



# **Collaboration on Nogales Sanitation: History and Recent Settlement SE Arizona Citizens Forum**

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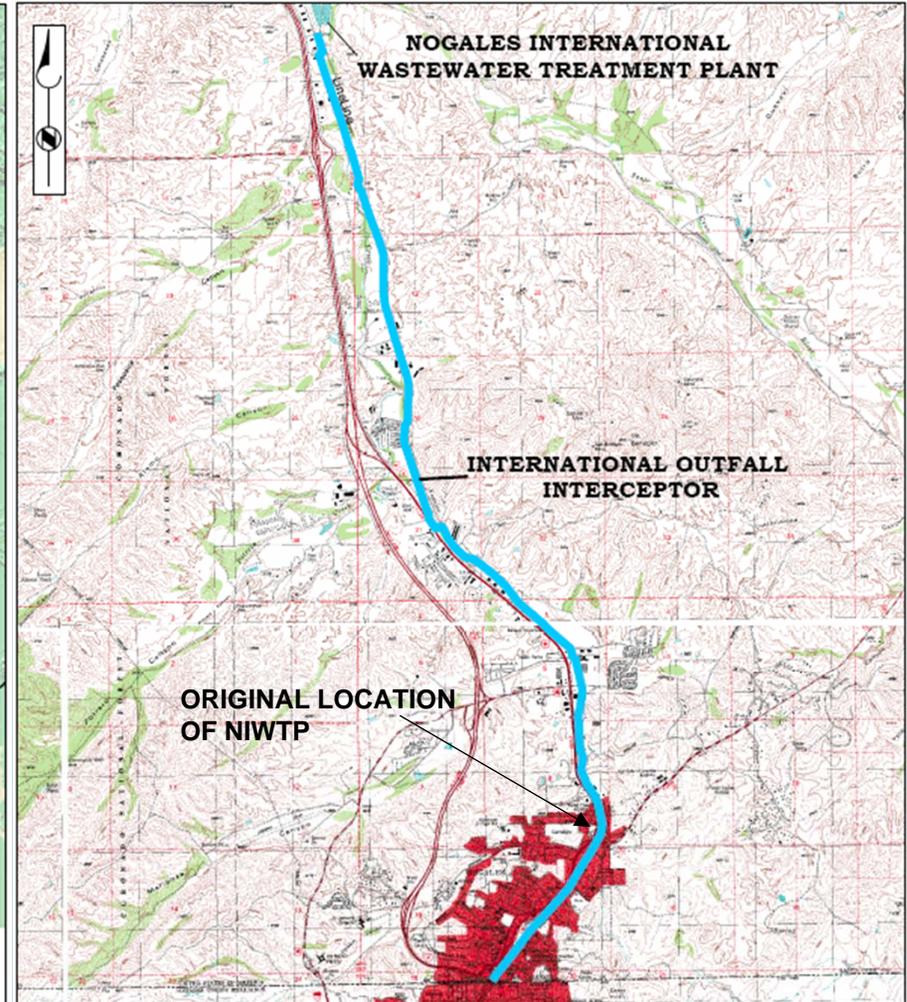
**International Boundary and Water Commission**

United States Section

Legal Affairs Office

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# Project Area and Sewerline Alignment





# USIBWC

- U.S. Section of an International Commission, the IBWC, attained its present organization in a 1944 treaty titled *Utilization of Water of the Colorado and Tijuana Rivers and of the Rio Grande*. We work in conjunction with the Mexican Section of the Commission to implement certain treaties between the U.S. and Mexico.
- Treaty Protocol states:
  - “ The works to be constructed or used on or along the boundary, and those to be constructed or used exclusively for the discharge of treaty stipulation, shall be under the jurisdiction of the Commission or of the respective Section, in accordance with the provisions of the Treaty.”

# Additional Authorities for Nogales Border Sanitation Issues



- Department of State, Justice, Commerce and the Judiciary Appropriation Act for 1947, P.L. 490, 60 stat. 454 (July 5, 1946) adopting requirements in Act of July 2, 1942, 56 stat. 477 (authorizing and appropriating fund for the Nogales International Sanitation Project).
- Act of July 27, 1953, Pub. L. 150, 69 Stat. 195, *codified at* 22 U.S.C. §§ 277d 10 – 11 (authorizing USIBWC to negotiate with Mexico the operation and maintenance of the sanitation project)
- Minutes No. 206 – “Joint Operation and Maintenance of the Nogales International Sanitation Project” dated January 13, 1958.
- Minutes No. 227 – Enlargement of the International Facilities for the treatment of Nogales, Arizona and Nogales, Sonora sewage dated September 5, 1967.
- Minutes No. 276 – Conveyance, treatment and disposal of sewage from Nogales, Arizona and Nogales, Sonora exceeding the capacities allotted to the United States and Mexico at the Nogales International sewage treatment plant, under Minute No. 227. dated on July 26, 1988.
- “Joint report of the Principal Engineers on the Rehabilitation of the International Trunkline and International Outfall Interceptor (IOI) in Nogales, Arizona” dated December 19, 2019.

