

EXHIBIT O

WATER CONTROL AGREEMENT

MANSFIELD DAM AND LAKE TRAVIS

(MARSHALL FORD DAM AND RESERVOIR)

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MANSFIELD DAM AND LAKE TRAVIS (MARSHALL FORD DAM AND RESERVOIR)  
COLORADO RIVER, TRAVIS COUNTY, TEXAS

Pursuant to section 7 of the Flood Control Act of 1944, 33 U.S.C. 709, and further prescribed in 33 CFR 208.11, the Corps of Engineers (hereinafter called the Corps) and the Lower Colorado River Authority (hereinafter called the Authority) hereby set forth this agreement to specify the roles and responsibilities of the respective organizations in the operation of Mansfield Dam and Lake Travis, Travis County, Texas.. The included water control release schedules will govern the use of the flood control storage space at Mansfield Dam and Lake Travis. It is agreed or understood that:

STORAGE AND RELEASE

a. The Authority is responsible for the physical operation of the flood control facilities and for directing real-time implementation of the Water Control Plan. Consultation and assistance will be provided by the Corps when appropriate and to the extent practicable.

b. The Authority is responsible for storing and releasing flood waters, in accordance with the Water Control Plan, when the lake level is between elevations 681.0 and 714.0 feet mean sea level (msl), the elevation limits of the flood control pool.

c. Appropriate consideration will be given for other authorized project functions.

d. The Authority is responsible for directing storage and release of all water when the lake level is above elevation 714.0 feet msl, the top of the flood control pool. The Corps may temporarily prescribe regulation of flood control storage space on a real-time basis without request of the Authority.

e. The Authority is responsible for directing storage and release of all waters when the lake level is in the conservation pool, below elevation 681.0 feet msl. The Authority will advise the Corps when inflow rates are anticipated which will raise the pool above elevation 681.0 feet msl at the dam.

f. The Water Control Manual, insofar as they govern the use of the flood control storage capacity between elevations 681.0 and 714.0 msl, are subject to temporary modification by the Corps in an emergency. The modification shall be communicated by the Corps to the representative of the Authority in immediate charge of operations at Mansfield Dam and Lake Travis by the best available means of communication. The modification shall

be confirmed in writing the same day by the Corps to the Authority.

g. The Authority may temporarily deviate from the flood control regulations for emergency reasons to protect the safety of the dam or to avoid other serious hazards. In the event an immediate short-term departure is deemed necessary, such action shall be immediately reported to the Corps by the fastest means of communication available. Actions shall be confirmed in writing the same day by the Authority to the Corps and shall include justification for the action. Continuation of the deviation will require the express approval of the Corps. Advance approval of the Corps will be acquired prior to any deviation from the plan of regulation prescribed or approved by the Corps in the interest of flood control and/or navigation except in the emergency situation mentioned above. When conditions appear to warrant a prolonged deviation from the approved plan, the Authority and the Corps will jointly investigate and evaluate the proposed deviation from the approved plan to insure that the overall integrity of the water control plan would not be unduly compromised. Approval of prolonged deviations will not be granted unless such investigations and evaluations have been conducted to the extent deemed necessary by the Corps to fully substantiate the deviation.

h. At any lake level, the Authority is responsible for directing releases as required to ensure dam safety and structural integrity. The Corps will provide technical assistance if the Authority requests it. Any such assistance provided by the Corps is to be used at the discretion of the Authority, and does not relieve the Authority of the responsibility for safety of the project.

i. Flood control regulation will not restrict municipal or industrial uses, or releases for authorized downstream users as determined by the Authority or others.

j. Releases made in accordance with these regulations are subject to the condition that releases will not be made at rates or in a manner that would be inconsistent with emergency requirements for protecting the dam and/or reservoir from major damage.

#### MAINTENANCE

k. The Authority is responsible for the operation and maintenance of the flood control facilities and for all dam safety aspects of the project. The Authority shall maintain capabilities of the flood control facilities in accordance with the construction specifications and the "as built" drawings.

1. The Authority shall develop, maintain and execute forecast models for Lake Travis. The Authority shall provide the Corps inflow and pool elevation forecasts for Lake Travis on a near real-time basis.

