



# Stormwater Update 2016

April 4, 2017

# Historic Data

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Average annual precipitation 2016	<b>6.75"</b>
Average annual precipitation - (averaged over a 30 yr period) (NOAA)	<b>9.71"</b>
Average annual rainfall from July – September 2016	<b>5.31"</b>
Cumulative annual rainfall up to December 8, 2016 (NOAA)	<b>8.72"</b>
Rainfall recorded August 1, 2006	<b>2.84"</b>
Average rainfall August 2006	<b>6.85"</b>

# Data

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20 storm events from April 2016 – November 4, 2016

Location / Date	Maximum Recorded Rainfall
Central 08/28/16	1.29"
Northeast 08/23/16	1.34"
East 09/02/16	2.10"
Westside 09/07/16	1.04"

# Data

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## 11/04/16 - Hail Storm

- Pea size to Marble size hail
- NOAA Recorded Rainfall @ EP International Airport
  - 0.38 in



Other inclement weather  
conditions that affect the system

# Hail Storm Nov. 4, 2016



Central - Porfirio Diaz





East – Americas Ave.



Central – Dallas/Cotton





# FY 2016-2017 Stormwater

## Accomplishments



# Delivering Results – Public Safety

- We have prioritized and continue to prioritize capital projects that remove flooding risks from high-traffic areas and can potentially save lives

## Reduced Flooding on I-10

Gateway Ponds	23 Million Gallons
Magnolia	4 Million Gallons
Morenci	7 Million Gallons
Pollard	1 Million Gallons
Austin	3 Million Gallons

38 MILLION  
GALLONS  
CAPACITY  
CREATED FOR  
FLOOD  
CONTROL





# FY 2016-2017 Stormwater

## Operations Report

# Stormwater Operations

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## **March 2016 to present**

- USACE Inspections
- Clearing of Inlets
- Cleaning of Drains and Channels
- Cleaning of Ponding Areas
- Weed Control
- Erosion Control
- Service Requests
- Vector Units
- Sandbag Distribution
- Mosquito Control