# Nogales International Sanitation Project (NIWTP)



## A Collaborative Joint Endeavor:

- Study initiated in 1943; construction authorized in a 1947 Appropriations Act
- Project built in 1951
- Congressional limitations on federal participation:
  - The City agrees to furnish lands or easements free of cost;
  - The City agrees to take over operation and maintenance;
  - The City agrees to relieve the U.S. Government of all liability for the Project arising from... failure to operate and maintain the Project.
- City takes over operation and maintenance of the Project in 1952.



# Joint Contributions to O & M

- In 1953, the City approached Government for help operating the project.
- Congress authorized USIBWC to:

enter into an agreement with the Mexico for the operation and maintenance by the IBWC of the Nogales sanitation project previously constructed by the said Commission, which agreement shall contain such provisions relating to a division between the two Governments of the costs of such operation and maintenance, or of the work involved therein, as may be recommended by said Commission and approved by the Government of Mexico and by the Secretary of State on behalf of the Government of the United States:

*Provided*, That no such agreement shall be entered into until the governing body of the city of Nogales, Arizona, has given assurances satisfactory to the Secretary of State that it will, so long as such agreement remains in force, contribute an equitable proportion, as determined by the United States section of said Commission, subject to the approval of the Secretary of State, of the costs of such operation and maintenance allocated to the United States

# 1965 Relocation of NIWTP

- Due to the population increasing over the years, the contributions of wastewater exceeded the original capacity of the NIWTP
- The City requested that the USIBWC negotiate an agreement for enlarging the capacity of the Nogales International Sanitation Project; and
- Requested that the treatment plant be relocated from its present site to a site north of the City
- The US and Mexico governments approved the expansion and relocation of the NIWTP under Minute 227's cost share
- Mexico's cost share included payment to expand the plant as if it was built at the original site

# 1972 International Project



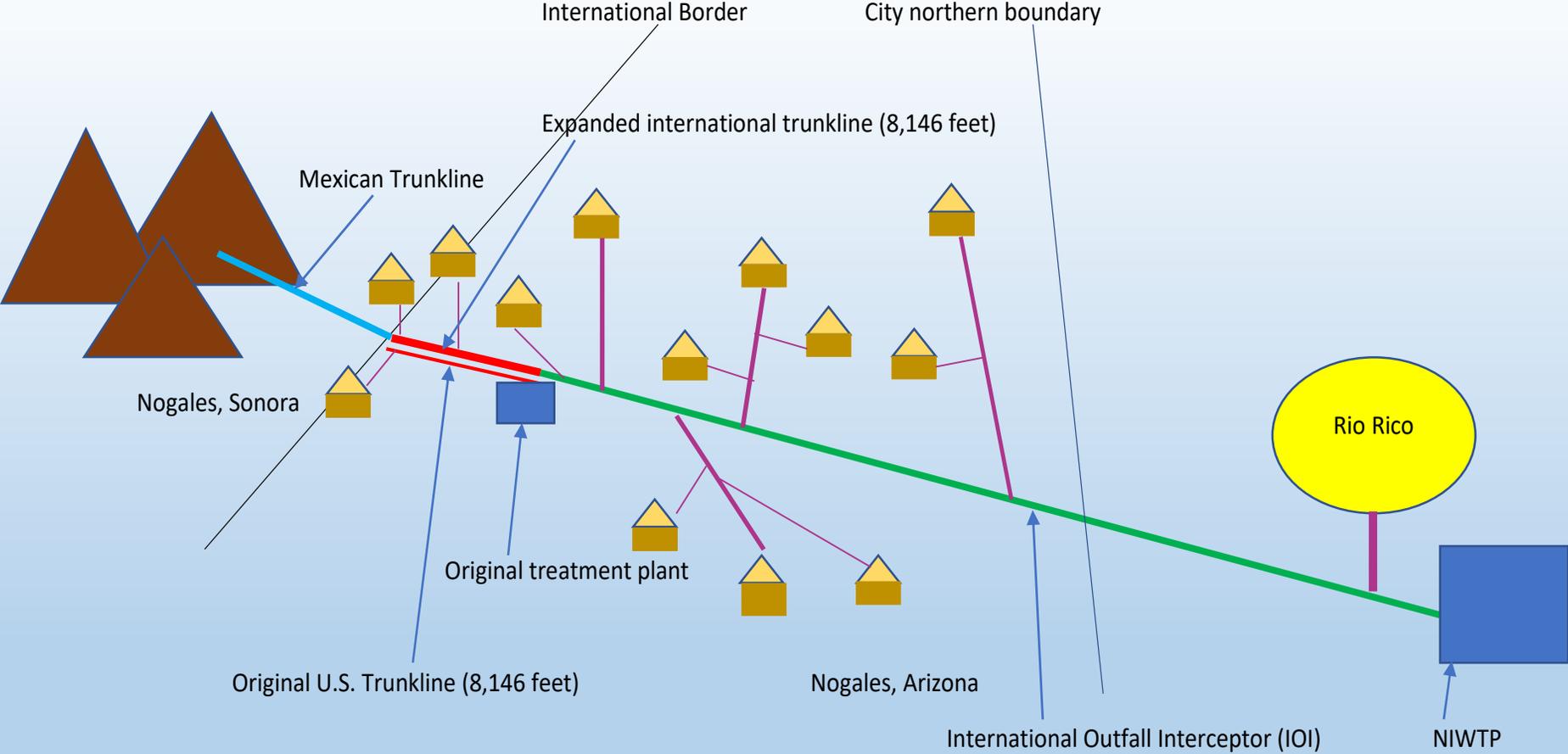
Wastewater Treatment Plant. View toward northeast. March 20, 1972

