2021 Monsoon Season Update

September 2021

Area Flooding

Historic Data

Average rainfall August 2006	6.85”
Rainfall recorded August 1, 2006	2.84”
Average annual precipitation	8.78”
Cumulative annual rainfall 2021 (NWS / NOAA) January – August **(Hydrometeorologist Reports)**	10.63” (based on Airport Gauge)
Max Daily Rain 2021 - CoCoRaHs @ Wyler Tramway	4.65”
Max. Rainfall from June 27 – August 16 (NWS) Max. Rainfall from June 27 – August 16 (CoCoRahs)	10.63" 13.6”

Monthly and Annual Average Rainfall Report

Report Year: 2021 Rainfall through: 31 August 2021 Issued: 2 September 2021 Report Status: **August Final**

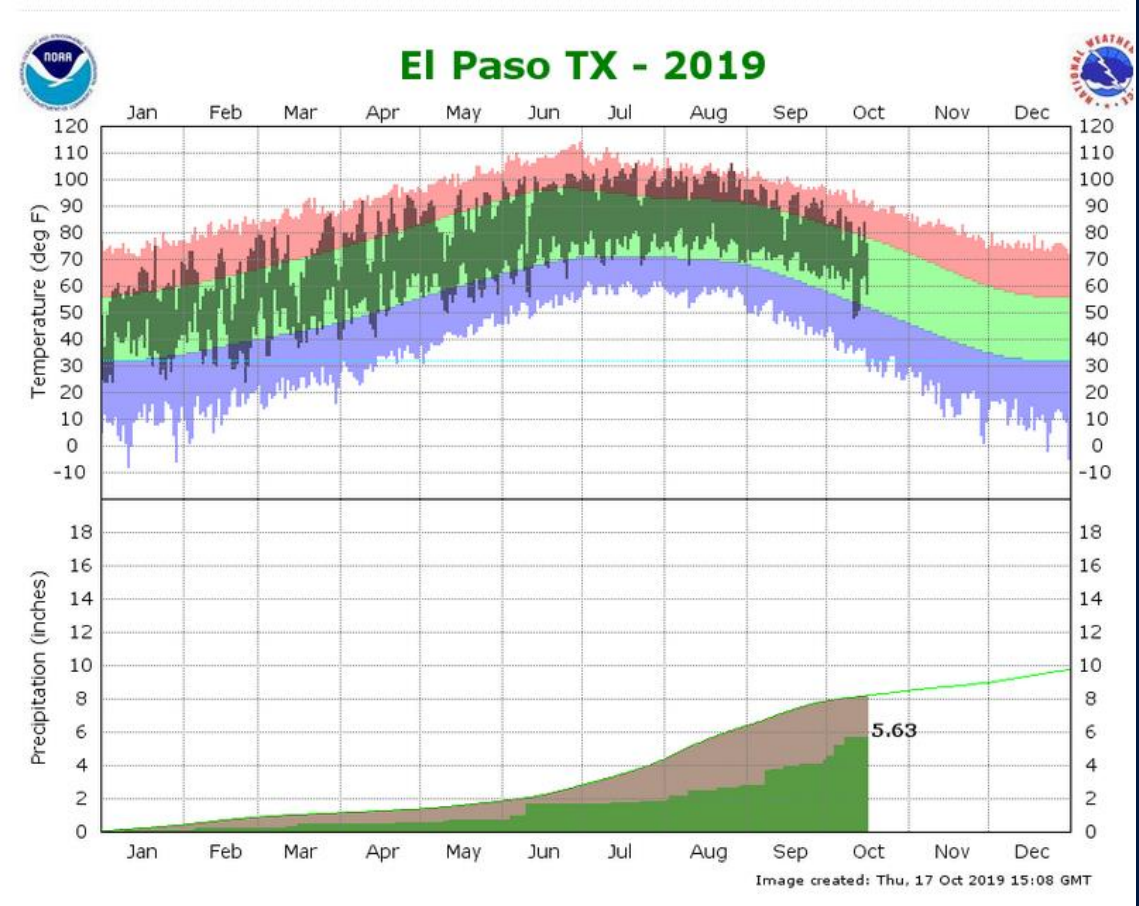
Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Year
West	0.25	0.24	0.00	0.16	0.05	2.72	1.96	4.44	0.00	0.00	0.00	0.00	9.81
Northeast	0.27	0.53	0.00	0.23	0.12	3.16	3.38	5.07	0.00	0.00	0.00	0.00	12.76
Central	0.19	0.10	0.07	0.06	0.03	2.17	4.03	3.25	0.00	0.00	0.00	0.00	9.89
Valley	0.21	0.12	0.00	0.07	0.03	1.57	2.79	2.71	0.00	0.00	0.00	0.00	7.49
City Wide	0.24	0.32	0.01	0.16	0.07	2.64	2.86	4.27	0.00	0.00	0.00	0.00	10.57
KELP (NWS)	0.18	0.40	0.00	0.24	0.18	2.37	4.80	2.46	0.00	0.00	0.00	0.00	10.63

