CITY OF EL PASO, TEXAS
AGENDA ITEM
DEPARTMENT HEAD'S SUMMARY FORM

AGENDA DATE: July 19, 2022

PUBLIC HEARING DATE: N/A

CONTACT PERSON(S) NAME AND PHONE NUMBER:
Gilbert Trejo, Chief Operations Officer, El Paso Water, (915) 594-4497

DISTRICT(S) AFFECTED: All Districts

STRATEGIC GOAL: Goal 7 – Enhance and sustain El Paso infrastructure network

SUBGOAL: Goal 7.1 - Provide reliable and sustainable water supply and distribution systems and stormwater management

SUBJECT:

Provide an annual report to the city council on the stormwater utility.

BACKGROUND / DISCUSSION:

El Paso Water Chief Operations Officer Gilbert Trejo will provide an annual report on the operations and functions of the stormwater utility, including information on the utility's CIP projects, responses to the 2021 monsoon season, outlook for the 2022 monsoon season, and the utility's collaborations and partnerships.

PRIOR COUNCIL ACTION:

Council received a similar report from El Paso Water in prior years, and it most recently received a similar report in 2021.

AMOUNT AND SOURCE OF FUNDING:

N/A

HAVE ALL AFFECTED DEPARTMENTS BEEN NOTIFIED? _X_ YES ___NO

PRIMARY DEPARTMENT: El Paso Water
SECONDARY DEPARTMENT: N/A

**********REQUIRED AUTHORIZATION**********

DEPARTMENT HEAD:

(If Department Head Summary Form is initiated by Purchasing, client department should sign also)

Revised 04/09/2021

Annual Stormwater Presentation FY 2021 – 2022

July 18, 2022

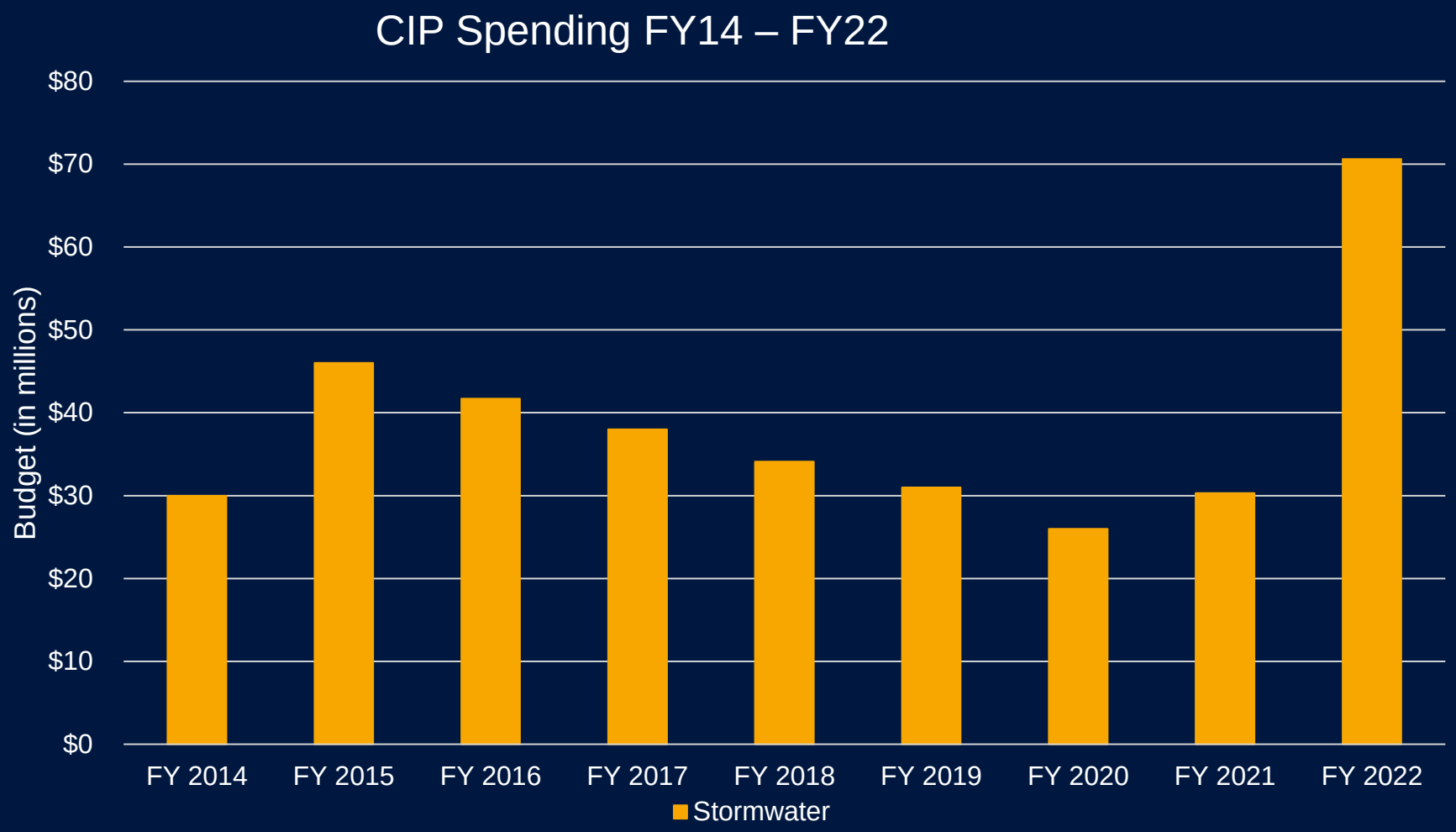
Highlights of Presentation

- History of Stormwater Master Plan
- 2021-22 CIP Projects Completed
- 2021-22 Monsoon Emergency Projects
- Upcoming 2022-2023 Projects
- Outlook for 2022 Monsoon
- Stormwater Utility Operations Report
- Partnerships and Community Engagement
- We welcome your help!