# International Project



- Minute 227 budget shared by Mexico only included enlarging 8,146 feet of U.S. Trunkline; Mexico did not agree to share construction costs for IOI.
- Minute 227 also states that Mexico does not have any responsibility for the operation and maintenance costs of the “section of sewer line from the existing plant to the site of the new enlarged plant” if it is moved North.
- Plant was expanded with completion in 1972.
- Expansion and 1.54 miles of pipeline cost \$2,338,000 (MX \$887,800, US \$659,200; City \$791,000 plus 144 acres
- Plant was upgraded and expanded again in 1990 to a capacity of 17.2 mgd. City paid for 45% and USIBWC paid for 55%
- Further technological treatment improvements made as well as a plant capacity reduction to 14.74 mgd were completed in 2009. City paid \$513,041, \$59.2 M EPA federal grants; USIBWC \$2,052,162
- Mexico’s allotted capacity in the NIWTP was set at 9.9 mgd under Minute 276

# Overview of Components





# IOI ISSUES

- Lack of system maintenance, increasing demand of wastewater management from Amos Nogales, and the proximity of the infrastructure's service life, the Trunkline and IOI require rehabilitation.
- Assessment report prepared by Brown and Caldwell in 2005 noted that the IOI had lost approximately half of its thickness due to erosion and numerous cracks had developed through its length; they also noted that the lifetime of the pipeline was 50 years, and it is almost 50 years old now (1971)
- Repairs to the IOI have been paid for by USIBWC in 2008, 2010, 2013, 2015, 2017, roughly \$5M has been spent on emergency repairs
- In 2010 Congress appropriated \$750,000 to rehabilitated the deteriorated IOI; annual appropriations have continued

# ADEQ v. USIBWC



- ADEQ filed an Amended Complaint styled as *State of Arizona, ex rel. Henry R. Darwin, Director, Arizona Department of Environmental Quality v. International Boundary and Water Commission, United States Section, et alon* May 28, against USIBWC, pursuant to A.R.S. § 49-262 and section 505(a)(1) of the Clean Water Act (“CWA”), 33 U.S.C. § 1365(a)(1);
- Alleged that USIBWC’s operation of the NIWTP violated certain conditions of AZPDES Permit No. AZ0025607 and Compliance Order No. P-73-10 (11/22/10)
- Alleged that USIBWC made unpermitted discharges from the IOI in violation of A.R.S. § 49-255.01 and CWA section 301, 33 U.S.C. § 1311

# Settlement Agreement



- On June 23, 2020, the parties executed a Memorandum of Agreement (MOA) and agreement to dismiss the legal action
- USIBWC will oversee the rehabilitation of the IOI pursuant to the terms of the MOA
- USIBWC will provide to ADEQ written notice, with a copy of this Agreement and the MOA, when USIBWC has completed the repairs detailed in the Technical Specifications whereupon Arizona will release USIBWC from all civil liability