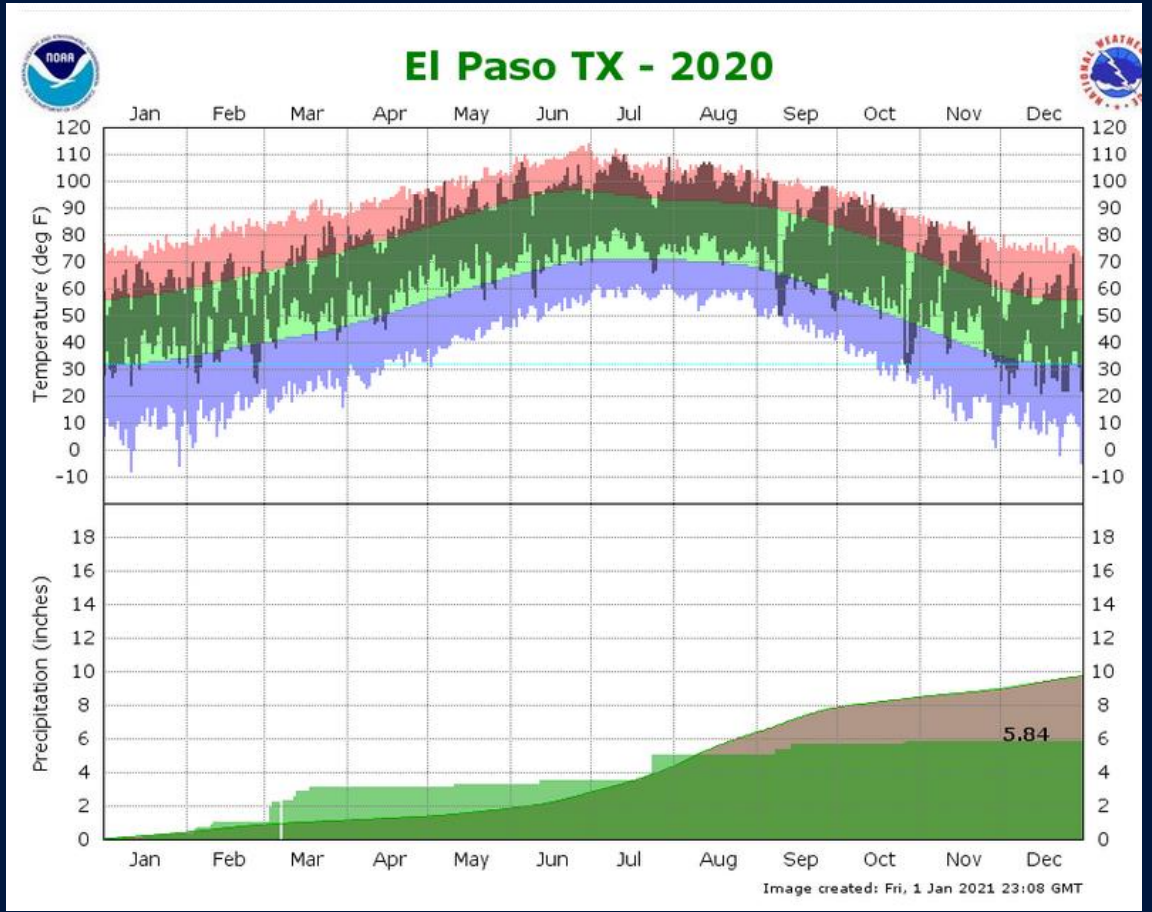
Winter Snowpack information and expected Spring/Summer Stream flow for the upper Rio Grande (% of Normal)

	Snowpack							Stream flow				
Snow Basin	Dec-21	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Dec-21	Jan 21	Feb 21	Mar 21	Apr 21	May 21
Upper Rio Grande	86%	64%	83%	99%	79%	50%		<25%	<25%	<25%	<25%	<25%
Rio Chama	75%	84%	50%	79%	77%	42%		<25%	<25%	<25%	<25%	<25%
Sangre	95%	104%	82%	94%	66%	35%		<25%	<25%	30%	<25%	<25%
Jemez	59%	58%	75%	71%	65%	<25%		<25%	<25%	<25%	<25%	<25%