Stormwater Master Plan continues to guide the way

- **Stormwater Utility Creation**: In aftermath of Storm 2006, the El Paso City Council in 2008 created the Stormwater Utility and vested management under the Public Service Board.
- **Stormwater Advisory Committee**: In 2009, EPWater engaged a broad group of stakeholders, including engineering experts and community leaders who participated in a Stormwater Advisory Committee to determine and prioritize the city's stormwater needs.
- **Stormwater Master Plan**: The Stormwater Advisory Committee created the Stormwater Master Plan that identified an initial $650 million in flood control needs.
- **Plan Implementation**: The Plan has guided the stormwater utility's work ever since and more than $240 million invested in stormwater infrastructure. All built projects have worked as designed to reduce flooding.

Stormwater CIP Trend

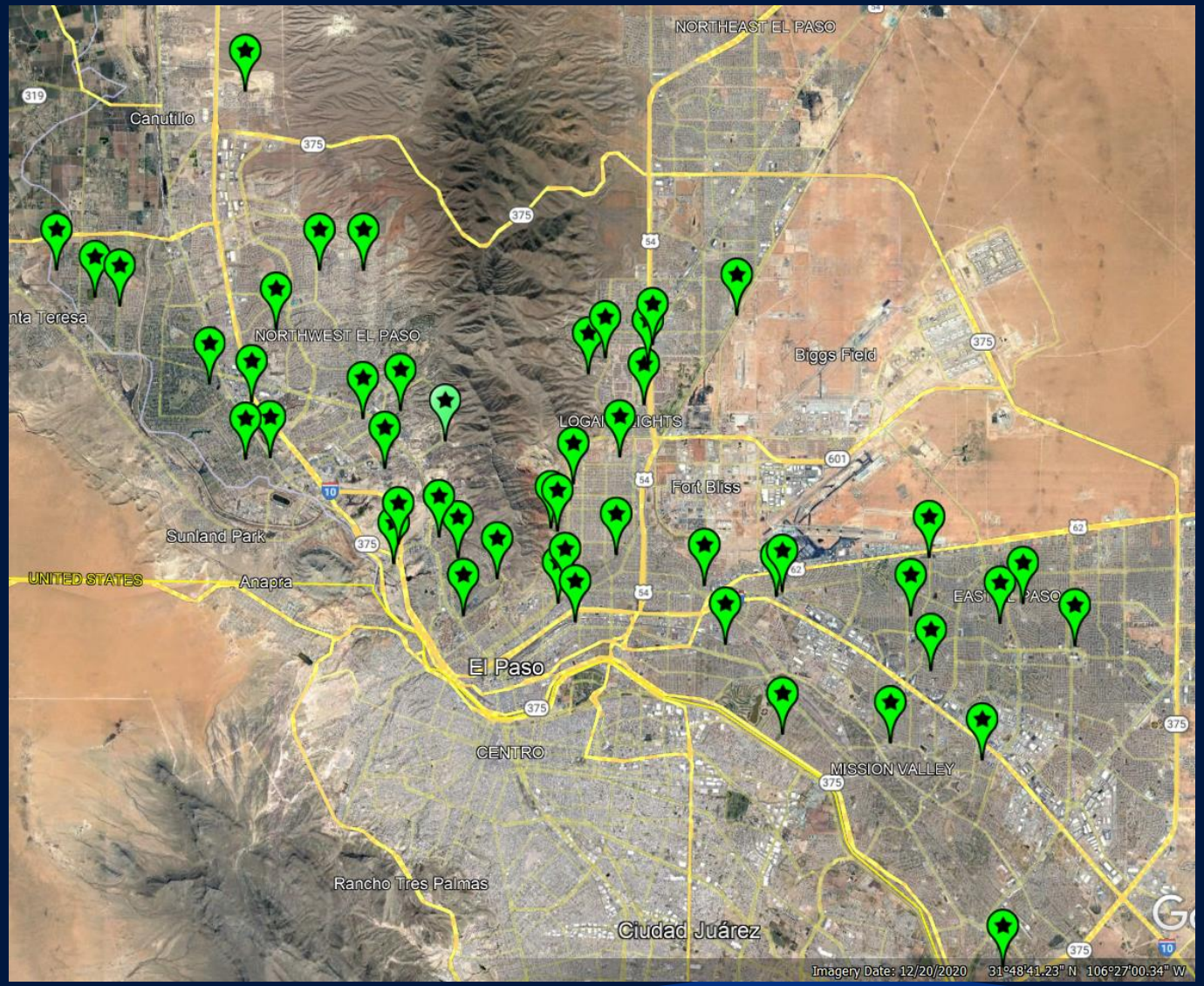


- Large projects were front-loaded to prevent major hazards.
- NADBank *Build America* bond funding helped jump start initial projects.
- CIP budgets subsequently reduced to pay down debt.
- Course correction in FY22 with acceleration of projects based on Council feedback.

FY 2021-2022 CIP Projects

Accomplishments

Projects Completed FY 21-22



Completed

Includes CIP and Monsoon Emergency Projects

2021 CIP Projects Completed

PROJECT	COST
Stevens Alley	$252,000
Sam Snead	$12,228,997
Old Spanish Trail	$809,360
Doniphan & Frontera	$4,163,802
San Lorenzo Pipe Rehabilitation	$1,074,225
Grissom Pipe Rehabilitation	$326,156
Carolina Pipe Rehabilitation	$1,604,178
Samoa & Tahiti Pipe Rehabilitation	$102,096
Nemexas Drain Replacement	$18,601
Borderland Pipe Replacement	$41,648
TOTAL	**$20,621,063**

