with the development and implementation of the ASR Project: NBU;
- b. Any and all costs associated with the installation, operation, maintenance, monitoring and reporting of the new monitoring wells provided for in Subsection 5.B.1.: NBU;
- c. Any and all costs associated with equipping the existing monitoring wells provided for in Subsection 5.B.2.: NBU;
- d. Any and all costs associated with monitoring and reporting of the existing monitoring wells provided for in Subsection 5.B.2. and Subsection 5.C.: EAA;
- e. Any and all costs associated with equipping the existing monitoring stations provided for in Subsection 5.C.: EAA;
- f. Any and all costs associated with development and implementation of the WQS/MP provided for in Section 5.D: NBU;
- g. Any and all costs associated with development and implementation of the Mitigation Plan provided for in Section 6: NBU;
- g. Any and all costs associated with development of the BWL/WQR provided for in Subsection 5.D.4.: EAA;
- i. Any and all costs associated with development of the analytical model provided for in Section 6.D.: NBU;
- j. Any and all costs associated with review and approval of the analytical model provided for in Section 6.D.: EAA
- k. Any and all costs associated with ASR Work Group: each Party bears their own costs;
- l. Any other unspecified costs necessary to implement this Contract that is not otherwise provided for in this section: each Party bears their own costs.

10. GENERAL PROVISIONS

A. Term.

(1) This Contract is effective and commences on February 15, 2017 (the Effective Date), and continues in effect for the projected project life of the ASR Project as determined by NBU until or unless terminated early as provided in subsections (2), or pursuant to Section 10.U.

(2) This Contract may be terminated at any time by NBU if it determines, in its sole discretion, that the ASR Project should be discontinued for any reason. In such an event, NBU shall give six (6) months advance written notice of termination to the EAA of the date that NBU intends to cease operations at the ASR Project, and NBU, in its sole discretion, must determine whether to recover all Stored Water, if any, and place it to Municipal Use; provided, however, NBU shall act in good faith in making such determination. This Contract terminates on the date stated by NBU in the notice as the date on which it intends to cease operations. If NBU gives the written notice of termination under this subsection, NBU shall promptly take all steps necessary to close the Recharge Injection Wells and Recharge Recovery Wells at the ASR Project, if any, in accordance with Subchapter D of Chapter 713 of the EAA's rules.

B. No Construction of Works by the EAA.

NBU has no right to require the EAA to acquire, install, or construct any facilities, plants, works, improvements, land, easements, rights of way, other interests in land, or water rights to implement the ASR Project.

C. Authority to Contract.

This Contract is entered into pursuant to the Interlocal Cooperation Act, Chapter 791, Texas Government Code, and other applicable law. 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) it has the legal authority to perform the duties and responsibilities of each respective Party; (3) this Contract has been duly approved and executed; (4) 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; (5) the person executing this Contract on behalf of each Party has the legal authority to bind that Party; and (6) 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. Each Party also represents and warrants for the benefit of the other Party that this Contract has been duly executed as authorized by its respective governing body as required by Subsection 791.011(d)(1), Texas Government Code, and pursuant to other applicable law, including but not limited to, the Texas Open Meetings Act, Chapter 551, Texas Government Code. Within ten (10) business days after its adoption, each Party agrees to furnish the other Party a certified copy of the resolution duly adopted by their respective governing bodies approving this Contract and authorizing the appropriate representatives to execute it.

D. Entire Agreement.

This Contract, the attached Exhibits, and the plans, reports, and models to be developed and approved under Sections 5 and 6 constitute the entire agreement between the Parties and there are no representations, warranties, agreements, or commitments between the Parties except as set forth herein.

E. Amendment.

(1) This Contract may be amended. No amendment to this Contract shall be binding on the Parties unless reduced to writing and signed by the Parties.

(2) The Board of Directors (“Board”) of the EAA delegates to the EAA General Manager the authority 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.

(3) The WQS/MP, BWL/WQR, Mitigation Plan, and analytical model may be amended from time to time by recommendation of the Parties or the NBU ASR Work Group to the EAA General Manager to, for example, reflect changes resulting from modification, taking out of service, or replacement, or the addition of new meters or wells, or to accommodate changes that are prudent to make in light of the acquisition of additional information and data relative to the behavior of the Saline Zone proximate to the ASR Project, and the Comal Springs, any impacts that may become apparent to the Comal Springs, or the need for the collection of additional data. Each amendment to these plans, reports, and models shall be accepted, signed, and dated by a single representative of each Party on the Work Group and the EAA General Manager. Each Party shall maintain an original of each amendment to these plans, reports, and models in the official records of each of the Parties. The most recent amendment executed under this subsection shall be considered by the Parties to be in full force and effect for purposes of the administration and implementation of this Contract.