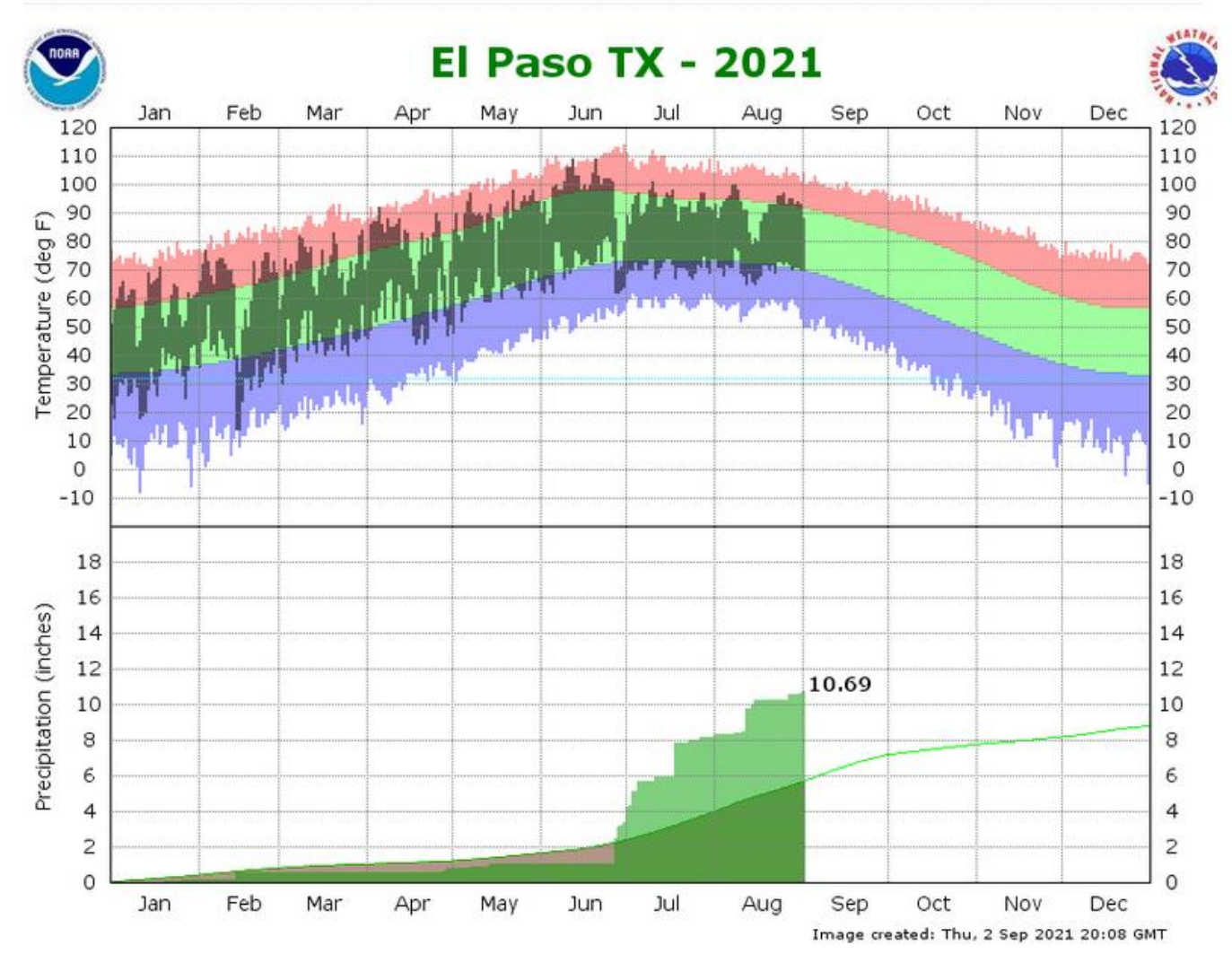
Notes: August, like July came in very wet with most of the regions coming in between 1.04 inches above normal (valley region) to 3.40 inches above normal (northeast region). Note this northeast region had the highest basin average for the month which is unusual for the monsoon season. Usually the west region would have a higher amount. This was due to the events from 10-14 August where northeast flow dominated the region. Also note the official climate station was at least 1 inch lower than all the basin averages. This shows the most of the rain fell in more isolated areas as well. While this is not unusual, it is notable.