Sam Snead

District 3

Before

After

Installation of drainage system

Morehead Dam

District 8

Before

After

Doniphan & Frontera Junction Box Rehabilitation Project

District 1

Before

After

Conduit lining seepage control

Old Spanish Trail

District 2

Before

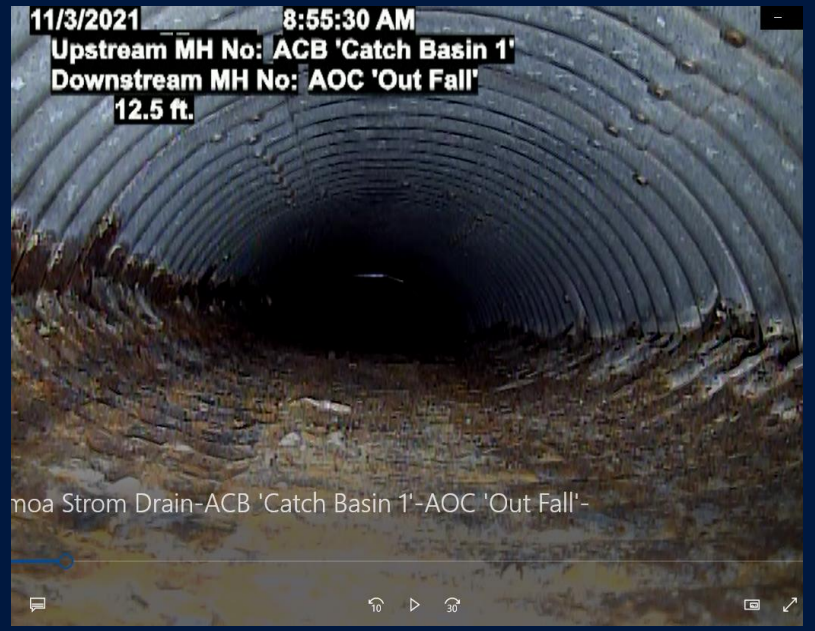
After

Reconstruction of existing spillway

CMP Rehabilitation Projects

Lining and repairs of aged corrugated metal pipe drainage systems

- Grissom Drive
- Carolina Drive
- Samoa and Tahiti



Before

After

Nemexas Drain at Heritage Farms

District 1

Before

After

Crossing Improvements

Borderland Drain Below Gomez Road

District 1

Before

After

Crossing Improvements

FY 2021-2022 Monsoon Recovery

Accomplishments

Rainfall Data (CoCoRaHs)

Location / Date	Maximum Recorded Rainfall	Percentage of Annual Rainfall (8.92”/yr)
Mission (08/15/21)	1.63”	18.3%
East (08/13/21)	2.22”	24.9%
Central (08/13/21)	4.65”	52.1% (within hours)
Northeast (08/13/21)	3.42”	38.3%
West (08/13/21)	2.59”	29.0%

Stormwater Investments Performed Well

- Gateway Ponds – Prevented frequent major flooding on I-10
- Silver Springs Dam – Prevented major stormwater damage to downstream properties
- Fairbanks Sediment Catch Basin – Prevent debris from mountains from damaging streets
- Northeast Channel – Prevented stormwater from inundating northeast neighborhoods

Gateway Ponds

Completed Emergency Response Projects

- Alabama at Harrison
- New York Channel
- Thunderbird Channel
- Bosworth Channel
- Clark Drive at El Paso Drive
- Edgemere and Airway Channel
- San Marcos Desilting
- Silver Springs Channel
- Ojo de Agua Channel
- High Ridge Channel
- Keystone Dam
- Roxbury Drive at Kent Avenue
- Maple Street Inlet
- Deerman Arroyo and West Drain
- Canterbury Crossing
- Upper Memphis Dam
- Mesa Park Arroyo
- Paragon Channel
- Mission Hills Park Inlet
- Lincoln Pond Desilting
- Copia Pond Solar Pumps
- Flow Path 23 at Hickerson Plant

