AGREEMENT TO PARTICIPATE IN PLAYA LAKES RECHARGE STUDY PHASE ONE – MONITORING

[Landholder of [corporate (hereinafter TWDB). The recharge and	
playa lakes r During Phas periodically to but not limited includes a de take place of of this Agree Agreement b	nent covers the use of cooperator's land by TWDB in Phase One of the echarge study (the <i>Project</i>), during which data will be gathered for analysis. e One, TWDB will install equipment and materials in the playa that will be monitored by TWDB employees and authorized representatives (including ed to Texas Tech University employees, or contractors). Attached Exhibit A escription of all TWDB Phase One activities that this Agreement permits to a the Cooperator's property. Exhibit A is incorporated into and made a part ement for all purposes. This Agreement and Exhibit A constitute the entire between the Parties.
which experi	nt, separate, optional agreement will govern Phase Two of the Project, in mental recharge activities will be implemented and monitored. Participation e of the Project does not require subsequent participation in Phase Two of
A. The C	Cooperator Agrees:
1.	To allow use by TWDB and its representatives of approximately 0.0059 acres (about 300 sq. ft.) of land owned by [landholder] located in the playa lake at°' N latitude°' longitude, [Playa location description] () (see Mapquest or Topozone [link:]) for the conduct of Phase One activities described in Exhibit A. If the Cooperator grants approval, TWDB monitoring equipment may be placed at more than one point within the playa and the area immediately surrounding the playa.

To permit TWDB and its representatives to install the equipment and materials listed in **Exhibit A** at the Phase One site, and to perform an initial topographic survey of the land surrounding the site's playa at the

2.

Cooperator's convenience.

 To permit access by TWDB and its representatives, during daylight hours, for any activity listed in **Exhibit A**. Access by TWDB and its representatives at any other time requires prior approval by the Cooperator.

B. <u>TWDB Agrees:</u>

- 1. To exercise all reasonable precautions to avoid injury to the Cooperator's property, including land, livestock and crops.
- 2. To assume responsibility for monitoring stations, wells and equipment placed on Cooperator's land, including public safety and the safety of TWDB employees.
- 3. To remove all equipment and materials from the Cooperator's land as soon as possible upon Project completion or upon request of the Cooperator. The TWDB will remove all equipment and materials within 60 days unless a longer period of time is required due to weather or availability of personnel to perform such removal. Exceptions are as follows:
 - a. Some PVC casing installed in the ground may not be removable, and thus left in place. For instance, PVC casing from deep monitoring wells may be impractical to remove. In this instance, the casing will be cut below grade and plugged with bentonite-cement grout.
 - b. The TWDB may install a settlement point sensor to measure soil movement in the playa basin. The settlement points are anchored up to 10 feet below ground, and are impractical to remove. In this instance, the riser will be cut below grade and plugged with bentonite-cement grout.
 - c. Tracer consisting of calcium bromide or fluorescein dye (both of which are not harmful to human, plant and animal life) may be used to trace movement of groundwater. Since this material is diffuse and impractical to recapture, it will remain diffused in the ground after Phase One is complete.
- 4. Upon Project completion or termination of access by the Cooperator, TWDB must return the site substantially to its original condition, with the exceptions listed above. Any well drilled by TWDB or its representatives will be plugged and abandoned in accordance with the standards and technical requirements established by Texas law.

- 5. To notify Cooperator in advance of access to site, and to use only the most direct practicable route from property entry point to equipment sites. If access to other areas is needed, TWDB shall seek permission from Cooperator. Any access to the site by heavy equipment, such as drilling rigs, will be coordinated in advance and will be subject to appropriate load-bearing conditions of the soil on site.
- 6. Although the tracers are not harmful to human, plant, and animal life, if either calcium bromide or fluorescein dye is used, it will be placed on the playa surface no closer than 1000 feet from any well used for potable water supply.