F. Officers and 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.

G. Multiple Original 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.

H. Further Instruments.

Each of the Parties will, promptly upon the request of another Party, execute, acknowledge, and deliver to the other Party any and all further instruments as are reasonably requested or appropriate to evidence or give effect to the provisions of this Contract.

I. Notice.

(1) All notices or communications under this Contract to the EAA shall be in writing and shall be sent to the EAA's principal place of business as follows, unless and until NBU is otherwise notified:

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

(2) All notices or communications under this Contract to NBU shall be in writing and shall be sent to the address of NBU as follows, unless and until the EAA is otherwise notified:

NEW BRAUNFELS UTILITIES
263 E. Main Plaza
New Braunfels, Texas 78130
ATTENTION: DOUG DRAEGER, EXECUTIVE DIRECTOR - OPERATIONS

(3) Any notice or other communication provided in this Contract to be given by a Party to the other Party will be in writing and may be given by depositing the same in the United States mail, certified with return-receipt requested, properly stamped and addressed to the Party to be notified. Notice may also be given by personal hand delivery, overnight delivery service, or facsimile. Notice deposited in the mail in the manner hereinabove described will be conclusively deemed to be effective, from and after the expiration of three (3) business days after it is so deposited. Notice given by personal or overnight delivery or facsimile will be deemed to be effective upon the day of delivery. Notice may also be given by electronic communication but is effective only upon the effective date of one of the other forms of delivery discussed above.

J. Response Times.

The Parties will use reasonable efforts to respond to written requests from the other Party within thirty (30) business days.

K. Rights Regarding Books and Records.

Upon reasonable prior written notice, each Party will permit the other Party's authorized representatives to examine and copy all the books and records kept by the Party pertaining to this Contract.

L. Disclosure of Materials.

The information, documents, property, and materials produced, created or supplied under this Contract may be subject to disclosure to any third party pursuant to the Texas Public Information Act, Chapter 552, Texas Government Code. Each Party shall promptly advise the other of any requests for any document by a third party.

M. Access to Property.

Unless agreed to otherwise which may be orally, by email, or otherwise, upon three (3) days' prior written notice, NBU agrees to allow the employees and duly authorized agents of the EAA to enter any facilities, plants, works, improvements, land, easements, rights of way, or other interests in land used by NBU in connection with the ASR Project, at any reasonable time for the purpose of inspecting and investigating conditions relating to the implementation of or compliance with the terms and conditions of this Contract. The EAA's employees or agents while on NBU's property shall observe NBU's rules, policies, or procedures concerning safety, internal security, and fire protection and shall notify NBU of their presence and shall exhibit proper credentials.

N. Interpretation.

The section headings used in this Contract are for the convenience of the Parties and descriptive purposes only and shall not be used to interpret or construe its provisions, nor alter or affect the terms and conditions of this Contract. Neither this Contract, nor any portion thereof, shall be interpreted by a court of law to the detriment of a Party based solely upon that Party's authorship of this Contract or any portion thereof, but rather as if both Parties had jointly prepared this Contract. Unless the context otherwise requires, words of the masculine gender will be construed to include correlative words of the feminine and neutral genders and vice versa, as may be appropriate. This Contract and all the terms, conditions, and provisions will be liberally construed to effectuate the purposes set forth herein and to sustain the validity of this Contract.

O. Exhibits; Plans; Reports; Models.

The Exhibits, schedules, and/or other documents attached hereto or referred to herein, including the plans, reports, and models to be developed and approved under Sections 5 and 6, are incorporated herein and made a part of this Contract for all purposes. As used herein, the expression "Contract" means the body of this Contract and such Exhibits, schedules, and/or other documents, and the expressions "herein," "hereof," and "hereunder" and other words of similar import refer to this Contract and such Exhibits, plans, reports, and models schedules, and/or other documents as a whole and not to any particular part or subdivision thereof.

P. Severability.

The provisions of this Contract are severable and, if any provision of this Contract is held to be invalid for any reason by a court or agency of competent jurisdiction, the remainder of this Contract will not be affected and this Contract will be construed as if the invalid portion had never been contained herein.

Q. State or Federal Laws, Rules, Orders, or Regulations.

(1) Except as provided herein, this Contract is subject to all applicable federal, state, and local laws and any applicable permits, ordinances, rules, regulations, and orders of any federal, state, or local governmental authority having jurisdiction. However, nothing contained herein will be construed as a waiver of any right to question or contest any such law, ordinance, rule, regulation, or order in any forum having jurisdiction.