# Stormwater Operations: High Productivity



**Ponds**

180 acres maintained



**Channels & Levees**

18 miles cleaned



**Drains**

5 miles maintained



**Storm Drains**

1.4 miles of conduits cleaned



**Inlets**

425 inlets cleaned

# Sandbags

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- 53,480 bags used



# Storm Drains





# Storm Drop Inlets

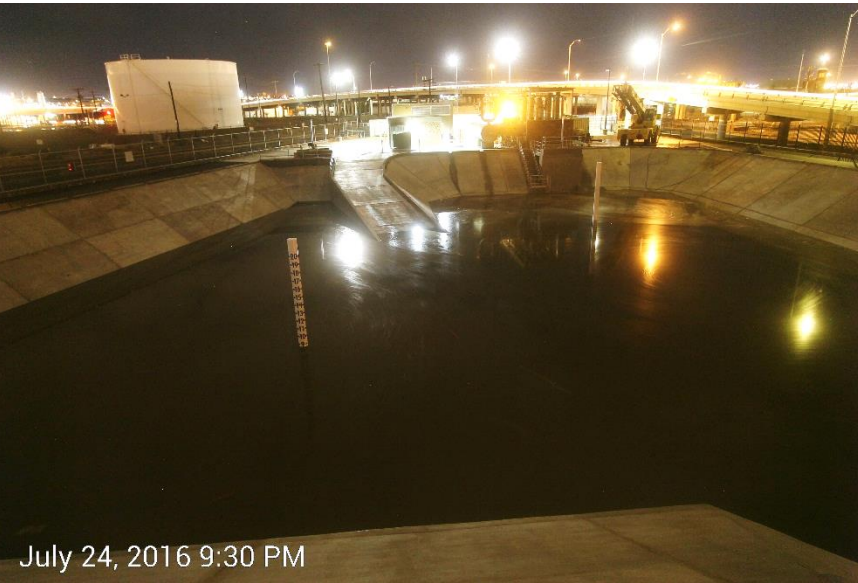




# FY 2016-2017 Stormwater

## Projects Completed

# Magnolia Projects



Project Cost: \$28.6M



# Gateway West Pond Expansion

Before



Project Cost: \$9.8M

# Austin Pond



Project Cost: \$2.7M



# Pico Norte Pond



Project Cost: \$2.4M



# Pollard Pond Improvements



Project Cost: \$1.6M

# Diana Drive Traffic Barrier



Construction Cost: \$318,000



# White Spur Crossing Improvements



Project Cost: \$200,000



# Stormwater

Projects Under Construction

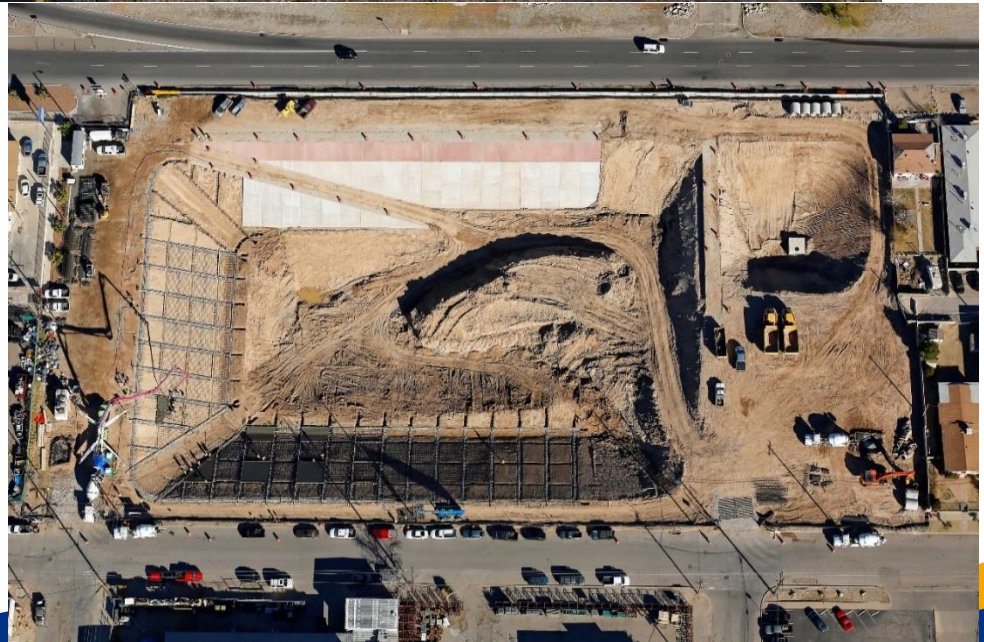


# Gateway East Pond Expansion



Construction of stormwater retention pond to capture stormwater runoff and reduce flooding on I-10