# Memorandum of Agreement



- The Trunkline and International Outfall Interceptor (collectively, the “IOI”) is the sewer pipeline located in Nogales, Arizona, that extends roughly nine miles from the United States-Mexico international boundary line to the Nogales International Wastewater Treatment Plant (NIWTP) and carries approximately 15 million gallons of sewage each day to the NIWTP.
- USIBWC, in consultation with ADEQ, has developed plans and specifications for a rehabilitation of the IOI
- Congress has appropriated \$34.2 million to USIBWC to pay for a portion of the cost of rehabilitation of the IOI



# Memorandum of Agreement

- Congressional appropriations were provided with the understanding that there would be a non-USIBWC match (State/Private Foundation/EPA) cost-share in the rehabilitation project.
- ADEQ obtained commitments from other sources, including State or Local governments, Federal programs, or private individuals and entities, to provide the non-USIBWC matching funds in the amount of \$4.59 million; \$1M from Freeport McMoRan Foundation and \$2.59 from ADEQ
- Non-USIBWC matching funds means funds other than those appropriated by Congress to USIBWC, including funds from State or Local governments, Federal programs, or private individuals and entities, and in-kind contributions. “In-kind contributions” means measures that further the work outlined in the Technical Specifications; providing or securing portions of financial assistance for emergency repairs, wash repairs, and lateral repairs; and other mutually agreed-upon items

# Memorandum of Agreement



## Future Funding:

- Parties understand that the cost of the IOI rehabilitation outlined in the Technical Specifications may exceed the funds currently appropriated by Congress for that purpose plus the \$4.59 million in non-USIBWC matching funds.
- USIBWC anticipates recommending through the appropriate administrative channels that additional funding be sought from Congress to complete repairs detailed in the Technical Specifications.
- neither party admits or assumes liability for the costs and expenses of additional phases, nor portions thereof, that are necessary to complete the repairs detailed in the Technical Specifications in the event that Congress does not appropriate additional funding to complete necessary repairs to the IOI
- neither party admits or assumes responsibility for ongoing operations and maintenance work (as distinguished from repair work) on the IOI. This agreement is not intended to be used as evidence of responsibility or liability for the IOI



# Memorandum of Agreement

## Construction Activities:

- USIBWC will contract for, manage and complete the rehabilitation work and construction activities
- Completion of work depends on cooperation of the City of Nogales and the County of Santa Cruz to:
  - Allow use of rights of way for repairs to IOI
  - Provide traffic control
  - Expedite IOI-related permits
  - Remove seven City-owned laterals that tie into IOI and re-rout them to manholes as needed during repairs
- Parties agree to **work together to plan and implement additional protective measures** for those section of the IOI that are most vulnerable to damage from stormwater and debris.

# Memorandum of Agreement



- Future Discussions Regarding Effluent
- USIBWC agreed to request that Mexico enter negotiations with the goal of creating a new Minute to the 1944 Treaty to assure that sewage inflows from Nogales, Sonora will continue, and the resulting treated effluent will continue being discharged from the international plant to the Santa Cruz River.
- USIBWC committed, subject to Mexico's agreement, to allow the Arizona Department of Water Resources to participate in such negotiations. This commitment does not extend to local government entities.
- ADEQ agreed to discuss with USIBWC the potential value of the Mexican effluent for purposes for groundwater recharge



# Mexico's Share of Repair of Trunkline

- Due to the deteriorated condition of the Trunkline, the Principal Engineers signed a Joint Report in December 2019 specifying Mexico's cost share of \$1.361 million US dollars for the Trunkline. Minute 325 is in development, and hopefully if signed in the near future, then the Mexican Section hopes it could obtain its share of funds in 2021, the year when the U.S. Section expects to construct Phase 2.
- Arizona Department of Environmental Quality is making efforts to obtain funding to install metal screens in the IOI that would intercept drug bundles and large debris, that could otherwise cause sewage spills, at a cost of \$2.6-\$3.3M, \$360,000 for maintenance per year

# USIBWC's Emergency Authority



**USIBWC has continued to make expenditures for flood fighting, rescue operations, repairs or restoration of flood control or sanitation works threatened or destroyed by floodwaters of Rio Grande, Colorado, or Tijuana Rivers. This authority is for limited emergency situations only.**

On and after June 20, 1956, in addition to the funds available under the appropriation “Rio Grande emergency flood protection”, the United States Commissioner is authorized to expend from any appropriation available to the International Boundary and Water Commission, United States and Mexico, American Section, such sums as may be necessary for prosecution of emergency flood fighting and rescue operations, repairs or restoration of any flood control or sanitation works threatened or destroyed by floodwaters of the Rio Grande, the Colorado or Tijuana Rivers, or other streams running across or near the boundary ...