Alabama and Harrison

District 2

Before

After

Concrete sidewalk and slope stabilization

Thunderbird Channel

District 8

Concrete channel reconstruction

Clark Drive at El Paso Drive

District 2

Before

After

Erosion repair

Clark Drive at El Paso Drive

District 2

Before

After

Concrete channel repair

Edgemere and Airway Channel

District 3

Before

After

Channel reconstruction

San Marcos Desilting Basin

District 2

Before

After

Sediment removal and cleanup

Silver Springs Channel - Fiesta to Cadiz Street

District 8

Before

After

Concrete dissipaters reconstruction

Ojo De Agua Channel

District 1

Before

After

Concrete channel reconstruction

High Ridge Channel

District 1

Before

After

Concrete channel repair

Keystone Dam at Osborne Drive

District 1

Before

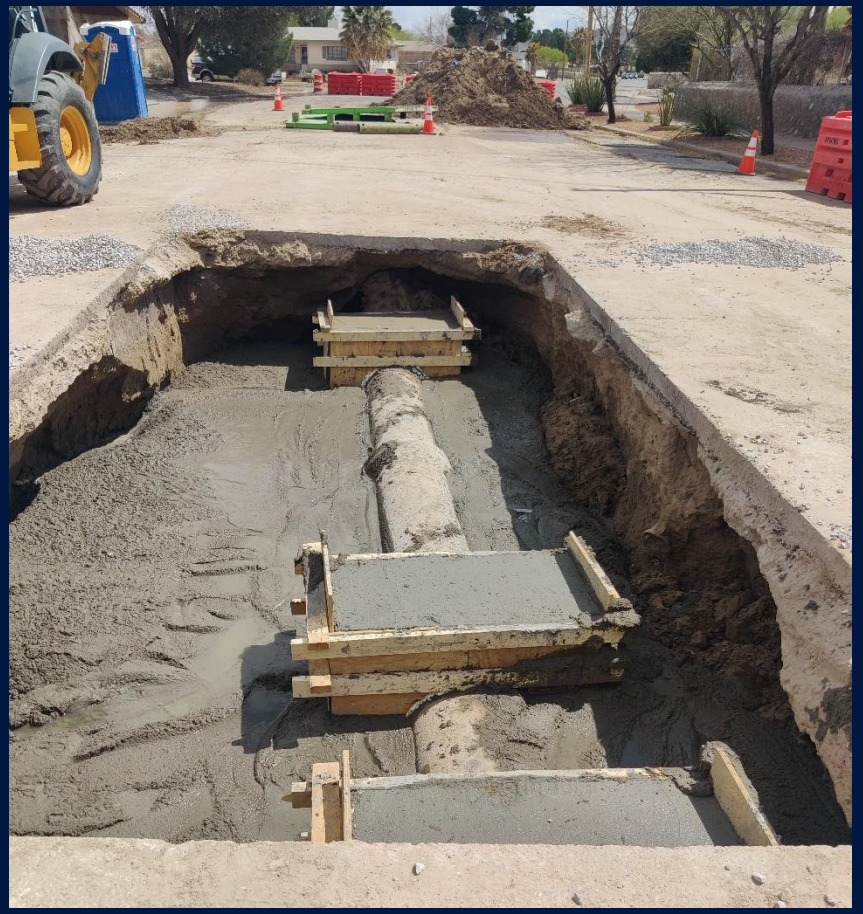
After

Berm reconstruction

Roxbury Drive at Kent Avenue

District 1

Before



After

Conduit Repair

Maple Street Inlet – Grant/Arizona

District 2

Before

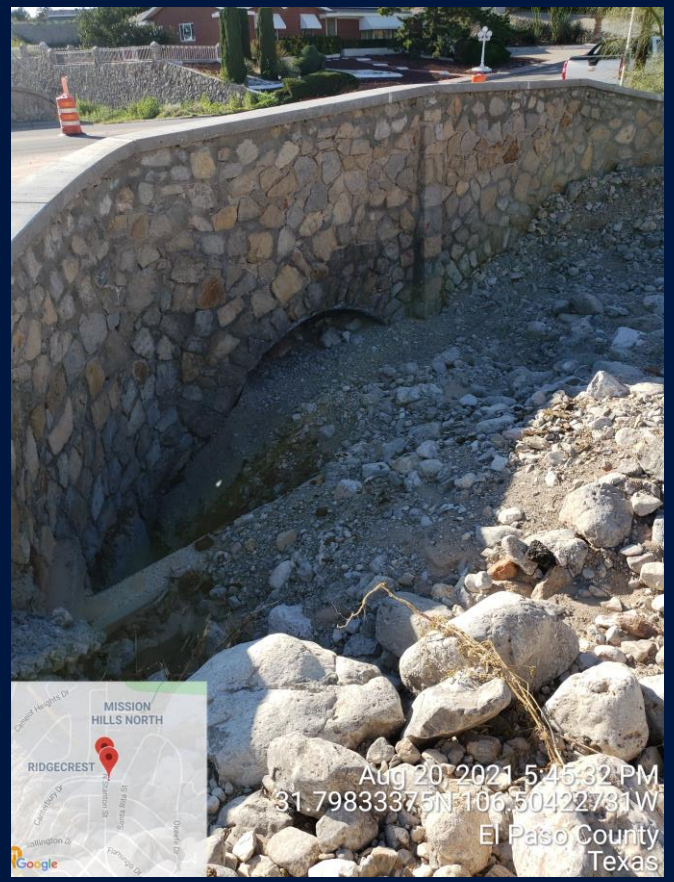
After

Inlet Reconstruction

Canterbury Crossing

District 8

Before



After

Sediment removal and cleanup

Upper Memphis Dam

District 8

Before

After

