



THE BOUNDARY MARKER



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USIBWC AWARDS \$220 MILLION IN RECOVERY ACT PROJECTS

The United States Section of the International Boundary and Water Commission (USIBWC) has awarded \$220 million in projects funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act), accounting for 100% of Recovery Act funds appropriated to the agency. The funding is being used to construct improvements for 237 miles of aging Rio Grande flood control levees in Texas and New Mexico.

“The USIBWC has worked diligently since last year to award Recovery Act contracts so that we can meet our goals of stimulating the economy and improving our Rio Grande flood control infrastructure,” said U.S. Commissioner Edward Drusina. “I am very proud of the agency’s work on Recovery Act projects and I know the communities where we are spending Recovery Act funds will enjoy the benefits of improved flood protection for decades to come.”

Of the \$220 million in projects, the USIBWC has already paid out over \$90 million. Over 800 jobs have already been preserved or created – a number that will increase significantly as levee construction continues to expand based on the contracts already awarded.

The USIBWC awarded its final few Recovery Act contracts on September 24, six days in advance of the deadline established by law. Some of the Recovery Act levee construction in the Lower Rio Grande Valley of Texas has already been completed, ensuring that the levees there were in their best condition in years when flooding occurred over the summer. No major

structural problems were identified with the levees despite the highest flood flows in decades.

USIBWC’s Recovery Act funding is being used for projects in El Paso, Hudspeth, Presidio, Hidalgo, Cameron, and Willacy Counties in Texas and in Doña Ana County, New Mexico. In addition to funding levee construction, the Recovery Act is paying for design of an additional 69 miles of

levee improvements that will be constructed with future appropriations.

The purpose of the Recovery Act is to create and preserve jobs, promote economic recovery, and invest in infrastructure that will provide long-term economic benefits. Additional information about USIBWC Recovery Act projects is available at: <http://www.ibwc.gov/Recovery/Index.html>



Pouring concrete for the new floodwall at Ft. Hancock, Texas.



COOPERATION KEY IN FIXING NOGALES SEWER BREAK

The U.S. Section of the International Boundary and Water Commission (USIBWC) worked round-the-clock with local, state, federal, and Mexican partners to repair a ruptured sewer line at the border at Nogales, Arizona-Nogales, Sonora in October and November.

The leak was discovered on October 11 near the Morley pedestrian port of entry in

Nogales, Arizona by a Border Patrol agent who observed a small hole in the pavement filled with sewage. The City of Nogales, Arizona provided immediate response and determined that there was a leak in the International Outfall Interceptor (IOI), the 24-inch diameter pipe that conveys sewage from the border to the Nogales International Wastewater Treatment

Plant nine miles north. Because of the complexity and international nature of the problem, the USIBWC was called in.

Initially, engineers thought there was a break in the sewer pipe just south of the border in Mexico but later discovered a large hole in the IOI in the United States where the bottom of the pipe had failed along a length of 20 feet. This fiberglass segment of the IOI, installed in 1969 in the United States, had deteriorated over time due to the high velocities, turbulence, and debris, such as rocks, being carried through it.

USIBWC staff from Nogales and El Paso worked with the local officials in both countries,

the Arizona Department of Environmental Quality, the U.S. Department of Homeland Security, and contractor KE&G to fix the problem. They installed a bypass pumping and piping system around the faulty segment of the IOI so that the repairs could be made, a process that required a section of the border fence to be temporarily removed.



A manhole ring is lifted over the border fence for repairs in Mexico.

To complete the job, a new ductile iron pipe was used to repair the breach in the United States, and a slip pipe or liner was installed by the U.S. contractor in a segment along both sides of the international boundary. The slip line will protect Mexico's existing pipe and add a much longer service life to the new ductile pipe installed in the United States.

Much of the work was

done in the middle of the night when sewage flows were at a minimum.

Repair of the IOI was completed on October 30 but related work on pavement and a stairwell was still pending completion.

Although the City of Nogales, Arizona agreed decades ago to undertake responsibility for operation and maintenance of the IOI, which carries both U.S. and Mexican sewage, the USIBWC continues to partner with stakeholders to address issues associated with the IOI. The USIBWC is working with our partners to help identify the means for complete rehabilitation or replacement of the IOI.



RIO GRANDE RETURNS TO NORMAL AFTER MONTHS OF FLOODING

The International Boundary and Water Commission's (IBWC) Rio Grande flood operations ended in November after four months of the worst flooding in decades. Flood conditions were experienced from near Amistad Dam at Del Rio, Texas-Ciudad Acuña, Coahuila downstream some 600 miles to the Gulf of Mexico.

In the affected area, the U.S. Section of the Commission maintains flood control levees along 180 river miles in the Lower Rio Grande Valley. Thanks in part to recent improvements (*see article page 1*), the levees held up well, ensuring that adjacent communities were protected from Rio Grande floodwaters. Likewise, proper operation of Commission dams greatly mitigated downstream flooding.

Flooding was triggered after Hurricane Alex came ashore June 30 about 80 miles south of the U.S.-Mexico border, causing heavy rainfall throughout the Rio Grande basin. Eight days later, Tropical Depression #2 blew in on a similar course, bringing even more precipitation to already-saturated areas, some of which received more than 20 inches of rain. Much of the impact was on Mexican tributaries that feed the Rio Grande.

On July 5, continued high inflow and rising reservoir levels forced the Commission to make flood releases from Amistad Dam. Two days later, flood operations began at the IBWC's Falcon Dam, located at Falcon Heights, Texas-Nueva Ciudad Guerrero, Tamaulipas.

As floodwaters moved downstream, the Commission also initiated flood operations at its two diversion dams in the Lower Rio Grande Valley – Anzalduas and Retamal – to divert floodwaters off the main channel of the Rio Grande into interior floodways of the United States and Mexico. By diverting water into the floodways, the Commission was able to limit flood flows downstream on the Rio Grande through Brownsville, Texas-Matamoros, Tamaulipas.

By mid-August, conditions throughout the basin had improved and the IBWC cut back its release of floodwaters from Amistad and Falcon Dams, not realizing that Mother Nature still had

more in store for waterlogged residents.

Heavy precipitation continued in late summer, forcing the Commission to again go into flood operations at the dams in September. Finally, by the second half of October, the Commission was able to taper off its flood operations, returning to normal releases at Amistad Dam on October 28 and at Falcon Dam on November 5.

During the course of the 2010 flood, Falcon Reservoir reached a record elevation, floodwaters were diverted to the U.S. interior floodway for the first time since 1988, and Rio Grande flow at Rio Grande City was the highest since Hurricane Beulah in 1967. The 2010 flood demonstrated just how vital the Commission's flood control infrastructure and personnel are for protecting lives and property.



Levees protected the USIBWC's Mercedes Field Office (center) and many other properties.

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