## 2007-2008 Flood Damage

- 2007 flood damaged a 150-ft. long segment of the open channel in the U.S. where the IOI is located; emergency repairs undertaken to prevent catastrophic failure of the IOI
- USIBWC and Army Corps of Engineers repaired 2007 damage in May/June 2008; USIBWC spent \$496,266 on repairs
- July 6, 2008 storm dislodged a panel in the Wash downstream from the newly-repaired segment; USIBWC assisted City of Nogales with repairs
- July 12, 2008 Storm
- Major flooding in downtown Ambos Nogales
- Portion of the Nogales Wash tunnel in Mexico collapsed, exacerbating flooding
- August 12, 2008 Storm caused similar damage
- Obstructions in the tunnel (border security wall and Mexican sewage pipes) contributed to flooding

# 2007 Flood



# 2007 Flood







# USIBWC Expenditures on IOI

## Contracts for International Outfall Interceptor (IOI) in Nogales, Arizona from FY 2008 to FY 2017

### Rehabilitation Contracts to the International Outfall Interceptor (IOI) in Nogales, Arizona

Contract No.	Appn.	Vendor Name	Contract Description	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	Total
IBM08A0016	Construction	U.S. COE	Nogales Wash repair	\$496,266.44										\$496,266.44
IBM14T0007	Construction	URS Group	Design services for the Rehabilitation of the International Outfall Interceptor (IOI) in Nogales, Arizona							\$638,722.00	\$53,202.00	\$75,007.00	\$7,000.00	\$773,931.00
Total by Fiscal Year with Construction appropriation				\$496,266.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$638,722.00	\$53,202.00	\$75,007.00	\$7,000.00	\$1,270,197.44
Total amount spent on Rehabilitation of the Nogales IOI				\$496,266.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$638,722.00	\$53,202.00	\$75,007.00	\$7,000.00	\$1,270,197.44

### Emergency Repairs Contracts to the International Outfall Interceptor (IOI) in Nogales, Arizona

Contract No.	Appn.	Vendor Name	Contract Description	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Total
IBM11C0002	Construction	K E & G Construction	Emergency repairs of the Nogales IOI: Increase contract for groundwater treatment, Dowels treatment, and Curb, Additional Electric Work, and Upper stairwell door replacement				\$1,440,120.36							\$1,440,120.36
IBM17C0003	Construction	K E & G Construction	Time and Materials SOW Emergency rehabilitation/replacement of IOI Manhole 89										\$2,070,000.00	\$2,070,000.00
Total by Fiscal Year with Construction appropriation				\$0.00	\$0.00	\$0.00	\$1,440,120.36	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,070,000.00	\$3,510,120.36
IBM13C0005	S&E	Abide International	Furnish all labor, materials, and equipment for the construction of the International Outfall Interceptor (IOI) Rehabilitation at Nogales, Santa Cruz County, AZ						\$959,342.58	\$60,340.21				\$1,019,682.79
93092041093	S&E	City of Nogales	Reimburse the City of Nogales, AZ, for the repairs made by their in-house crews to the floor of the Grand Tunnel. Reimbursement is for materials only.		\$4,005.09									\$4,005.09
93092041100	S&E	City of Nogales	Reimburse the City of Nogales, AZ, for the tie-in made by their in-house crews to the abandon International Outfall Interceptor. Reimbursement is for materials and contract work only.		\$3,697.74									\$3,697.74
FY10Nogales_IOI	S&E	City of Nogales	Cost of materials, equipment, and labor used by the construction company "A.G.E. Construction" for the rehabilitation and shoring of Manhole #46.			\$86,347.68								\$86,347.68
IBM15C0001	S&E	Abide International	Furnish all labor, materials, equipment and incidentals necessary to complete the emergency repair in accordance with the revised SOW 1/22/15								\$674,282.00			\$674,282.00
Total by Fiscal Year with S&E appropriation				\$0.00	\$7,702.83	\$86,347.68	\$0.00	\$0.00	\$959,342.58	\$60,340.21	\$674,282.00	\$0.00	\$0.00	\$1,788,015.30
Total amount spent on Emergency repairs to the Nogales IOI				\$0.00	\$7,702.83	\$86,347.68	\$1,440,120.36	\$0.00	\$959,342.58	\$60,340.21	\$674,282.00	\$0.00	\$2,070,000.00	\$5,298,135.66
Grand Total Amount spent on Nogales IOI from FY08 to FY17				\$496,266.44	\$7,702.83	\$86,347.68	\$1,440,120.36	\$0.00	\$959,342.58	\$699,062.21	\$727,484.00	\$75,007.00	\$2,077,000.00	\$6,568,333.10

# QUESTIONS?

