Dear Mr. Chairman:

On behalf of the Secretary of State, we are pleased to transmit the enclosed Report to the Congress on Water Deliveries from Mexico to the Rio Grande under Existing Treaty Obligations. The report is in response to a requirement set forth in Section 7045(g) (3) of the Consolidated and Further Continuing Appropriations Act, 2015.

We hope this information is useful. Please let us know if we can be of further assistance.

Sincerely,

[Signature]

Julia Frifield
Assistant Secretary
Legislative Affairs

Enclosure:
As stated

The Honorable
Lindsey O. Graham, Chairman,
Subcommittee on State, Foreign Operations,
And Related Programs,
Committee on Appropriations,
United States Senate.
Report to the Congress on Water Deliveries from Mexico to the Rio Grande under Existing Treaty Obligations

Section 7045(g)(3) of the Department of State, Foreign Operations and Related Programs Appropriations Act, 2015 (Div. J, P.L. 113-235) requires the Secretary of State to report to the Congress on efforts to work with the Mexican Section of the International Boundary and Water Commission (IBWC) and the Government of Mexico to establish mechanisms to improve the transparency of data on, and predictability of, the water deliveries from Mexico to the United States under the 1944 Treaty for the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande (“Water Treaty”) on actions taken to minimize or eliminate the water deficits owed to the United States in the current five-year cycle, and to assess the estimated impact of any deficit projected for the current five-year water delivery cycle. The report has been prepared by the Department of State in consultation with the U.S. Commissioner of the IBWC, and is submitted to the Committees on Appropriations of the House of Representatives and of the Senate.

Treaty Obligations

The 1944 Water Treaty allots to the United States one-third of the flow arriving in the Rio Grande from six Mexican tributaries, “provided that this third shall not be less, as an average amount in cycles of five consecutive years, than 350,000 acre-feet annually.” The treaty also specifies that in the event of extraordinary drought making it difficult for Mexico to deliver the required volume “any deficiencies existing at the end of the aforesaid five-year cycle shall be made up in the following five-year cycle with water from the said measured tributaries.” Moreover, the treaty provides that whenever the U.S. conservation capacities in the two international reservoirs (Falcon and Amistad) are filled, “a cycle of five years shall be considered as terminated and all debits fully paid, where upon a new five-year cycle shall commence.” The vast majority of five-year cycles have ended early because the reservoirs filled.

Over the seven-decade history of the Water Treaty, Mexico has accumulated a water debt at the end of a five-year cycle on three occasions; this circumstance may be repeated in the current five-year cycle that began October 25, 2010. The Department of State and the U.S. Section of the IBWC (USIBWC) have been actively engaged with the Government of Mexico and the Mexican Section of the IBWC to address this projected deficit. A principal area of focus for both the Department of State and USIBWC has been the establishment of an arrangement that reduces or eliminates the water deficit in the current cycle.
avoids the accumulation of such deficits in the future, and enhances the predictability of water availability for the United States. The Water Treaty permits Mexico a degree of flexibility in meeting its water delivery commitments under certain circumstances. As indicated above, the required annual minimum volume of 350,000 acre feet is not an annual requirement but an annual average calculated over a five-year period, and any accumulated debt may be repaid in the subsequent five-year cycle. However, Mexico shares the U.S. view that better planning could eliminate the large fluctuations in annual delivery volumes. In the current cycle, low levels of water deliveries have confounded efficient planning by U.S. water authorities and their customers, damaging the interests and operations of municipal, agricultural and industrial water users alike. Despite significantly improved deliveries during the third and fourth years of the current cycle (as depicted below), at the end of 2014 Mexico had an accumulated deficit of some 275,000 acre feet of water still on the books. This deficit is the difference between the minimum annual average of 350,000 acre-feet and the actual annual delivery volumes.

A Technical Solution

Devising a long-term technical solution to the recurring water deficit problem has been a principal area of focus for USIBWC for the last several years, complemented by diplomatic support from the Department of State. The IBWC organized a meeting of the two countries’ water policy leaders in May 2010. At that meeting, both IBWC Commissioners, the Commissioners of the U.S. Bureau of Reclamation and the Texas Commission on Environmental Quality (TCEQ) and the Director General of CONAGUA, Mexico’s National Water Commission, committed to exchange data that would enhance each country’s understanding of the other’s water management practices to help determine a water delivery schedule for the Rio Grande basin.
When the international dams on the Rio Grande filled to capacity in summer 2010 as a result of abundant rainfall, the surfeit of water in the system cleared the slate and permitted the start of a new cycle in October. Given healthy reservoir levels in much of the basin, deliveries in the new cycle started at a good rate, which permitted fully adequate deliveries to U.S. water users, but also served to diminish momentum towards designing a water delivery schedule. Only after Texas had recorded the worst drought on record in 2011, and Mexico experienced its most severe dry spell in over three decades that same year, did water deliveries from Mexico begin to taper off with the resultant shift to enhanced reliance on stored water by U.S. users. By the end of 2012 and into 2013, the combined effect of drawing down U.S. water reserves in the international reservoirs to critical levels, and the greatly diminished flow of water to those reservoirs from Mexico, had served to create acute water shortages for U.S. consumers. Farmers had to switch crops, fallow fields, or otherwise alter planting decisions, while some municipalities were forced to seek and pay for expensive alternative water supplies as a result of the disruption.