#### DATA AND COMMUNICATION

m. The Authority shall provide observations required by the Corps for flood control regulation of Mansfield Dam and Lake Travis. The Authority will record and make available to the Corps hydrometeorological, streamflow and lake data on a real-time basis and will furnish a daily report, electronically, to the Corps office in Fort Worth, Texas. Data missing from weekend and holiday reports will be furnished on Monday or the day following the holiday unless otherwise instructed by the Corps. These reports shall be provided to the Corps office in Fort Worth, Texas, by 8:30 a.m. each day. This report will include the headwater elevation at 4:00 p.m. and midnight of the previous day and 8:00 a.m. of the day of the report; the number of gates in operation with their respective openings and releases; the 24-hour average power discharge; measured pan evaporation data; and, precipitation in inches for the preceding 24-hour period. Whenever the lake rises to elevation 681.0 feet msl and releases for flood regulation are necessary or appear imminent, the Authority shall report at once to the Fort Worth District Engineer or his duly authorized representative by telephone all gate changes and the time the gate change was made. This confirmation will include the head water elevation, the time of the gate change, the number of gates in operation, and the release rate.

n. The Corps and the Authority shall provide warnings that will start immediately when a water condition is expected that could produce severe damage to property or be potentially dangerous to life. The following paragraphs identify the action to be taken by each agency:

(1) Corps. In the event the lake level is projected to exceed elevation 681.0 feet msl, the Authority shall furnish the Corps with basin hydrologic data including projected lake levels and releases. The Corps will review, and at its discretion, modify the Authority's projections and proposed operations for use in warning the public within and below the project. In the event communications are lost between the agencies, the Corps shall dispatch personnel to Mansfield Dam, for the purpose of maintaining communications, as required by the Authority.

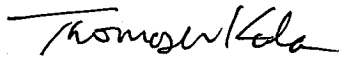
(2) Authority. In the event the lake level is projected to exceed elevation 714.0 feet msl, the Authority shall continue

to furnish the Corps with hydrologic data including projected lake levels and releases. The Authority shall initiate its flood warning plan at its discretion. The Authority shall be responsible for alerting the necessary public officials and agencies of the current and forecasted conditions. The Authority shall release information furnished by the Corps to the public in the lake area and will advise the public below the dam. The Authority shall provide the Corps with a copy of all information releases made to the public and news media.

o. The Authority is responsible for keeping current all data contained in its public flood warning plan.

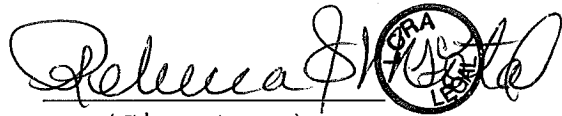
p. Regulation schedules are shown in tabular form for both Normal Flood Control Regulation (Table 1) and Emergency Flood Control Regulation (Table 2), and are attached hereto and incorporated herein in compliance with the regulations.

WITNESS OUR HANDS in the capacities shown below and effective either on the date of the adoption of amendments to 33 C.F.R. § 208.19 consistent with the revised Water Control Manual or on the date of the last signature, whichever is later.



(Signature)

Thomas W. Kula  
Brigadier General, U.S. Army  
Commanding  
Southwestern Division  
Corps of Engineers  
Authorized Representative  
of the Chief of Engineers



(Signature)

Rebecca S. Motal  
General Manager  
Lower Colorado River  
Authority

Jan 27, 2014

(Date)

DEC. 9, 2013

(Date)

**TABLE 1**

**Mansfield Dam and Lake Travis - Normal Flood Control Regulation Schedule**

Condition	Reservoir Level [ft]	Release <sup>1</sup> [cfs]	Controlling Stages and Discharges at Downstream Control Points
Pool Rising or Falling	Below 681	As Specified by the Authority	33.0 ft (30,000 cfs) at Austin - USGS Gage 08158500 27.2 ft (45,000 cfs) at Bastrop - USGS Gage 08159200 35.5 ft (50,000 cfs) at Columbus - USGS Gage 08161000
Pool Rising	Forecast: 681-683	3,000 <sup>2</sup> to 7,500	33.0 ft (30,000 cfs) at Austin 27.2 ft (45,000 cfs) at Bastrop 35.5 ft (50,000 cfs) at Columbus
Pool Rising	Forecast: 683-685	5,000 to 30,000	33.0 ft (30,000 cfs) at Austin 27.2 ft (45,000 cfs) at Bastrop 35.5 ft (50,000 cfs) at Columbus
Pool Rising	Forecast: 685-691 (a) During January, February, March, April, July, August, November, December. (b) During May, June, September, October	5,000 to 30,000	33.0 ft (30,000 cfs) at Austin 27.2 ft (45,000 cfs) at Bastrop 35.5 ft (50,000 cfs) at Columbus
Pool Rising	Forecast: 691-710	30,000	33.0 ft (30,000 cfs) at Austin 27.2 ft (45,000 cfs) at Bastrop 35.5 ft (50,000 cfs) at Columbus
Pool Rising	Forecast: 710-714	50,000	No Stage Control (50,000 cfs) at Austin No Stage Control (50,000 cfs) at Bastrop No Stage Control (50,000 cfs) at Columbus