(2) Each Party represents that, to the best of its knowledge, no provisions of any applicable federal, state, or local law, nor any applicable permit, ordinance, rule, regulation, or order of any federal, state, or local governmental authority having jurisdiction will limit or restrict the ability of each Party to carry out its respective obligations under or contemplated by this Contract.

(3) Each Party warrants and represents that it will comply with all applicable federal, state, and local law when performing any activities under this Contract. Moreover, in its performance of any activities under this Contract, each Party warrants and represents that, to the best of its knowledge, it is or will be in compliance with all applicable federal, state, or local law, including any applicable permit, ordinance, rule, regulation, or order, and that it has obtained any and all permits, licenses, or other approvals as may be required by law to perform such activities to accomplish the objectives of this Contract.

R. Relationship of Parties.

This Contract is based upon the active participation of the Parties. Neither the execution nor the delivery of this Contract shall create or constitute a partnership, joint venture, or any other form of business organization or arrangement between the Parties, except for the contractual arrangements specifically set forth in this Contract. No Party shall have any power to assume or create any obligation on behalf of the other Party.

S. Binding Effect; Successors and Assigns.

This Contract shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns. Unless expressly provided herein, neither this Contract, nor any part thereof, may be assigned by a Party without prior written notice to and approval by the other Party, which consent may be withheld without cause.

T. Third-Party Beneficiaries.

This Contract is intended to confer any rights, privileges or causes of action only upon the Parties, and not upon any other third party.

U. Default – Notice and Opportunity to Cure.

If a Party fails to perform any obligation under this Contract, the other Party may provide written notice of default. The defaulting Party shall have five business days to make written reply to the notice, and sixty days from receipt of the notice within which to remedy the default, unless another time frame is agreed to by the Parties. If NBU fails to remedy a default, EAA shall have the right: (i) to give notice to NBU of the termination of this Contract and the loss of NBU's authorization to inject and store Aquifer water at the ASR Project and to recover Stored Water from the ASR Project; or (ii) to take any other enforcement action against NBU in EAA's sole discretion, but only if such action relates to the ASR Project and the terms and conditions imposed thereon on NBU under this Contract.

V. Remedies.

(1) The Parties recognize that the failure of NBU to perform its obligations hereunder may not be measurable solely in money damages. NBU therefore agrees in the event of any default on its part that the EAA will have available to it, in addition to all other legal remedies, the equitable remedies of injunction, mandamus and/or specific performance, and termination. It is the intent of the Parties that any default under this Contract may be subject to the remedy of injunction, mandamus and/or specific performance to the extent that injunction, mandamus and/or specific performance is possible under the existing circumstances as determined by a court of competent jurisdiction

(2) The failure by NBU to remedy a default under this Contract may also be considered by the EAA to be a violation of applicable sections of the EAA Act or the EAA's rules. Therefore, the EAA may elect to invoke its regulatory enforcement authority under the EAA Act and other applicable law to seek appropriate enforcement remedies against NBU for any action or failure to act related solely to this Contract and may prosecute such matter under its enforcement authority. Such an election does not affect the EAA's right to pursue any other remedies under this Contract.

(3) The Parties recognize that any actions or remedies taken or not taken under this section shall not affect any other contract or agreement between the Parties or to which both the EAA and NBU are parties.

W. Applicable Law; Venue.

This Contract will be governed by and construed in accordance with the laws of the State of Texas, and the obligations, rights, and remedies of the Parties hereunder will be determined in accordance with such laws without reference to the laws of any other state or jurisdiction, except for applicable federal laws, rules, and regulations. It is specifically agreed among the Parties that in the event that any legal proceeding is brought to enforce this Contract or any provision hereof, the same will be brought exclusively in Bexar County, Texas.

X. Attorney Fees.

If any action at law or in equity, or other proceeding is brought to enforce or interpret a provision of this Contract, or because of an alleged breach or default relating to this Contract, the prevailing Party shall be entitled to recover from the other Party reasonable attorney's fees, costs, and other necessary litigation disbursements, in addition to any other legal or equitable relief to which it may be entitled.

Y. Force Majeure.

If by reason of Force Majeure any Party will be rendered unable wholly or in part to carry out its obligations under this Contract, such Party will give notice and full particulars of such Force Majeure in writing to the other Party within a reasonable time after the occurrence of the event or cause relied on. After providing such notice, the obligation of the Party giving such notice, so far as its performance is prevented by such Force Majeure, will be suspended during the continuance of the inability then claimed, but for no longer period, and any such Party will endeavor to remove or overcome such inability with reasonable dispatch. The term "Force Majeure" as used herein will mean those situations or conditions which are beyond the control of the Party and which, after the exercise of due diligence to remedy such situation or condition, render the Party unable, wholly or in part, to carry out the covenants in this Contract. Such Force Majeure events are limited to: Acts of God other than drought, strikes, lockouts or other industrial disturbances, acts of public enemy, orders of any kind of the government of the United States or the State of Texas, regulatory restrictions imposed on the EAA by the Texas Legislature, any civil or military authority, insurrection, war, terrorism, riots, epidemics, landslides, lightning, earthquake, fires, hurricanes, tornados, storms, floods, washouts, restraint of government and people, civil disturbances, explosions, extraordinary breakage or accidents to machinery, wells, pipelines or canals, partial or entire failure of water supply, or water production infrastructure, or on account of any other causes insofar as any of the foregoing are beyond the reasonable control of the Party claiming such inability. Neither Party shall be deemed in default hereunder for any failure to perform due to any Force Majeure event.