Construction Cost: \$5.7M  
Estimated Completion: July 2017





# Fairbanks Sediment Catch Structure



Construction of concrete structure to capture sediment

Construction Cost: \$1.3M  
Estimated Completion: July 2017



# Grand Teton Drive Ponding Area Improvements



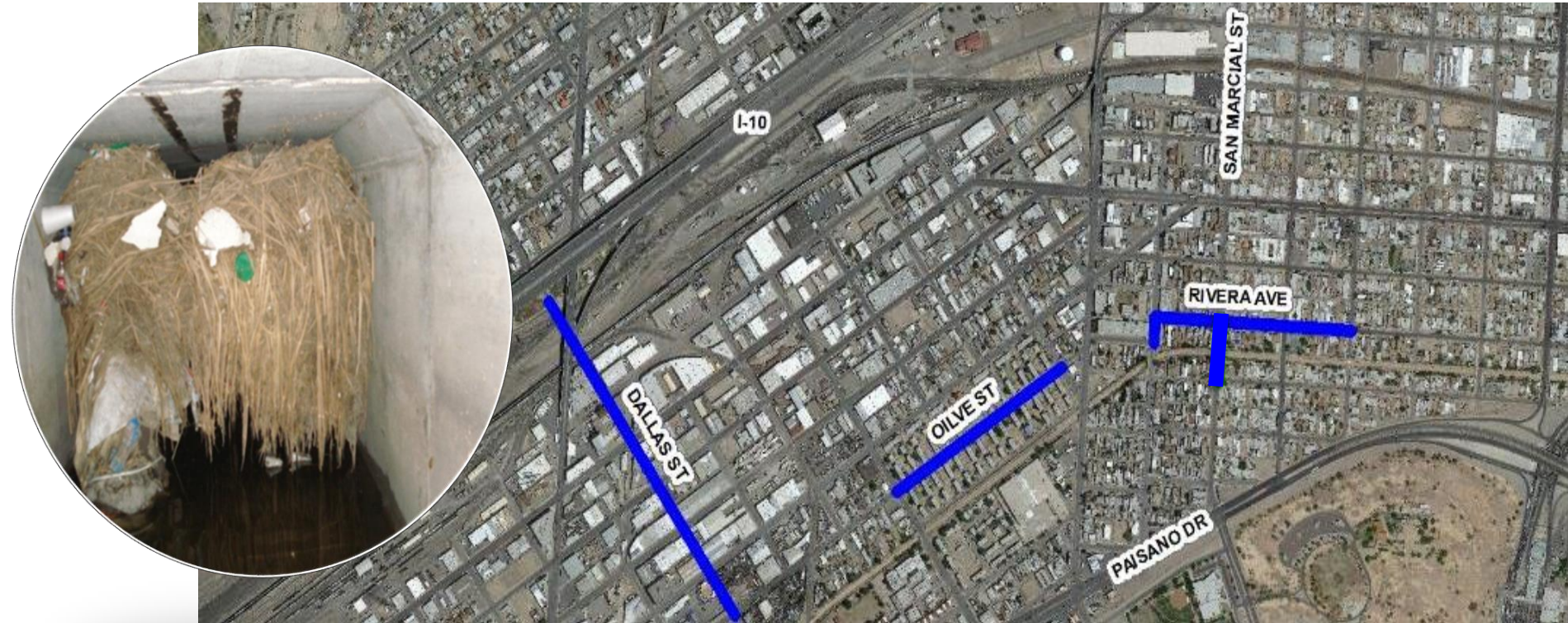
Construction of stormwater  
detention basin

Construction Cost: \$1.3 M  
Estimated Completion:  
September 2017





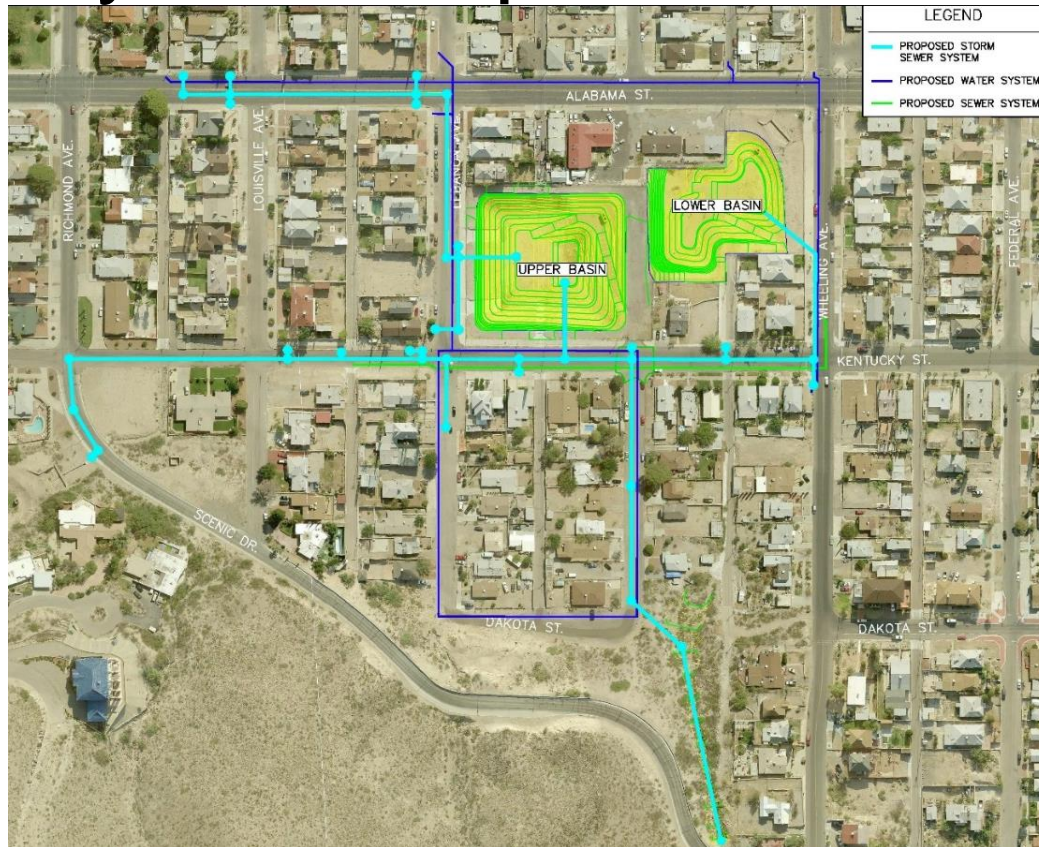
# Dallas Conduit Clearing of Utilities PH II



