



# International Boundary and Water Commission

Summer 2018

## The Boundary Marker



### USIBWC welcomes new leaders

**E**ffective May 11, 2018, Principal Engineer Jose A. Nuñez of the U.S. Section of the International Boundary and Water Commission (USIBWC) has been designated to serve as the agency’s Acting Commissioner.

The change in leadership comes after the departure of Commissioner Edward Drusina who was appointed by President Barack Obama on January 15, 2010 and was sworn in on January 19, 2010. Drusina served at the pleasure of the Administration for 8 eight years and four months.

Mr. Nuñez has worked at the USIBWC since 1990. In 2014, he was named Principal Engineer of the Engineering Department, providing executive leadership for the agency’s Engineering Services, Construction, Environmental Management, Master Planning, Boundary and Realty, and Geographic Information Systems functions. In late 2017, he was also named Acting Principal Engineer for the Operations Department, which oversees the agency’s field offices, flood control projects, wastewater treatment plants,

dams, and hydroelectric power plants, as well as the Safety and Security Division and Water Accounting Division.

Mr. Nuñez previously served in the Construction Division, Construction Contracting Office, Acquisitions Division, Design Division, Program and Project Management Division, Environmental Management Division, and Engineering Services Division.

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Left to right, Daniel Avila, Jose Nuñez, Padinare Unnikrishna  
Photo by Lori Kuczanski, USIBWC Public Affairs Officer

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During his time in the Engineering Department, the USIBWC completed extensive rehabilitation of Rio Grande flood control levees, flood risk assessment, coordination with FEMA on flood control projects, coordination with the U.S. Department of Homeland Security (DHS) on border projects, and reviewing proponent submittals for licenses for construction along floodplains to comply with the 1970 Boundary Treaty with Mexico. He has been a Lead Engineer or Supervisor since 2005. Prior to his employment with the USIBWC, Mr. Nuñez worked as an engineer with the Department of Defense.

Mr. Nuñez holds a Bachelor of Science degree in Civil Engineering from the University of Texas at El Paso and is a Registered Professional Engineer in the State of Texas. He is an active member of Chi Epsilon, which is an honors society for civil engineers.

New to the USIBWC is Daniel Avila, Principal Engineer (PE). He was named PE of the Operations Department of the USIBWC in 2018. He serves as head of the department overseeing the Water Accounting Division, Safety and Security Division, and Operations and Maintenance Division, which includes 11 field offices in Texas, New Mexico, Arizona, and California. As PE, Mr. Avila is one of five U.S. Section “treaty officers” – positions designated in the 1944 Water Treaty between the United States and Mexico. Mr. Avila brings extensive private and public-sector experience to his new role, most recently as Vice President of Engineering for FXSA in El Paso, Texas. He has also worked as Assistant City Manager/Interim City Manager for the City of Las Cruces, New Mexico, and as Vice President of Operations and Technical Services for the El Paso Water Utilities.

A native of El Paso, Mr. Avila has a Bachelor of Science degree in Civil Engineering from the University of Texas at El Paso and is a Registered Professional Engineer in the State of Texas.

Dr. Padinare Unnikrishna has temporarily been named PE for the Engineering Department. Since joining the USIBWC in October 2011 as a Lead Hydraulic Engineer, Dr. Unnikrishna has reviewed license applications from proponents, including DHS, for drainage projects along the border and in the Rio Grande floodplain to ensure no adverse hydraulic impacts to the U.S. or to Mexico, consistent with the 1970 Boundary Treaty. He conducted hydrologic and hydraulic modeling studies, erosion and sediment transport studies, and is actively involved in developing georeferenced hydraulic models using ArcGIS tools and two-dimensional FLO-2D models for portions of the Rio Grande. These binational models are being developed jointly with Mexico, and will be useful tools for the protection of life and property along the floodplains as well as in the continued implementation of the boundary treaties. He has written scopes of work and prepared cost estimates for design projects.

Dr. Unnikrishna has worked as the Chief of the Engineering Services Division (ESD) since November 2014. He managed engineering projects and personnel functions related to the ESD. He participates in meetings with project proponents and in binational meetings with Mexico and has made several technical presentations to both technical groups and nontechnical groups, such as Citizen Forum meetings. He is active in committees and ongoing drainage and engineering projects of interest to the USIBWC.