Sediment and debris removal and slope stabilization

Mesa Park Arroyo

District 8

Before

After

Arroyo stabilization/rehabilitation

Paragon Channel

District 8

Before

After

Sediment removal and cleanup

Copia Pond Solar Pumps

District 2

Before

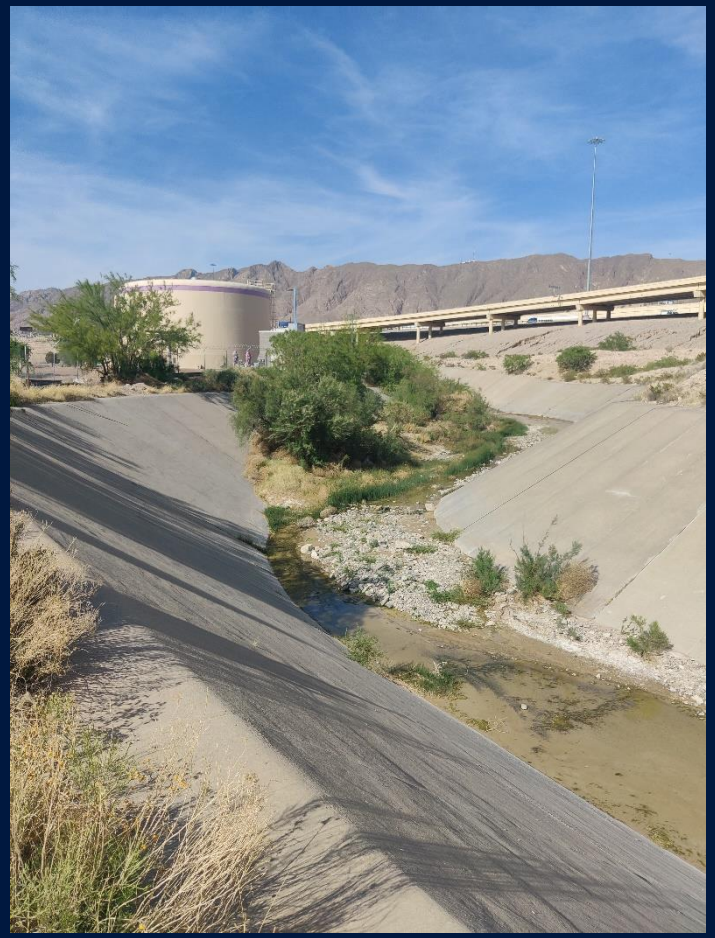
After

Solar Pump Installation to pump out water excess

Flow Path 23 at Hickerson Plant

District 8

Before



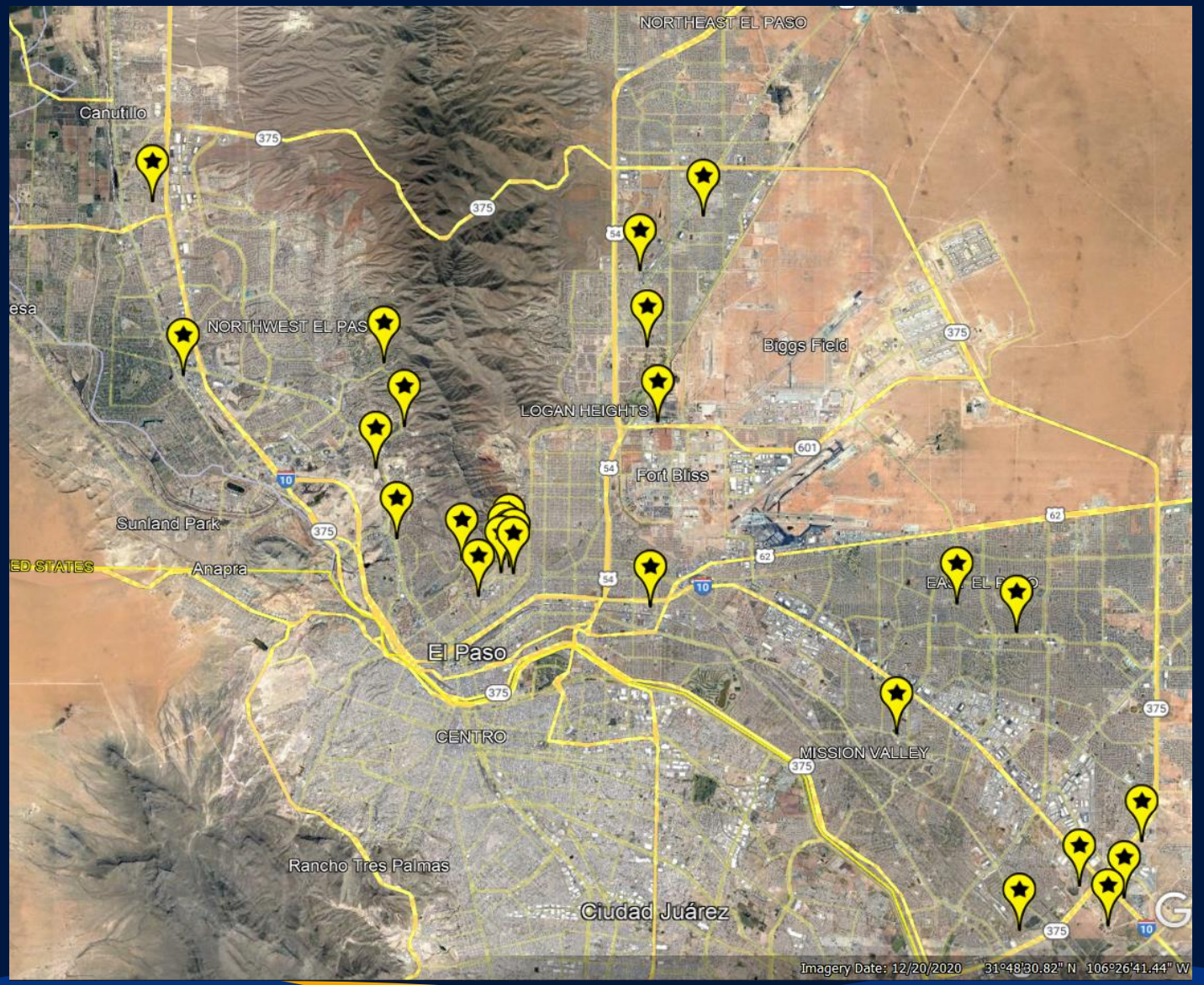
After

Emergency Projects Still Under Construction

- Killarney Pond at Wedgewood
- Lower Memphis Dam
- Morehead Dam
- Van Buren Dam Cleanup
- Fort Bliss Channel Desilting

Upcoming CIP Projects FY 22-23 (Construction)

Citywide Project Locations FY 21-22



Upcoming construction

Upcoming CIP Projects FY 22-23 (Construction)

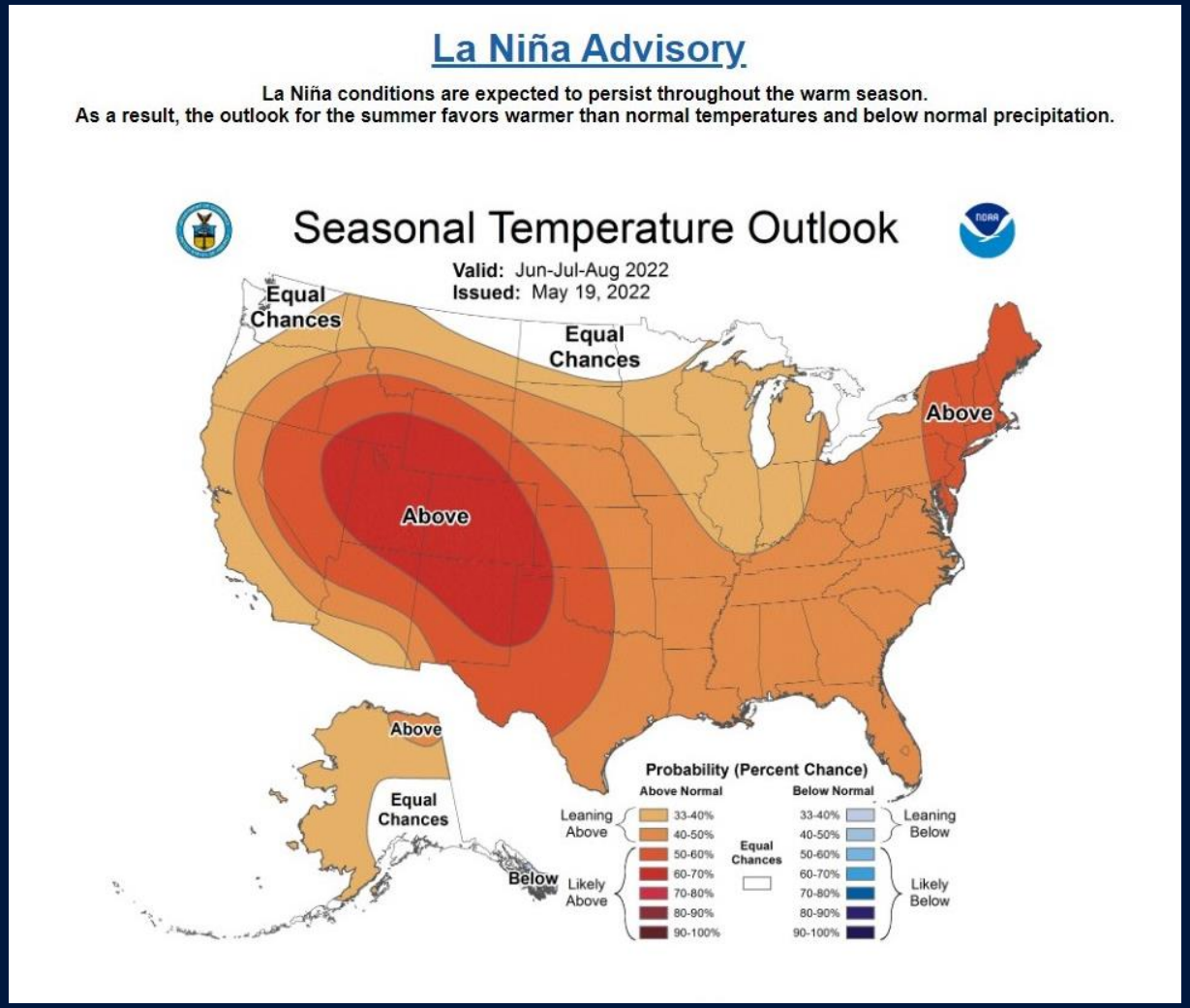
- Fort Bliss Junction Box
- Saint Marks Drainage System
- Animal Services Ponding Area
- Palisades
- Will Ruth
- Arroyo 1
- Murchison Dam #8
- Cliff Dam #10
- Scenic Dam #6
- Denver Dam #9
- San Jose Pond
- Coates Dam improvements
- Grissom & McAffee Phase II Drainage Improvements
- Tremont Dam #7
- Coors Channel Improvements
- Pico Norte Pond Slope Rehabilitation
- Carolina Drive Retention Pond