Relocation of existing utilities within the Dallas system conduits  
to regain the conveyance capacity

Construction Cost: \$1.3 M  
Estimated Completion: July 2017

# Kentucky Dam Improvements Phase I



Construction of intake structures and pond expansion

Construction Cost: \$3.8 M

Estimated Completion: July 2017



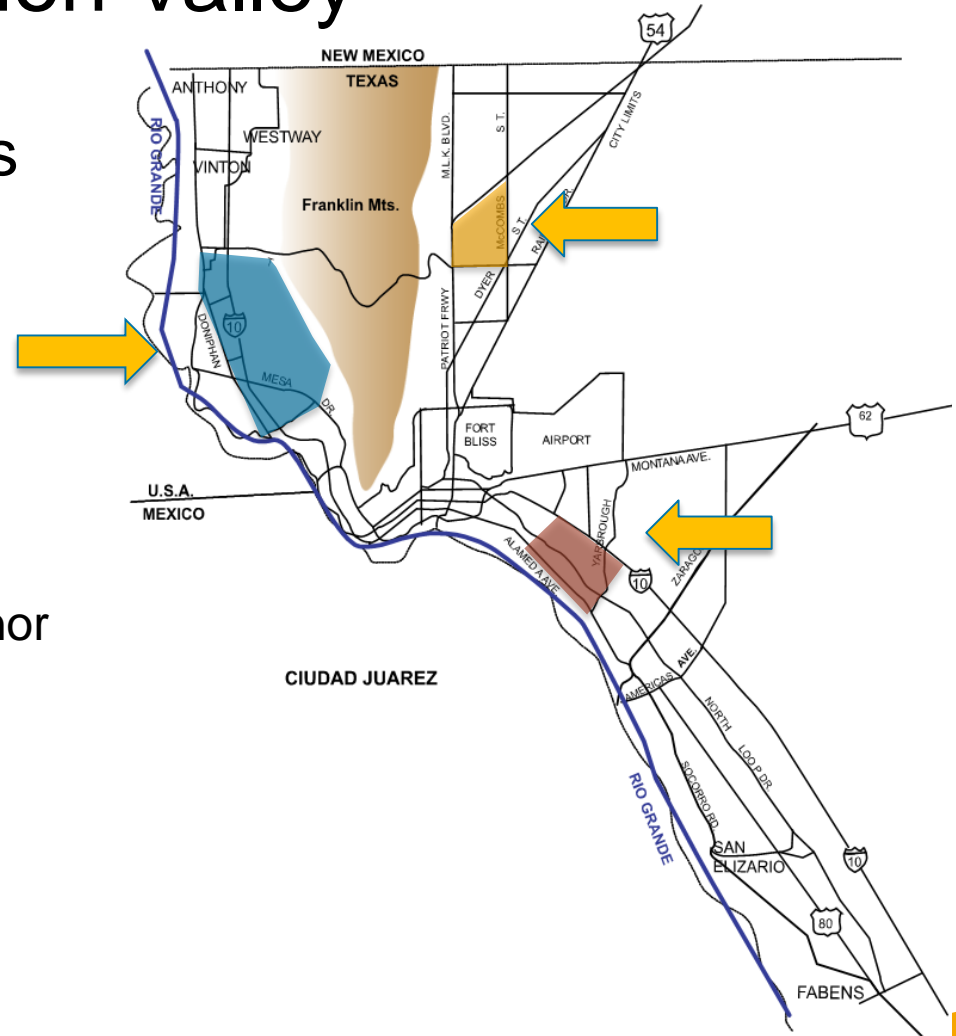


# FY 2017-2018 Stormwater

## Capital Budget

# Emphasis to Shift from Central to NW, NE and Mission Valley

- Work in Central continues
- Emphasis in work will shift to:
  - Northeast – Fairbanks
  - Northwest – Mesa Hills
  - Localized – Keystone Dam
  - Mission Valley – Thomas Manor





