

International Outfall Interceptor

July 2020



Positive Impacts of Effluent Are Regional



**12M gal/day
(13,442 acre-ft./yr.)**

USGS Study on Ecosystem Services of effluent to border region



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Article

Framing Scenarios of Binational Water Policy with a Tool to Visualize, Quantify and Value Changes in Ecosystem Services

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*Perennial extent is increased
by about 12 miles (depending on the time of year)*

Southwest Willow Flycatcher



Photo Credit: US Fish and Wildlife

Gila-Topminnow



Photo Credit: Nogales International

Provides critical habitat for endangered species, and sustains Audubon-designated Important Bird Area.

THE ECONOMIC IMPACT OF RIVERS, LAKES, AND STREAMS IN SANTA CRUZ COUNTY



\$189 Million

dollars generated annually from recreation on or along rivers, lakes, and streams.



1,600 Jobs

in Santa Cruz County are supported by outdoor recreation on waterways.



65,000

Arizona residents participate in outdoor recreation activities on or along Santa Cruz County's waterways. The top three activities in Santa Cruz County are picnicking or relaxing, wildlife watching, and trail sports.



39,000

enjoy picnicking or relaxing



25,000

enjoy wildlife watching



21,000

enjoy trail sports

What is the Problem?



ADEQ Flow Measurements: July 27, 2017

Upstream flow	: 21.006 cfs
Downstream flow	: 21.977 cfs
Difference attributed to IOI	: 0.971 cfs
“	: 0.6278 MGD
“	: 627,574 gallons per day (+/-8%)

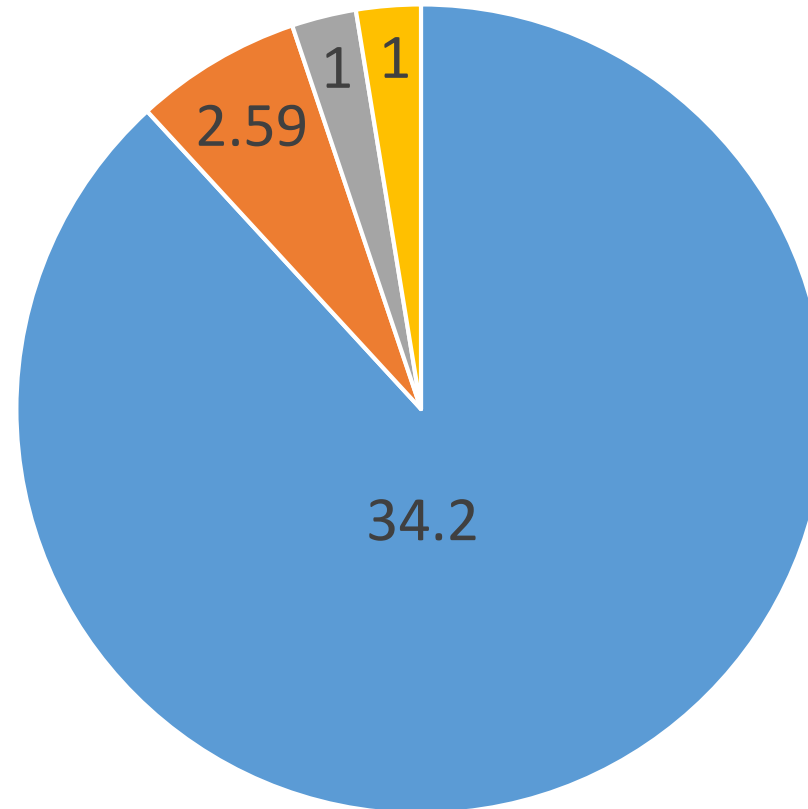
ADEQ sues IBWC for CWA violations due in part to the crumbling IOI infrastructure (2012)

IBWC and ADEQ enter in to settlement discussions (2018)

IBWC and ADEQ reach settlement (2020)



IOI Funding (\$ millions)