In response to these circumstances, USIBWC initiated and has maintained an intense engagement with the Mexican Section of the IBWC to devise an innovative way for making Mexican deliveries more predictable. The focus is designing a proactive Rio Grande basin water management model that would use historic data to better predict natural water flows throughout the basin and thereby provide a reliable basis for Mexico to set its future domestic and international water allocations. We believe this would be a fairer, more transparent, and more predictable approach. This model would take into account the impact that internal Mexican reservoir storage has on the natural flow of water to the Rio Grande important because U.S. water allocation in the basin is determined in large measure by the volumes of water that reach the main stem of the Rio Grande from six Mexican tributaries. As noted above, the United States is allotted one-third of the volume of such flows.

Another important component of the model would be enhanced reliance on more flexible mechanisms for increasing water deliveries to the United States. Consistent with the technical efforts of the IBWC to establish a model based on the natural flow of water in the entire basin, one of these mechanisms already has been applied and allows the United States to use waters arriving in the Rio Grande from the San Juan River when Mexico does not need it, water that otherwise is allotted 100 percent to Mexico in the Water Treaty. While completion of the model has been hampered by data limitations, the Mexican Section of the IBWC has cooperated closely with USIBWC in seeking necessary additional information.
from CONAGUA. In addition, throughout 2014 USIBWC devoted substantial staff time to explaining the model to Mexican counterparts, conducted joint workshops in the use of the software, and has incorporated useful feedback for adjusting the analysis. Importantly, the Mexican Section of the IBWC and CONAGUA have now adopted the software as the basis for their own analytical purposes.

**Diplomatic Engagement**

The Department of State has continued to parallel USIBWC’s technical efforts through active diplomatic engagement with Mexico, in Washington, Mexico City, and elsewhere, including participation in various technical meetings convened by the IBWC in the Rio Grande basin. In the latter half of 2013, in part due to understandings reached under the auspices of Mexico’s Secretariat of Foreign Relations and the U.S. Embassy in Mexico City, Mexican authorities had sharply increased water deliveries to the United States. Mexico’s cumulative water delivery deficit with the United States contracted markedly as water deliveries in the third year of the cycle exceeded the minimum average annual amount by better than 40,000 acre feet (see the Cycle Year 3 uptick in the chart of accumulated water deliveries depicted here (updated graph may be found at www.ibwc.gov/wad/images/current_cycle.pdf). Department of State officials raised the water delivery issue on multiple occasions throughout 2014, via both direct demarches in Mexico City and in more general encounters. The cumulative effect of these efforts by the Department of State and USIBWC was a commitment by Mexico in September 2014 to deliver the minimum annual average volume in the final two years of the current cycle. This level of deliveries was substantially achieved in the fourth year, as reflected in the chart on page 2. While it remains to be seen whether Mexico in fact does deliver a full quota of 350,000 acre feet of water in the final year of the cycle, Mexico’s stated objective to take the necessary actions to do so is an important step (the chart above depicts the
increased water release rates to the United States in the latter months of Cycle Years 3 and 4 that followed concerted U.S. government engagement with Mexico.

**Even if Mexico is able to deliver 350,000 acre feet in 2015 there would still be a remaining delivery deficit of 275,000 acre feet.** However, the reservoirs along Mexico's Rio Grande tributaries currently enjoy healthy water storage and the model developed by USIBWC supports water deliveries that would reduce significantly the deficit.

Mexican officials have assured USIBWC and the U.S. Embassy in Mexico City that the Government of Mexico intends to institute new basin-wide regulations in 2015 that would include water allocations for the United States. However, the measures would take effect only as a new five-year water delivery cycle commences. Without additional water deliveries through the end of the five-year cycle beyond the commitments made in September 2014, we are unlikely to see a change in the current deficit level of roughly 275,000 acre feet by October 25, 2015. This deficit equals more than nine months of average annual water deliveries to the United States, which significantly diminishes water availability for domestic, agricultural and industrial water users.

The most authoritative study of the impact of deficient water deliveries on the lower Rio Grande valley of Texas was undertaken in mid-2013 by the Texas A&M AgriLife Extension Service. The study examined the economic impact of the accumulated water delivery deficit at the time (some 483,000 acre feet) on the lower Rio Grande valley agricultural sector. That study assessed the direct and indirect costs to agriculture alone at some $230 million. Including sectors that supply agriculture, an overall loss of more than 4,800 jobs, and the associated demand reduction due to lost income, the overall economic losses assessed by the study totaled close to $400 million.

While a water deficit of 275,000 acre feet in October 2015 would be substantially lower than the level analyzed in the Texas A&M study, the continuing lost production and jobs associated with a lingering water deficit equal to more than nine months of average annual water deliveries would nonetheless be damaging. There can be little question that the failure to receive the full volume of water anticipated in the Water Treaty for the current five-year cycle would result in a serious negative impact on the lower Rio Grande valley's economy, as well as on the finances of the region's municipalities that have been forced to seek, and pay for, alternative water supplies.
Adoption of a proactive water delivery plan remains a priority for both USIBWC and the Department of State in pressing jointly for both enhanced water deliveries, in the near term, and the adoption of measures for avoiding recurrent deficits in the future. Intensified technical and diplomatic exchanges with Mexico in 2014 towards development of such a plan have helped move the process forward; Mexico’s expressed intention to adopt new arrangements in the management of the Rio Grande basin water resources in 2015 that would also recognize U.S. water rights is a positive development and will be an area of close scrutiny. The agencies would be pleased to provide further information and details through follow-on briefings on these efforts. A USIBWC executive staff member serves as a liaison with the Department of State in Washington, D.C.