C. <u>It is Mutually Agreed:</u>

- 1. This Agreement defines general terms by which the parties will cooperate, and does *not* constitute a financial obligation to serve as a basis for expenditures or reimbursement by either Party.
- 2. This agreement allows TWDB use of the site on the Cooperator's property from 2010 through 2019 with renewal upon mutual agreement by the parties. However, this Agreement may be terminated by either Party whereupon TWDB must remove equipment from the site within 60 days with the exceptions listed in Section B(3). The Cooperator may terminate this agreement by notifying the TWDB representative, the Executive Administrator or a designee, in writing with at least 30 days notice.
- 3. Neither Party to this Agreement can exactly predict the results of Phase One activities. Therefore, TWDB and the Cooperator agree to hold each other harmless for any damages or claims of any nature whatsoever arising from the activities listed in Exhibit A of this Agreement, and to hold each other harmless for any damages or claims of any nature whatsoever arising out of the performance of the activities conducted under this Agreement. The Cooperator agrees that TWDB shall not be liable for any damages or claims of any nature whatsoever arising from any existing contamination (including any contaminated soil or groundwater) present at the site prior to this Agreement.
- 4. This Agreement may be modified through mutual agreement of the Cooperator and TWDB. Any modification made to this Agreement shall be confirmed in writing prior to performance of the change.
- 5. The Cooperator shall not be held liable for any negligence of TWDB. TWDB shall not be held liable for any negligence of Cooperator.

Cooperator Signature:	
Cooperator Name:	
Date:	
Authorized TWDB Representative Signature:	
Authorized TWDB Representative Name:	
Date:	

EXHIBIT A Page 1

EQUIPMENT AND MATERIAL TO BE PLACED ON THE PHASE ONE SITE OWNED BY COOPERATOR:

- 1. Monitoring wells and sensors (including PVC pipe).
- 2. Survey monument(s).
- 3. Settlement point sensor (including PVC pipe).
- 4. Tracer, consisting of calcium bromide or fluorescein dye.
- 5. A small, tripod-mounted meteorological station with a datalogger, solar panel and battery, time-lapse camera, and water level/water temperature sensors.

The above equipment shall be located at the point or points on the Cooperator's property that are determined by mutual agreement of TWDB and the Cooperator.

ACTIVITIES TO TAKE PLACE AT THE PHASE ONE SITE OWNED BY COOPERATOR:

- 1. Tracer Tests. Artificial tracer consisting of calcium bromide or fluorescein dye (which is not harmful to human, plant, and animal life), may be placed on the playa surface. This tracer would help TWDB understand the movement of water within this particular playa. Although the tracer is not harmful to human, plant, and animal life, as a precaution the tracer would not be applied within one thousand feet of any well used for potable water supply.
- 2. Topographic Survey. A one-time survey of the playa, and land adjacent to the playa, would be performed at the Cooperator's convenience. Since this survey would also catalog lands adjacent to the playa, the Cooperator may restrict this survey to the winter or fallow season to avoid any disruption to crops. The survey might include:
 - a. Placement of survey monument(s) onsite.
 - b. Using ATV-mounted GPS equipment to measure location and elevation along transects spaced approximately one hundred feet apart.
- 3. Soil and Water Samples. TWDB may take soil core and water samples during the course of Phase One. Soil core samples may be collected using hand augers or drilling rigs. Any heavy equipment access will be coordinated with the Cooperator to minimize impact on roadways, soil, and vegetation. The boreholes will be plugged with bentonite-cement grout upon completion if not converted to monitoring wells. Water samples may include both surface water and groundwater samples.
- 4. **Monitoring Wells and Sensors.** TWDB may install monitoring wells and sensors. Typically monitor wells are two-inch PVC screen and casing installed to a total depth just below the minimum annual water level. Sensors may be installed through casings in the unsaturated zone above the water table. Upon

EXHIBIT A Page 2

- 5. Project completion, the monitor well and sensor casings will be plugged and abandoned in accordance with the standards and technical requirements established by Texas law.
- 6. **Temporary Fences**. TWDB may place temporary fences (to be removed upon Project completion) around monitoring equipment as a protective measure.