# Stormwater Projects Will Ruth Pond





# Will Ruth Pond

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- Construction of approximately 93 MG detention pond to collect stormwater runoff from Flow Path 15 in Northeast El Paso
- Requires acquisition of 74 parcels
- Over 500 properties will be removed from the Flood Zone
- Estimated Project Cost: \$17M

# Stormwater Projects

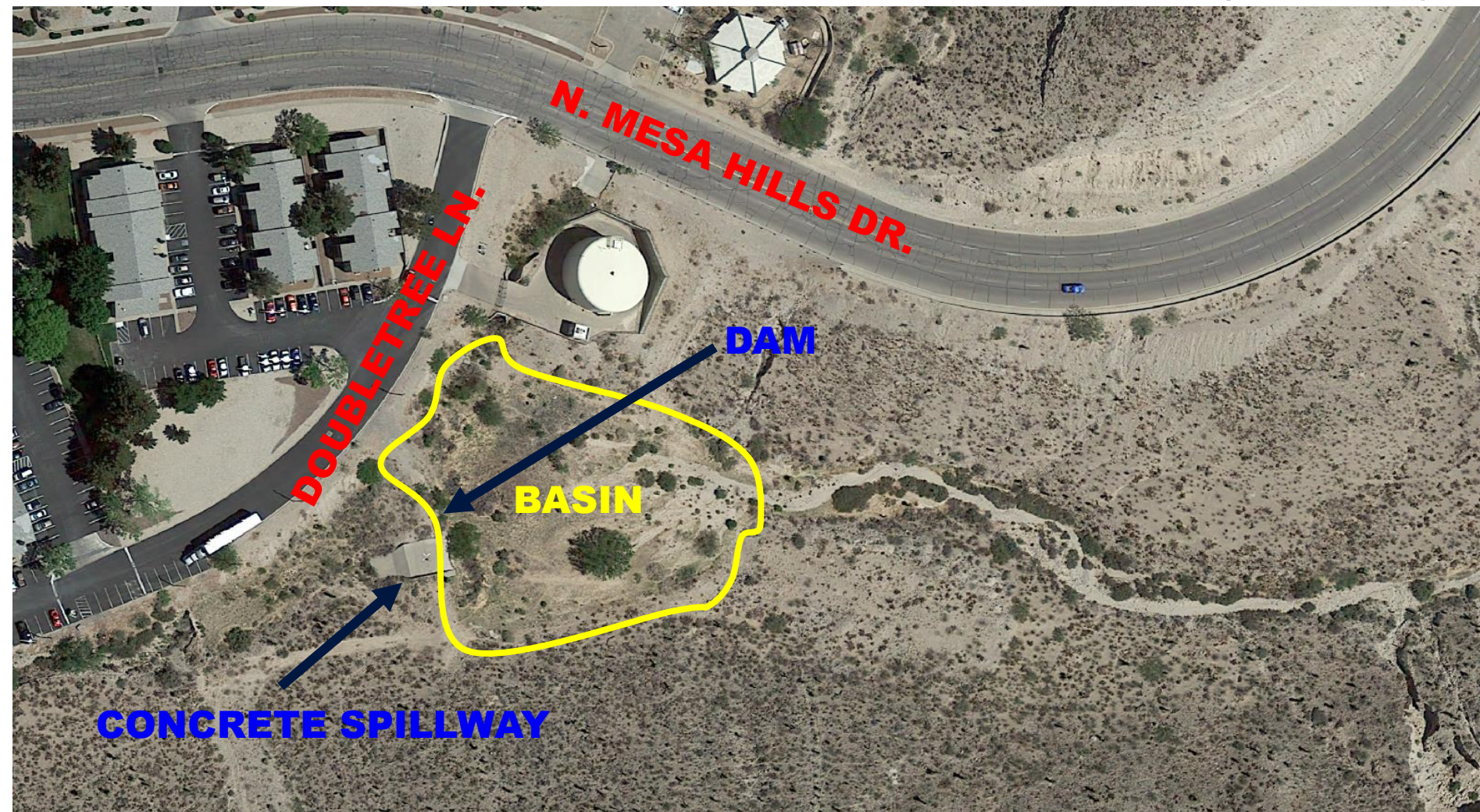
## Copia Pond Improvements





# Stormwater Projects

## Mesa Hills Sediment / Detention Basin (NW18)





# Stormwater Projects

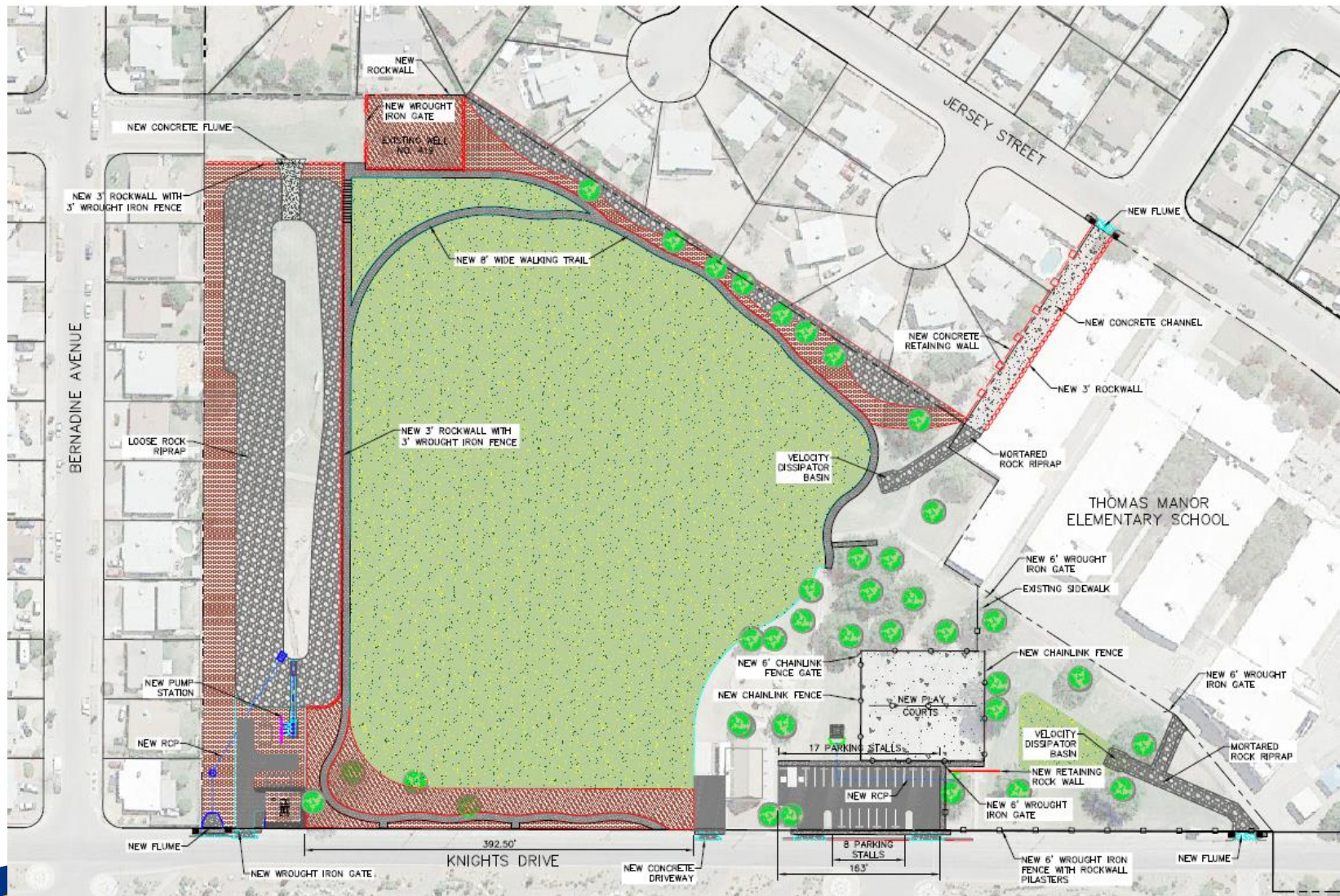
## Bear Ridge Channel





# Stormwater Projects

## Thomas Manor Stormwater Improvements





# Open Space Acquisitions



# Open Space Financial Report as of September 30, 2016

<b>Total Open Space Expenses from Inception</b>	<b>\$ 9,257,830</b>
<b>Open Space Revenue Inception through 9/30/2016</b>	<b>\$14,893,053</b>
<b>Available Balance for Open Space Projects as of 9/30/2016</b>	<b>\$ 5,635,223</b>