■ USIBWC

■ Arizona

■ USEPA

■ Freeport Foundation

Settlement Highlights

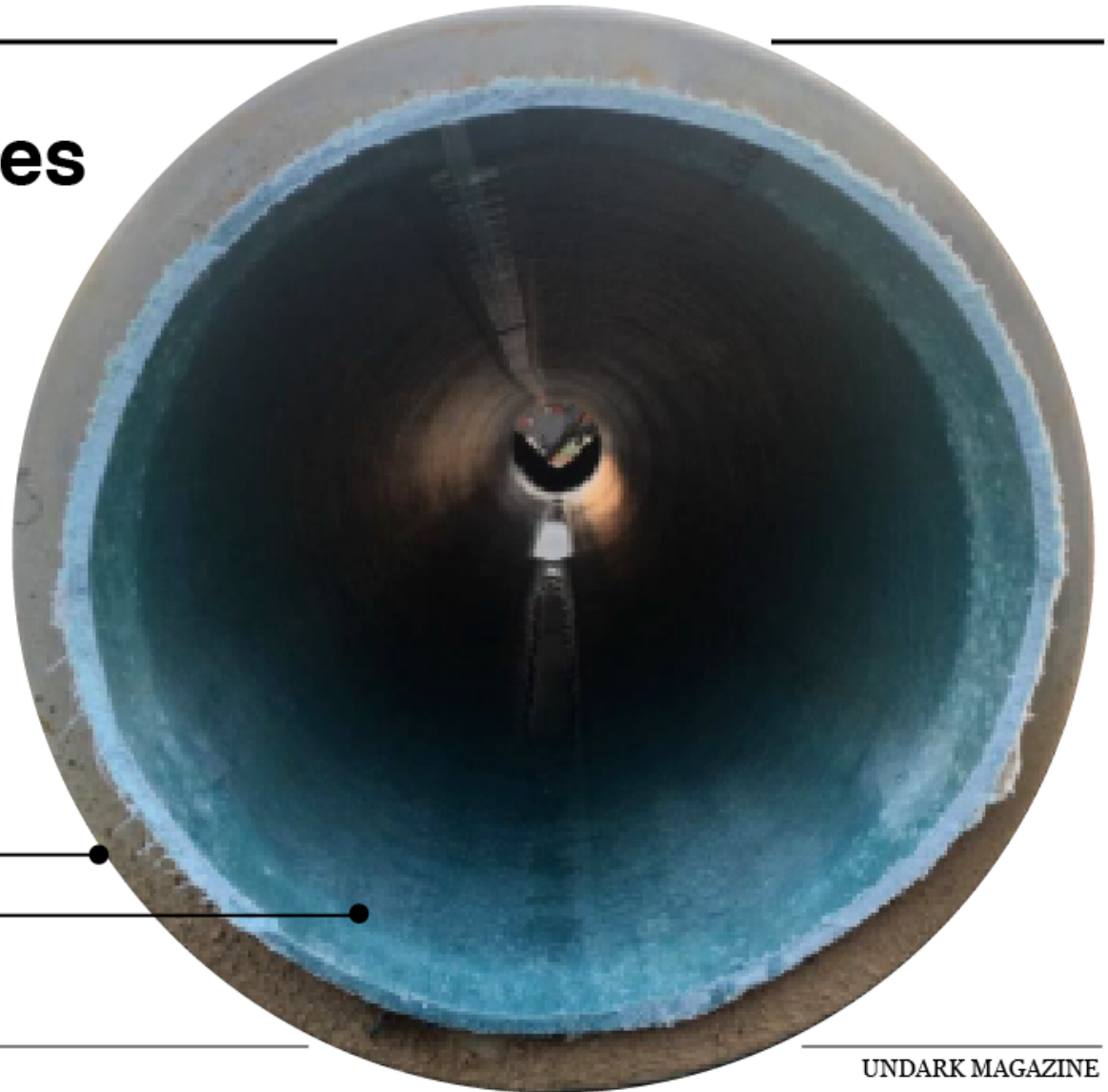
USIBWC Proposed	Settled on
\$21 million plus good faith efforts to secure more	\$34.2 million
Local O&M	Settlement is silent on O&M
22% local match ongoing	\$4.59 million one time (12%)
CIPP solution only	CIPP + reinforcement of vulnerable areas
Dismiss violations without prejudice	Dismiss violations without prejudice
	Agreement to address sustainability of flows

Pipes Inside Pipes

Cured-in-place pipe, also known as CIPP, is one of several conduit repair technologies that are considered “trenchless” — that is, they don’t require that old pipes be dug up and replaced. In CIPP, liners made of felt, fiberglass, or other composite tubes embedded with resin are inserted into the damaged pipes. Hot water or steam hardens, or “cures,” the liner into a plastic conduit.

ORIGINAL CONDUIT

CIPP LINER



Fall 2020 Procurement

- Solicitation Notice
- Evaluate Bids
- Award Contract

Early 2021 Construction Begins

- Phases 1 and 2
- Phase 3, if funding permits
- **2-year timeline for Phases 1-3, completion estimated for early 2023**

2023 Construction Continuation

- Phases 4 and 5 – funding not currently assured
- **2-year timeline for Phases 4-5, completion estimated for 2025**

There is more to do



Above: repairing a saw-cut hole in the IOI.
Right: a metal screen used to catch drugs forms a blockage in the IOI.

A major O&M challenge is that cartels use the IOI to transport drugs. ICE & CBP have been contacted multiple times and claim that they can not assist with in-pipe prevention equipment.



ADEQ is currently working to find funds to install a metal screen near the border. Cost estimate is \$2.6 – \$3.3 million to install and \$360 thousand for yearly maintenance.