**TABLE 1 (continued)**

<b>Mansfield Dam and Lake Travis - Normal Flood Control Regulation Schedule</b>			
Pool Rising	Forecast: 714-722 <sup>3</sup>	90,000 <sup>3</sup>	No controls. See footnote 3.
Pool Rising	Forecast: above 722		The Authority will specify and schedule releases as required to protect the safety of the structure.
Pool Falling	Above 722		The Authority will specify and schedule releases as required to protect the safety of the structure.
Pool Falling	722-714		The Authority will specify and schedule releases as required to protect the safety of the structure.
Pool Falling	714-710	50,000	No Stage Control (50,000 cfs) at Austin No Stage Control (50,000 cfs) at Bastrop No Stage Control (50,000 cfs) at Columbus
Pool Falling	710-691	30,000	33.0 ft (30,000 cfs) at Austin 27.2 ft (45,000 cfs) at Bastrop 35.5 ft (50,000 cfs) at Columbus
Pool Falling	691-685: (a) During May, June, September, October. (b) During January, February, March, April, July, August, November, December.	30,000	33.0 ft (30,000 cfs) at Austin 27.2 ft (45,000 cfs) at Bastrop 35.5 ft (50,000 cfs) at Columbus
Pool Falling	685-683	5,000 to 30,000	33.0 ft (30,000 cfs) at Austin 27.2 ft (45,000 cfs) at Bastrop 35.5 ft (50,000 cfs) at Columbus
Pool Falling	683-681	3,000 <sup>2</sup> to 7,500	33.0 ft (30,000 cfs) at Austin 27.2 ft (45,000 cfs) at Bastrop 35.5 ft (50,000 cfs) at Columbus

<sup>1</sup> Subject to the specified controlling discharges at downstream control points. Releases from the dam, when combined with downstream inflows to the Colorado River, shall not contribute to an

exceedance of the specified controlling discharges. Normal hydroelectric turbine releases may be reduced only to prevent them from contributing to an exceedance of downstream control discharges. Control discharges will not be modified due to minor shifts in the respective control point stage-discharge relationships, but will be reassessed if significant shifts indicate the possibility of negative impacts.

<sup>2</sup> Minimum daily average release. Release need not be continuous throughout the day.

<sup>3</sup> Release shall be the lesser of 90,000 cfs or the forecasted peak rate of reservoir inflow. As the reservoir level exceeds elevation 714 feet, **or is forecast to exceed elevation 722 feet**, the Authority will assume responsibility for specifying and scheduling releases as required to protect the safety of the structure **to the maximum extent practicable**.



**TABLE 2**  
**Mansfield Dam and Lake Travis - Emergency Flood Control Regulation Schedule**

Pool Elevation [ft]	Pool Condition	Operations
Below 691	Rising, Standing, or Falling	If the Dam Tender has knowledge of significant rainfall or pending flood conditions on the Colorado River downstream of the dam, stop all releases. Otherwise, continue to make releases as previously instructed.
691 - 710	Rising	Release 5,000 cfs
	Standing or Falling	Release 3,000 cfs
710 - 714	Rising	Release 30,000 cfs
	Standing or Falling	Release 5,000 cfs
714 - 722	Rising, Standing, or Falling	Release 90,000 cfs
Above 722	Rising, Standing, or Falling	All conduit gates full open.

Instructions During Emergency Operations

1. A complete log of all conduit gate operations will be maintained at each conduit gate.
2. The conduit gates will be operated as follows:
  - a. Each conduit gate will be fully opened or closed.
  - b. Conduit gates will be opened or closed at a maximum rate of one gate per hour.
3. When the lake level is receding and approaching elevation 681.0 feet (top of conservation pool), reduce conduit gate releases in such manner that all conduit gates are closed when the pool falls to elevation 681.0 feet.
4. No curtailment of normal hydroelectric turbine releases will be required due to flood control operations.