

TO: Board Members

THROUGH: Jeff Walker, Executive Administrator
Todd Chenoweth, General Counsel

FROM: John Dupnik, Deputy Executive Administrator, Water Science and Conservation
Kaye Schultz, Assistant General Counsel

DATE: February 28, 2019

SUBJECT: Memorandum of Understanding with the Texas Department of Transportation

ACTION REQUESTED

Consider authorizing the Executive Administrator to execute a Memorandum of Understanding (MOU) with the Texas Department of Transportation (TxDOT) regarding placement of climate data collection stations on TxDOT property.

BACKGROUND

TexMesonet is a partnership working to develop a statewide network of earth observation data collection sites. The Texas Water Development Board (TWDB) is leading the effort and incorporating data from other local and regional networks, including the Guadalupe Blanco River Authority, Lower Colorado River Authority, Edwards Aquifer Authority, National Weather Service, U.S. Forest Service and West Texas Mesonet.

TexMesonet stations collect weather information 24/7, including temperature, precipitation, wind speed, relative humidity, barometric pressure, solar radiation, soil temperature and moisture, and evaporation. A primary goal of TexMesonet is to help Texans monitor and use meteorological, hydrological and soil data to respond to ever-changing weather patterns and extreme weather events. This virtual network of high-quality data supports flood monitoring and flood forecasting efforts by the National Weather Service, regional river authorities, and local emergency responders. The network also provides valuable information for monitoring and responding to drought and wildfires and increasing the efficiency of water use for irrigation.

The first five TWDB stations were installed in May 2016. TexMesonet currently has about 45 sites in 20 counties, part of a network of 3,094 stations in the network. The sites and data are available on the TexMesonet viewer, <http://www.texmesonet.org>.

This MOU will allow placement of TexMesonet data collection equipment at agreed sites on land owned by TxDOT, with a separate site use agreement for each location. With its 89 rest areas across the state, the TxDOT partnership will allow expansion into areas not covered by the network and provide higher visibility for the project. The first TexMesonet site on TxDOT property is planned for installation in cooperation with the Clearwater Underground Water Conservation District at an Interstate Highway 35 southbound rest area near Salado in Bell County. The agreement would be in effect until cancelled by either party with 30 days' notice.

Texas Water Code § 6.104 allows the Board to enter into an MOU with any other state agency and requires the TWDB to adopt by rule any such MOU. That rulemaking proposal will be brought before you later this year. The ability to enter into the MOU and the effectiveness of the MOU are not contingent upon the separate administrative requirement of adopting the MOU into Agency rules.

Texas Water Code § 6.190 authorizes the Executive Administrator to enter into this contract with the consent of the Board.

KEY ISSUES

Under the terms of this MOU, the TWDB would be responsible for installing the TexMesonet equipment at mutually agreed locations on TxDOT land, monitoring and maintaining the equipment, and removing the equipment and restoring the sites to their original condition on termination of the agreement.

RECOMMENDATION

The Executive Administrator recommends executing an MOU with TxDOT regarding placement of climate data collection stations on TxDOT property. Data available from the expanded TexMesonet will enhance flood monitoring and forecasting and provide information for drought and wildfire monitoring and response.

Attachment:

Memorandum of Understanding Between TWDB and TxDOT

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE TEXAS WATER DEVELOPMENT BOARD
AND THE TEXAS DEPARTMENT OF TRANSPORTATION**

This Memorandum of Understanding (MOU) is between the Texas Water Development Board (TWDB), 1701 N. Congress Ave., Austin, TX 78701, an agency of the State of Texas, and the Texas Department of Transportation (TxDOT), 125 E. 11th Street, Austin, Texas 78701, also an agency of the State of Texas

The parties assert that each has the authority to enter into this agreement under Texas Government Code § 771.003. TWDB is authorized by Texas Water Code §§ 6.104 and 6.190 to enter into this agreement. The Texas Transportation Commission has authorized TxDOT to allow the use of state right of way through a multiple use agreement under 43 Texas Administrative Code § 11.12.