Projects FY 23-24 (Design)

- Corrugated Metal Pipe (CMP) Replacement Program- Various
- Americas 10 Watershed
- SAC 1 Detention Basin
- SAC 2 Detention Basin
- RV channel Retention Pond
- Flow Path 38 Culvert Crossing at Helen of Troy
- Krupp Drive Drainage Improvements
- White Spur Drain Upstream Expansion
- Feather Lake II Improvements
- Justus Pond
- Hondo Pass Drive Drainage Improvements

Outlook for 2022 Monsoon

- The primary driving factor for the monsoon season will be *El Niño / La Niña* weather patterns
- A weakening *La Niña* is conducive to an active monsoon season
- Increased risk for rainfall events is expected



Stormwater Assets and Operations

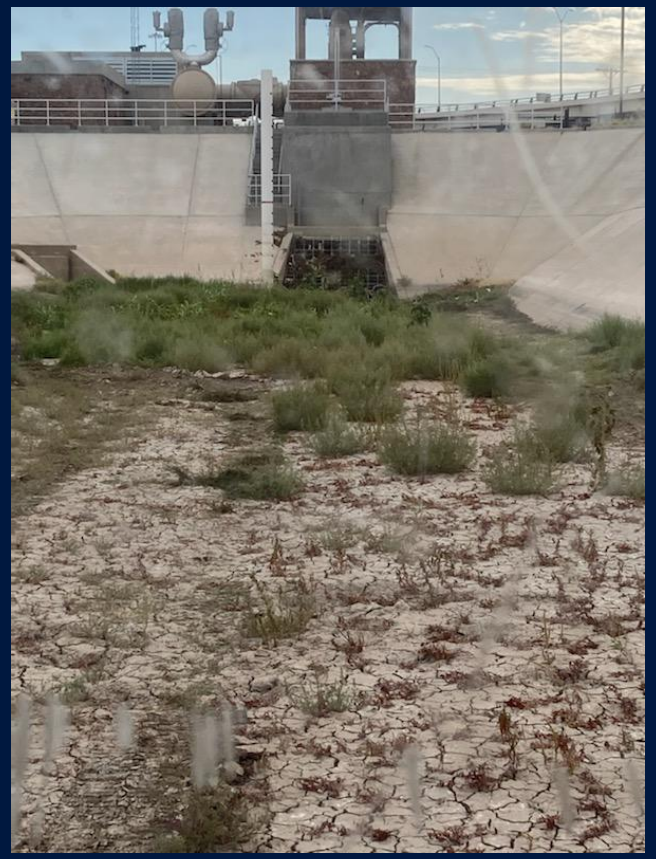
August 2021 to June 2022

	**Ponds**	**425 acres maintained**
	**Channels & Levees**	**22 miles cleaned**
	**Agricultural Drains**	**13 miles maintained**
	**Storm Drains**	**1.0 miles of conduits cleaned**
	**Inlets**	**4,397**
	**Dams**	**420 acres maintained**