Dr. Unnikrishna is a registered Professional Engineer in Texas, Arizona, Nevada and Utah. He is a Certified Floodplain Manager (CFM) and is knowledgeable about FEMA floodplain regulations.

## Historical marker unveiled at port of entry

The El Paso County Historical Commission and the United States International Boundary and Water Commission hosted a Texas Historical Marker dedication ceremony for the old Fabens-Caseta International Bridge on March 21 at the Marcelino Serna Port of Entry. The bridge was replaced by the new Tornillo-Guadalupe International Bridge.

Ed Drusina, USIBWC Commissioner at the time, offered remarks on the history of the Commission and the bridge.

“The bridge was built as part of the Commission’s Rio Grande Rectification Project authorized by a 1933 treaty. The bilateral effort was done to stabilize the international boundary and to provide Rio Grande flood control from El Paso-Ciudad Juarez to Little Box Canyon, more than 50 miles away,” said Drusina.

The original Fabens-Caseta Bridge spanned the Rio Grande connecting the U.S. and Mexico. Constructed in 1938, the 17-span, steel I-beam bridge was 510 feet long by 22 feet and 3 inches wide. It had a 16-foot-wide concrete roadway with a raised concrete sidewalk on the south side for pedestrian traffic across the Rio Grande.

As noted on the historical marker, the bridge “encouraged trade and commerce between the United States and Mexico for seventy-eight years, providing a symbolic and physical connection between the American and Mexican cultures.”

The U.S. and Mexican governments realized the need for the Rectification Project. A 1928 agreement known as Minute 111 recognized “the problems arising from the meandering channel of the Rio Grande which generally is the boundary line, the menace of floods and other difficulties.” The project established a stationary border in the region and curtailed flooding.

As part of the Rectification Project, the Commission straightened the channel, decreasing its length in the project area from 155 miles to 88 miles, and constructed flood control levees. The new channel was aligned so that each country received the same amount of land from the other as parcels traded hands with the straightening of the river. Three light-duty bridges were built: Fabens-Caseta, Fort Hancock-Porvenir, and Ysleta-Zaragoza.

“I’m pleased to have shared this small bit of history and information on how the two Sections of the Commission worked together in the past for rectification—a type of cooperation that has not diminished at all,” said Drusina.

The bridge was used until the new bridge was opened in 2016. The original Fabens-Caseta Bridge was demolished by El Paso County and Mexico. The new bridge is now the Tornillo-Guadalupe Bridge. On the U.S. side, the associated Port of Entry is known as the Marcelino Serna Port of Entry, named after an Army private.

Drusina and members of the El Paso County Historical Commission unveiled the historical marker signifying the importance of the bridge.



Ed Drusina, USIBWC Commissioner, admires the newly-unveiled Texas Historical Marker at the Marcelino Serna Port of Entry, signifying commerce and trade between the U.S. and Mexico for more than 75 years. (Photo by Lori A. Kuczanski/USIBWC Public Affairs Officer)

## Habitat Restoration along the Rio Grande in southern New Mexico and west Texas

Contributed by Elizabeth Verdecchia, USIBWC Natural Resources Specialist

The USIBWC has been restoring native habitat along the Rio Grande in southern New Mexico and west Texas for nine years under the agency's 2009 Record of Decision for River Management Alternatives for the Rio Grande Canalization Project.

Through collaborative agreements with the U.S. Fish and Wildlife Service (USFWS), the Elephant Butte Irrigation District (EBID), and other entities, as well as numerous contracts with environmental and engineering firms, the USIBWC has, to date, implemented 22 restoration sites on over 500 acres. The work includes removing non-native saltcedar, some floodplain excavation, planting native trees and shrubs, salvaging island vegetation, biological monitoring, and groundwater level monitoring. The restoration sites target the creation and restoration of habitat for endangered species as well as enhance recreation along river trails and establish woodlands, mesquite forests, and native grasslands. From 2011 to 2018, USIBWC and its partners and contractors have planted over 65,000 trees and shrubs, with an additional 20,000 anticipated for 2019. USIBWC also acquired over 47 acres of EBID surface water

rights and has irrigated three habitat restoration sites that target habitat for the endangered southwestern willow flycatcher.