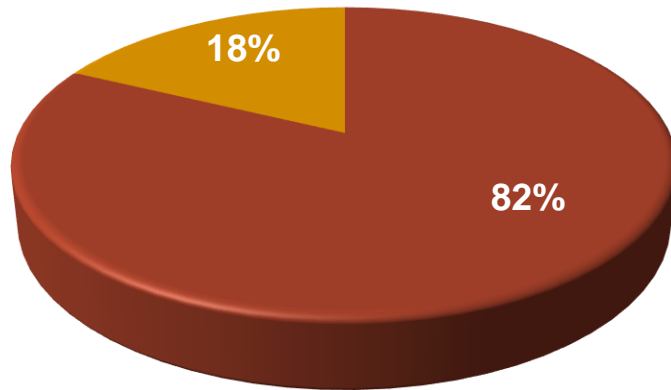
# Pending Open Space Acquisitions

- Lower Coronado Canyon
- Hunt Arroyos
- Palisades Entrance
- Cement Lake

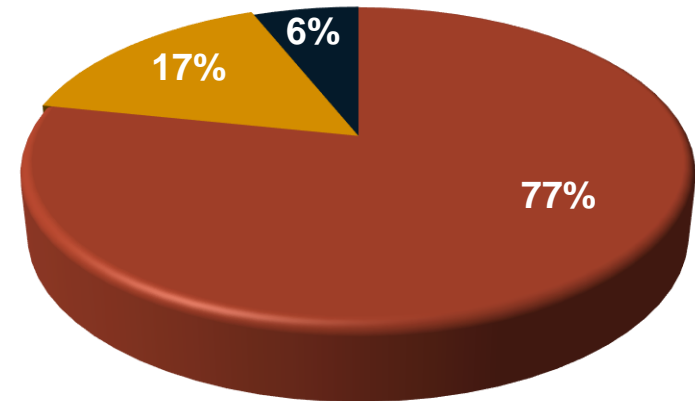
# Good Progress on Master Plan

## Still much more to do

**Original Master Plan**  
\$650 Million



**Master Plan w/Additional Costs**  
\$695 Million



■ Still to do

■ Completed

■ Additions



# Next Steps

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- **Reconvene and reconstitute SW Advisory Committee**
  - Update master plan (SWMP is 10yrs old)
  - Decide new priorities and speed to develop projects
  - Understand budget implications

# Stormwater Safety Campaign

July - September

- Billboards citywide
- Radio PSA's
- Media Event resulting in coverage from all local outlets
- Social media engagement
- Stakeholder support



LANZAN CAMPAÑA  
"DE MARCHA ATRÁS Y NO SE AHOGUE"



El Paso Water @EPWater - Jul 11

Stormwater Safety Campaign gets underway



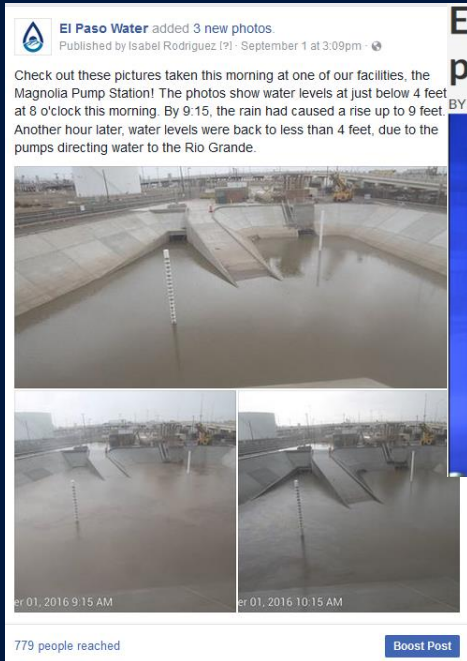
**Flash Floods Can  
Kill in a Flash  
Turn Around Don't Drown®**



# Continuing Stormwater Outreach

July - September

- Sandbags
- Illegal dumping
- Completed capital projects
- Media and social media



## El Paso Water crews clean drains and inlets in preparation for storms

BY ADRIA IRAHETA | TUESDAY, SEPTEMBER 6TH 2016







# 2016 Stormwater Update

Questions / Comments