Stormwater Operations

Magnolia Pump Station/Basin cleanup

District 8



Before

After

Stormwater Operations

Grant Drainage Easement Cleanup

District 8

Before

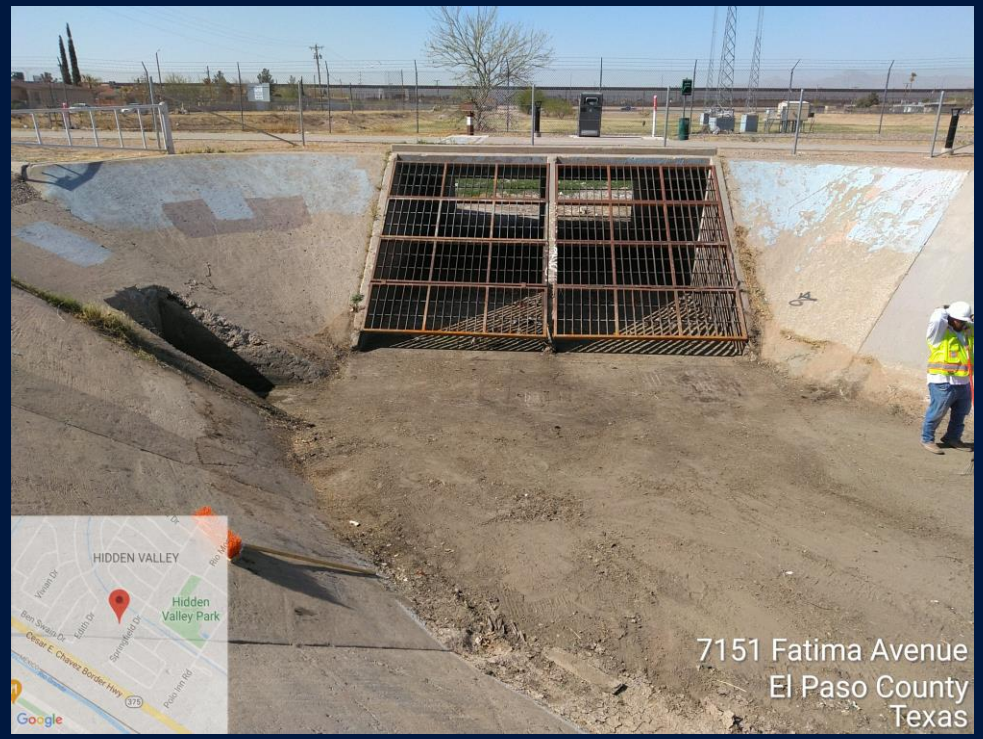
After

Stormwater Operations

Croom Grate cleanup and illegal dumping removal

District 3

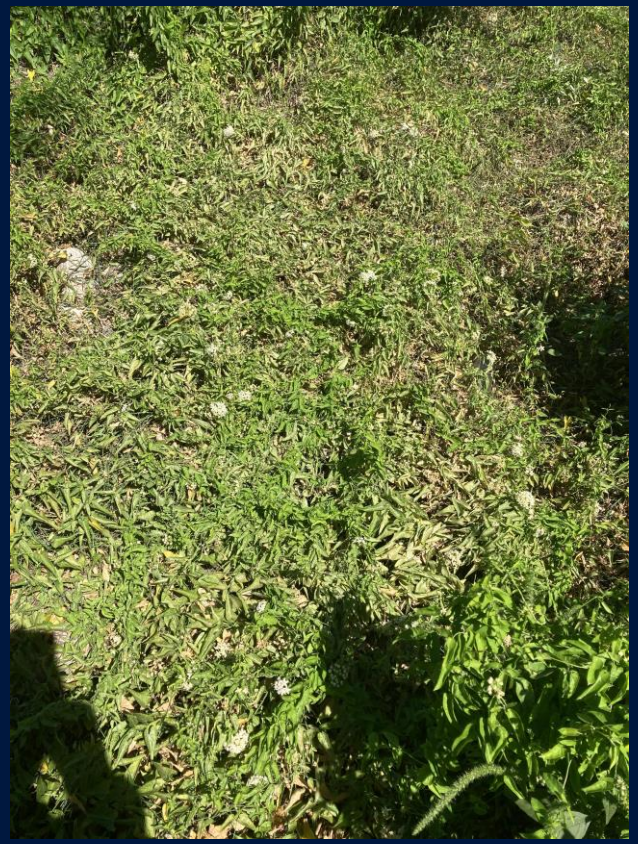
Before



After

Stormwater Operations
8300 Loma Terrace Inlet cleanup

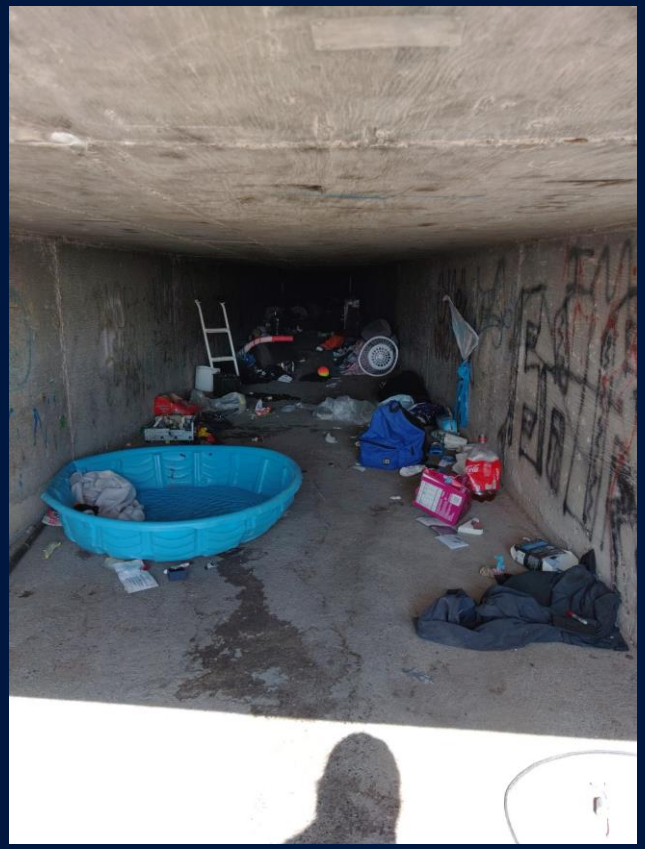
District 7



Before

After

Stormwater Operations
Clearing Encampments, Illegal Dumping
Citywide



Nearly 30,000 Sandbags Distributed

Partnerships and Community Engagement

Actively Pursuing Federal/State Funding

Recent Successes

Agency	Project	Amount
U.S. Army Corps of Engineers	Keystone Dam Seepage Repairs	$1,200,000
U.S. Army Corps of Engineers	Clardy Fox Pump Station	$3,380,000
U.S. Army Corps of Engineers	Northgate Diversion Channel Improvements	$3,750,000
U.S. Army Corps of Engineers	Central Cebada Watershed Study	$1,500,000
Texas Water Development Board	Will Ruth Pond	$5,000,000

