

Issue 17: Challenges Along International Border

A. Brief Description of Issue

Protecting Texas' water supplies and air quality are core responsibilities for TCEQ. The challenges to protecting water supplies and air quality are compounded when these resources are shared across an international boundary. TCEQ has several issues in the border area related to water and air. TCEQ has concerns with water deliveries, international reservoir infrastructure and safety, and water and air quality.

B. Discussion

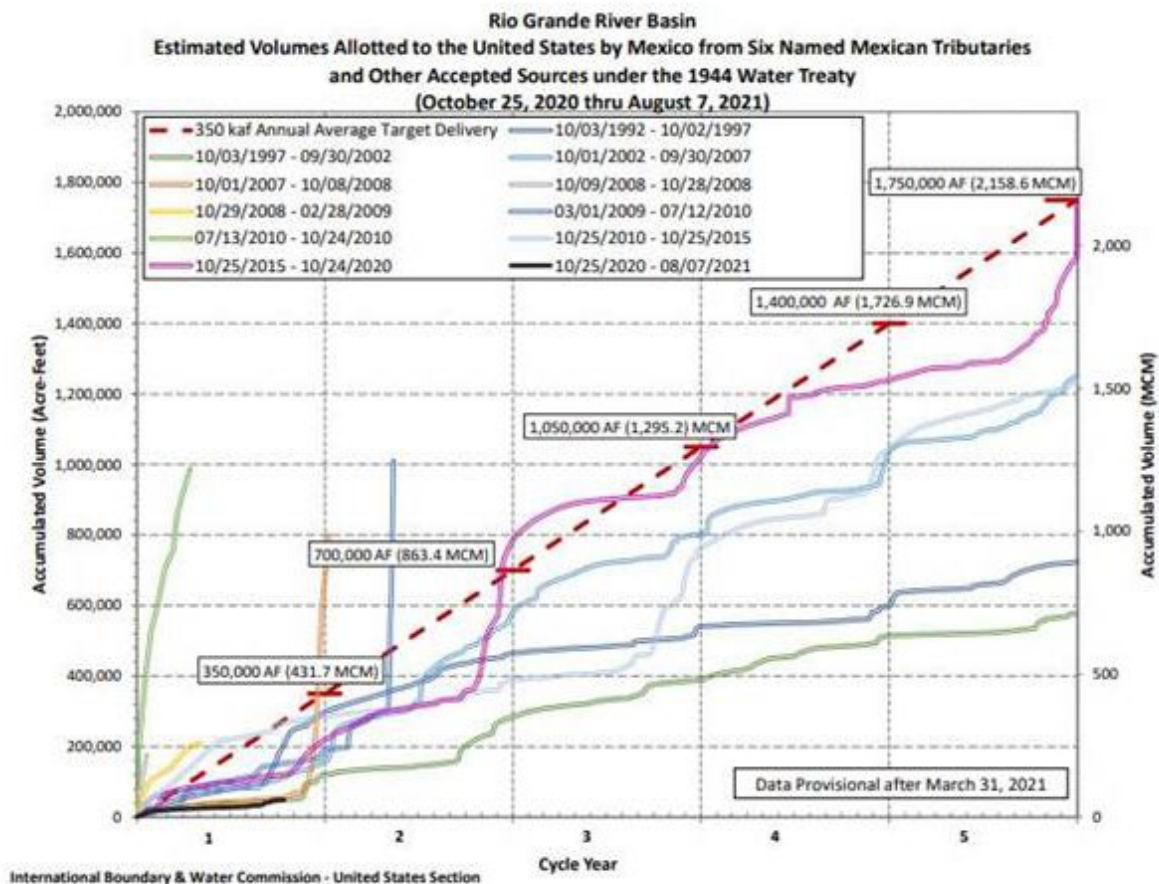
1944 Water Treaty

The waters of the international Rio Grande Basin are vital to ensuring Texas water right holders can irrigate crops, supply water to municipalities, and conduct industrial operations along the Rio Grande. [The International Boundary and Water Commission](#) (IBWC) oversees the *Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, Treaty Between the United States of America and Mexico, signed at Washington February 2, 1944* ([1944 Water Treaty](#)) binationally. The IBWC United States Section (USIBWC) participates in that utilization for the United States as well as helps settle differences that may arise. TCEQ is Texas' representative to the USIBWC on 1944 Water Treaty matters.

1944 Treaty Deliveries

Under the 1944 Treaty, Mexico has an obligation to deliver to the United States 1,750,000 acre-feet (AF) of water over a five-year cycle, at an average of 350,000 AF per year. During multiple five-year cycles, Mexico has not met its Treaty obligations. The following USIBWC graph shows the history of Treaty deliveries.