NOW THEREFORE, the parties agree as follows:

1. The parties enter into this MOU for the purpose of cooperating to further research concerning Earth observations, including weather, rainfall, soil moisture and runoff, recognizing that the results of such research are to their mutual benefit and the benefit of the people of Texas. Observational and location data will be publicly available on the TWDB website at www.TexMesonet.org.
2. This MOU provides for the use by TWDB of mutually agreed locations on TxDOT land to gather data for the TexMesonet Monitoring Network (the Project), As part of the Project, TWDB will install equipment that will be periodically monitored by TWDB employees and authorized representatives (including but not limited to local Groundwater Conservation District employees or contractors). The attached **Exhibit A** includes a description of all TWDB equipment and activities permitted by this agreement to take place on TxDOT property. **Exhibit A** is incorporated into and made a part of this agreement for all purposes.
3. Responsibilities of the parties:
 - A. TxDOT agrees:
 1. To work with TWDB on selection of sites for the Project and to proceed with a Multiple Use Agreement for each mutually agreed location.
 2. To permit TWDB and its representatives to install the equipment and materials listed in **Exhibit A** at each site addressed by a Multiple Use Agreement.

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

B. TWDB agrees:

1. To exercise all reasonable precautions to avoid injury to natural resources and TxDOT property, including land and improvements.
2. To assume responsibility for monitoring equipment placed on TxDOT property, as well as public safety and the safety of TWDB employees.
3. To remove all equipment and materials from TxDOT land as soon as possible upon request of TxDOT. TWDB will remove all equipment and materials within 60 days of the request unless a longer period of time is required due to weather or availability of personnel to perform such removal and is agreed to by TxDOT.
4. To return a site substantially to its original condition upon termination of access.
5. To notify TxDOT in advance of accessing any site, and to use only the most direct practicable route from property entry points to equipment sites. If access to other areas is needed, TWDB will seek permission from TxDOT.
6. To fence or enclose all equipment installed on TxDOT property authorized for use by TWDB through a Multiple Use Agreement and to maintain all property within the fence or enclosure in a manner acceptable to TxDOT.
7. Execution of this MOU does not grant TWDB any interest in TxDOT property. TWDB acknowledges that the execution of this MOU does not impair or relinquish TxDOT's right to use of TxDOT property for a highway purpose when it is required for the construction, reconstruction or maintenance of the traffic facility for which the property was acquired, nor shall use of any TxDOT property by TWDB ever be construed as abandonment by TxDOT.

C. It is mutually agreed:

1. This agreement defines general terms by which the parties will cooperate, and does not constitute a basis for financial obligations, expenditures or

reimbursement by either party. The parties agree to follow all applicable laws in performing the activities described herein.

2. This agreement allows TWDB use of the mutually agreed sites on TxDOT property as addressed in each individual Multiple Use Agreement until access to one or more sites is terminated by either party, whereupon TWDB must remove equipment from the site within 60 days with the exceptions listed in Section B(3).
3. To the extent allowed by law, TxDOT agrees that TWDB will 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 MOU.
4. To the extent authorized by law, TWDB agrees that TxDOT will not be liable for loss of or damage to TWDB equipment or personal property installed by TWDB in the state right of way.

This agreement is effective on the date that the last party executes this document and will terminate upon 30 days' written notice by either party. It may be amended as needed upon written agreement by both parties.

The parties hereby agree to be bound by this Memorandum of Understanding as indicated by their signatures below.

TEXAS WATER DEVELOPMENT BOARD

TEXAS DEPARTMENT OF TRANSPORTATION

Jeff Walker
Executive Administrator

Name: _____
Title _____

Date: _____

Date: _____

EXHIBIT A

TWDB EQUIPMENT AND MATERIAL TO BE PLACED ON THE SITE(S) OWNED BY THE TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT):

1. Tipping bucket or weighing rain gauge and windscreen
2. Soil moisture sensor(s)
3. Pole-mounted or tower-mounted meteorological sensors with a data-logger, solar panel
4. Battery and cellular modem or radio for communications

The above equipment will be located at a point or points on TxDOT property determined by agreement of TWDB and TxDOT.

TWDB ACTIVITIES TO TAKE PLACE AT THE SITE(S) OWNED BY TxDOT:

1. **Periodic maintenance.** Regular maintenance will be performed twice per year to maintain equipment calibrations. Additional site visits will take place as needed to respond to instrument failure or site maintenance needs.
2. **Soil Samples.** TWDB may take soil samples to calibrate soil moisture sensors. Soil samples may be collected during sensor installation and periodically during the first year of operations using a hand auger or shovel from several locations within the fenced enclosure.
3. **Fencing.** TWDB will place fences (to be removed upon Project completion) around equipment as a protective measure, with advance approval of fencing material by TxDOT.

Weather data-viewer for Texas



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