Z. Payment from Current Revenues; Limitation on Funding Sources.

The Parties acknowledge that pursuant to Subsection 791.011(d)(3), Texas Government Code, NBU, which is required under Section 9 to bear and pay all costs associated with the performance of the governmental functions or services under this Contract, must make such payments from current revenues available to NBU.

AA. Applicability of to Other Projects.

This Contract does not apply to any other ASR project that NBU might develop inside or outside the jurisdiction of the EAA. The Parties agree and understand that any other ASR project of NBU for which Aquifer Source Water is source water, or which involves the injection into and/or recharge of the Aquifer regardless of source water, will require a review and a determination by the EAA as to the applicable legal requirements and possible permitting or contracting that will apply to such project.

IN WITNESS WHEREOF, the Parties, acting under authority of their respective governing bodies, have executed this Contract to be effective as provided in Section 10(A).

Roland Ruiz
General Manager
Edwards Aquifer Authority

Ian Taylor
CEO
New Braunfels Utilities

Date

Date

Attest:

Attest:

Jenifer Wong-Esparza
Assistant to the Secretary

Laura Rivers
Executive Assistant

Approved as to Form:

Approved as to Form:

Darcy Alan Frownfelter
General Counsel

Connie Lock
Staff Attorney

EXHIBIT A

General Description of the ASR Project

1. Location and Basic Design Parameters.

The proposed location of the ASR Project is on a site near the New Braunfels Regional Airport, more specifically identified on the map attached as Exhibit B, which includes the proposed wellfield layout consisting of the initial ASR well for the ASR Project, eight (8) additional ASR wells that may be added if full operation is found feasible, and up to five (5) monitoring wells described in Subsection 5.B.1. The ASR Project is estimated to initially have a long-term total storage volume of approximately 14,000 AF of water, with a recovery capacity of approximately 9 million gallons per day (mgd) and a recharge capacity of approximately 4 mgd. The ASR Project is expected to have a useful project life of about 50 years. The ASR Project is intended to serve NBU as a vehicle to: (1) provide a long-term water management strategy; (2) help NBU meet seasonal demands when drought restrictions are in effect; (3) provide additional water supply during outages due to flooding and other emergencies; (4) potentially add additional springflow protection measures to benefit springflow discharges at Comal Springs during drought conditions; and (5) add valuable information to the current, limited understanding of the hydraulic nature of the Saline Zone.

2. Phased Approach.

As conceived under this Contract, the ASR Project is designed to be implemented through a phased approach. An initial full-scale demonstration ASR well will be constructed to investigate and verify the suitability, feasibility, and efficacy of the ASR Project as planned for the ASR Project site which, depending on the results, may be followed by the full build-out of the ASR Project as described herein.

A. Demonstration Well.

The proposed full-scale ASR demonstration well will explore the suitability of the Saline Zone for the purpose of demonstrating the facilities required for a complete ASR Project. Preliminary work will consist of wireline coring and construction of the initial monitoring well for the purpose of gathering data on Aquifer lithology and confining layers to an estimated depth of about 1,000 feet. NBU then intends to construct, operate, and maintain the demonstration ASR well and subsequently install the up to four remaining monitoring wells. After the demonstration ASR well has been completed, operational activities will also include Cycle Testing. Cycle Testing will continue in parallel with the design, permitting, construction, and start-up of permanent wellhead facilities at the demonstration ASR well if the ASR Project is deemed feasible at this location. Operations performed during this phase of the ASR Project will be based upon data obtained from the wireline core and initial monitoring well.

B. ASR Project Expansion.

Expansion of the ASR Project will only occur upon successful implementation of the initial demonstration activities associated with the ASR Project. While the demonstration well of the ASR Project is expected to provide the first in a series of ASR wells at the ASR Project that will meet NBU's water supply goals based on the ASR Project, Project expansion is expected to provide the capability to fully meet these goals.

EXHIBIT B
Location Map of the ASR Project

EXHIBIT C
ASR Project Purging Protocol