USIBWC contractors plant thousands of native trees along the river trail at Valley Creek Restoration Site in El Paso, Texas, April 2018. (Photo by Liz Verdecchia, Natural Resources Specialist, USIBWC)

Irrigation of the Leasburg Extension Lateral Wasteway #8 habitat restoration site in north Las Cruces, June 2018. (Photo by Liz Verdecchia, Natural Resources Specialist, USIBWC)



## Minute 324 signed in El Paso, Texas

On April 10, 2018, in El Paso, Texas, the International Boundary and Water Commission, United States and Mexico, signed Minute 324, *Location, Demarcation, and Monumentation of the International Boundary Line on the new Bridge and Demolition of the old Bridge over the Rio Grande between Tornillo, Texas, and Guadalupe, Chihuahua.*

A Minute is a Commission agreement intended to implement treaty. The Minute was signed to ensure the proper demarcation of the international boundary on the new Tornillo-Guadalupe International Bridge over the Rio Grande along the Texas-Chihuahua border, which replaced the old Fabens-Caseta International Bridge. In accordance with the Minute and its associated Joint Report of the Principal Engineers, the Commission determined the normal flow of the Rio Grande and used this information to determine the location of the international boundary. As indicated in the 1970 Boundary Treaty, the border runs along the middle of the channel occupied by normal flow. The Minute also describes how the border will be marked by placement of two monuments on the bridge.

In addition, the Minute provided the Commission's agreement for the demolition of the old Fabens-Caseta International Bridge, which the Commission built in the 1930s. In signing the Minute, the Commissioners noted the observation of the Principal Engineers that since the new bridge became operational on February 4, 2016 the Commission no longer needed to continue to operate and maintain the old bridge, and that if it did not receive the corresponding maintenance it could deteriorate and constitute an obstruction to the normal or flood flow of the Rio Grande.



From left, Sally Spener, U.S. Secretary; Edward Drusina, U.S. Commissioner; Roberto Salmon, Mexican Commissioner; Jesus Luevano, Mexican Secretary, pose after signing Minute 324 at USIBWC Headquarters. (Photo by Lori A. Kuczanski/IBWC Public Affairs Officer)

## Citizens Forum meetings along the border

The USIBWC has Citizens Forum meetings convened by five of our Field Offices: San Diego, CA (USIBWC Citizens Forum); Nogales, AZ (Southeast Arizona Citizens Forum); Yuma, AZ (Colorado River Citizens Forum); El Paso, TX (Rio Grande Citizens Forum); and Mercedes, TX (Lower Rio Grande Citizens Forum).

The Citizens Forum meetings are intended to bring together community members enabling the early and continued two-way flow of information, concerns, values, and needs between the USIBWC and the general public, environmentalists, government agencies, municipalities, and other interested parties.

The meetings are held quarterly, and topics vary on USIBWC projects, information on treaties, flood control projects, salinity projects, and more.

Board Members are appointed to serve a two-year term. For more information on USIBWC Board Members, read the press releases here:

USIBWC (San Diego) [https://www.ibwc.gov/Files/Press\\_Release\\_021518.pdf](https://www.ibwc.gov/Files/Press_Release_021518.pdf)

SEAZ: [https://www.ibwc.gov/Files/Press\\_Release\\_030618.pdf](https://www.ibwc.gov/Files/Press_Release_030618.pdf)

Colorado River: [https://www.ibwc.gov/Files/Press\\_Release\\_071118.pdf](https://www.ibwc.gov/Files/Press_Release_071118.pdf)

Rio Grande: [https://www.ibwc.gov/Files/Press\\_Release\\_062818.pdf](https://www.ibwc.gov/Files/Press_Release_062818.pdf)

Lower Rio Grande: [https://www.ibwc.gov/Files/Press\\_Release\\_042518.pdf](https://www.ibwc.gov/Files/Press_Release_042518.pdf)



The Southeast Arizona 2018-2020 Citizens Forum Board Members were seated in March 2018 for a two-year term.  
Courtesy photo