Submitted Requests

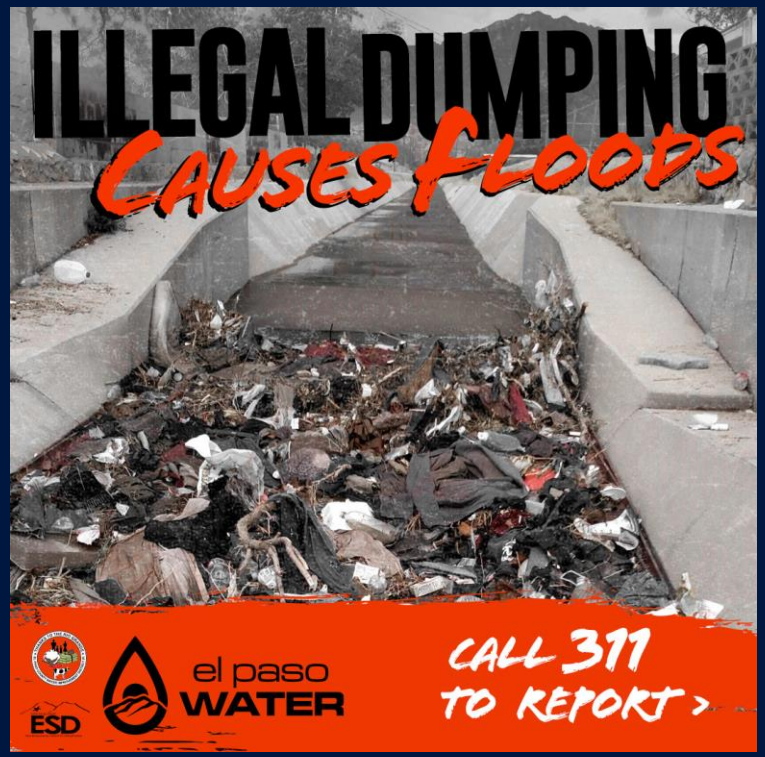
Agency	Project	Amount
U.S. Army Corps of Engineers	SAC 1 Detention Basin - Design	$1,000,000
FEMA	Hickerson Detention Pond	$2,700,000
FEMA	Canterbury Sediment Basins	$4,500,000
FEMA	Montview Pump Station	$6,150,000
FEMA	Alcan Pond	$7,500,000

Tours of the Stormwater System

- EPWater staff has hosted tours of the stormwater system for several council members, community members and the media
- Provides the opportunity to see the enormity of the system and see first-hand some of the major stormwater protection projects

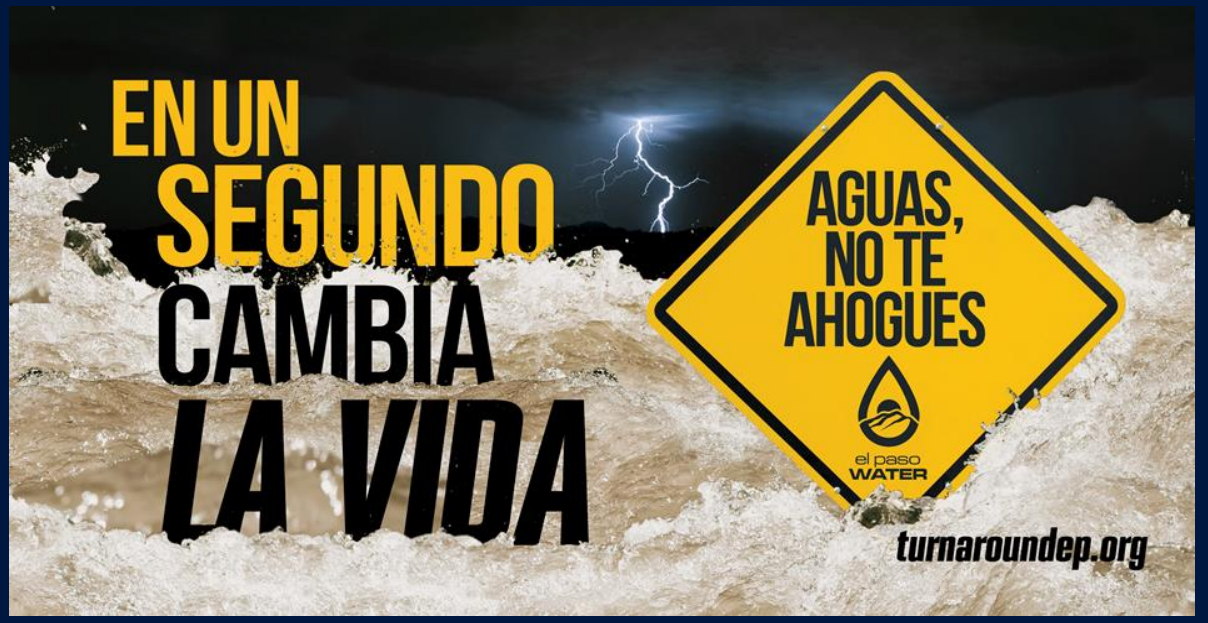
Broad campaign to raise awareness

The campaign is bi-lingual and uses a variety of media to target key audiences to help raise awareness of this widespread problem. Outreach includes social media, radio, email, digital static ads, bus ads, and print publication advertising.



PSAs for Flood Safety

- EPWater works with stakeholders to urge drivers to not drive through flooded streets.
- Previous bilingual campaigns included radio spots, billboards, internal bus displays and bench ads, digital ads, and a microsite.



Who to call during flood events

- 911 – Emergency
- 311 – Non-emergency
- EPWater Dispatch: (915) 594-5775

How you can help

- Share public service information with constituents
- Help the community to understand that streets are an integral part of the stormwater system
  - Streets are designed to convey water to the stormwater system. Water collects briefly on streets before entering the stormwater system
- Support non-profit partnership programs to help residents repair private property after flood events
- Update the City's Drainage Design Manual to meet Atlas 14 standards
- Support stormwater fee increases for continued infrastructure investments
- Encourage Green Infrastructure
  - Consider innovative and sustainable policy solutions to stormwater needs

Questions and Comments