Estimated Volumes Allotted to the United States by Mexico under the 1944 Water Treaty



It is imperative that Mexico consistently meet its Treaty obligations each year, as well as every cycle, because Texas relies on this water source. Without the required Treaty waters, Texas must decrease allocations of water (made by TCEQ's Rio Grande Watermaster Program) from the international reservoirs (Amistad and Falcon) to Texas water right holders along the Rio Grande. Without the water allocations, Texas water users are forced to secure alternate sources of water, change crops, and reduce operations.

Amistad Dam

Under the 1944 Water Treaty, IBWC is responsible for the operation and maintenance of Amistad Dam, shared by the United States and Mexico. This IBWC responsibility includes flood control operations and dam safety. [Amistad Dam currently has a hazard potential classification of "High,"](#) meaning that in the event of dam failure, loss of life is expected. TCEQ has engaged with USIBWC on the dam safety issues at both the policy and emergency response levels and will continue to do so until the hazard is mitigated.

Water Quality and the Morillo Drain

Elevated salinity can result in the inability of Texas users to use the water, as elevated salinity may cause crop damage or impair municipal and industrial water treatment. Generally, salinity levels exceeding 1,000 mg/L are of concern to agricultural and other water users. Salinity in the lower Rio Grande frequently

exceeds 1,000 mg/L and flows from irrigation drains in Mexico are a documented source of elevated salinity levels in this area.

The Morillo Drain was constructed in 1969 to divert high saline runoff from agricultural fields in Mexico away from the Rio Grande. The Morillo Drain is located downstream of Falcon Reservoir and upstream of Anzalduas dam and diverts agricultural runoff through a 24-mile canal that parallels the Rio Grande for a short time then veers southeast and flows directly into the Gulf of Mexico. Minutes 223, 224, 282, and 303 to the 1944 Water Treaty address the construction, operation, and maintenance of Morillo Drain. Minute 223 specifies the capacity of the canal at three cubic meters per second (CMS). Currently, the operating capacity at the Morillo Drain is limited to approximately two CMS mainly due to canal conveyance constraints created by the spread of human settlements along the canal in the City of Reynosa, Tamaulipas, Mexico. Flows greater than two CMS normally spill into the Rio Grande. These types of spills generally occur after large or prolonged rainfall events or during irrigation season in Mexico (winter and spring). Additionally, power outages, debris in the pump or canal, and pump malfunction have all resulted in agricultural runoff spilling into the Rio Grande.

Mitigation of salinity on the Rio Grande below Falcon is important to all users. USIBWC should ensure the operation and maintenance of the canal is conducted as needed to ensure the pump station operates properly and the three CMS capacity in the canal is restored and maintained because, if operated at a lesser CMS capacity, the Morillo Drain is more likely to overflow during peak irrigation seasons in Mexico. This has been an ongoing issue for at least the last two decades and TCEQ has actively engaged USIBWC. This engagement has resulted in improved maintenance at the pumps; however, capacity remains below the three CMS specified by Minute 223.

Air Quality

El Paso County is impacted by emissions from Juarez and other areas in Mexico; primarily coarse particulate matter (PM10) and ozone. The City of El Paso is designated nonattainment for the PM10 National Ambient Air Quality Standard (NAAQS). Regarding ozone, El Paso County was designated as attainment for the 2015 ozone NAAQS by EPA in 2018. Multiple petitioners challenged the designation, and in July 2020 the U.S. Court of Appeals for the D.C. Circuit remanded the designation at EPA's request. On May 25, 2021, EPA notified the governor that it intends to designate El Paso County as a nonattainment area for ozone as part of the existing partial Doña Ana County, New Mexico (Sunland Park) nonattainment area. Because El Paso County would be combined with the Sunland Park nonattainment area, which was designated nonattainment in 2018, the deadlines for submitting the required State Implementation Plan revisions and attaining the standard have already passed (August 3, 2020 and August 3, 2021, respectively). As a combined nonattainment area, planning requirements would need to be coordinated with New Mexico.

C. Possible Solutions and Impact

Regarding water, TCEQ continues to engage with USIBWC on issues related to the 1944 Water Treaty including deliveries, salinity, and Amistad Dam.

Regarding air, TCEQ responded to EPA's letter on July 26, 2021. In the letter, TCEQ provided additional information and requested that EPA not modify El Paso County's attainment designation for the ozone standard. The letter also urged that, if EPA does designate the county as a nonattainment area, the area should not be tied to the Sunland Park nonattainment area in New Mexico. EPA is expected to finalize its designation for El Paso County in September 2021. If El Paso County is designated nonattainment, TCEQ would submit a Federal Clean Air Act Section 179B demonstration (i.e., a demonstration that the area

would attain the standard but for foreign emissions) to EPA, which would be reviewed along with New Mexico's demonstration. If the Section 179B demonstration is approved, planning requirements for the nonattainment area would be suspended.

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