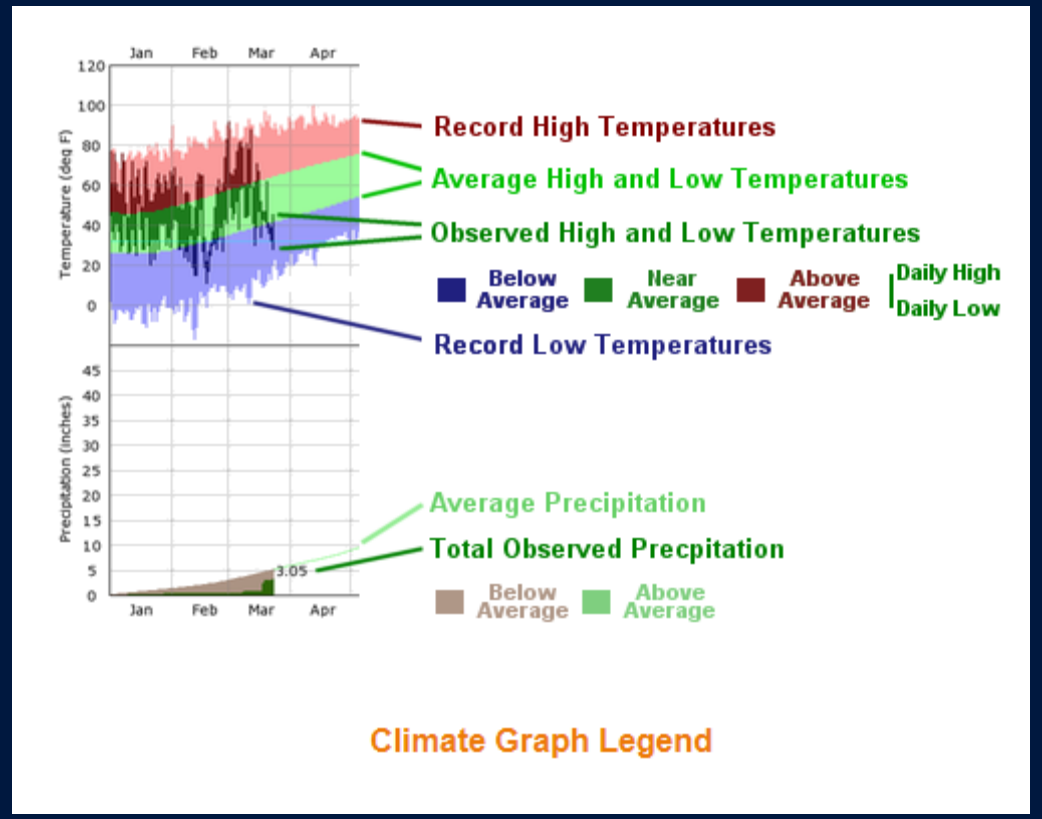
Temperature and Precipitation Plot for El Paso





Temperature and Precipitation Plot for El Paso 2021





Rainfall Data – June 27 – August 16

Location / Date	Weighted Rainfall (Rainfall over watershed)
Central	9.39”
Northeast	11.32”
East	7.08”
Westside	9.08”
Citywide	9.63”

Citywide Maximum Daily Recorded Rainfall

Location / Date	Maximum Daily Recorded Rainfall
Central (08/12/21)	4.65”
Northeast (08/12/21)	3.42”
East (07/18/21)	3.46”
Westside (08/13/21)	2.78”

Storm Frequency

Frequency	1-Hour Precipitation		24-Hour Precipitation	
	DDM Central (2008)	Atlas-14 (2018)	DDM Central (2008)	Atlas-14 (2018)
1 yr	0.41-in	0.68-in	0.80-in	1.18-in
2 yr	0.70-in	0.89-in	1.35-in	1.54-in
5 yr	0.97-in	1.20-in	1.83-in	2.07-in
10 yr	1.15-in	1.48-in	2.16-in	2.56-in
25 yr	1.41-in	1.88-in	2.60-in	3.29-in
50 yr	1.61-in	2.21-in	2.96-in	3.90-in
100 yr	1.84-in	2.56-in	3.34-in	4.58-in
200 yr	2.18-in	2.95-in	3.89-in	5.36-in
500 yr	2.47-in	3.49-in	4.35-in	6.50-in

These values represent statistical storm depths at EPIA based on prior analyses.
The DDM was published in 2008.
NOAA Atlas-14 was published in 2018.
NOAA Atlas-14 consistently reports that statistical storms are of greater magnitude.

Storm Frequency for 2021 Events

Date	Location	Precipitation Depth	1 hr Precipitation		24 hr Precipitation	
			DDM (2008)	Atlas-14 (2018)	DDM (2008)	Atlas-14 (2018)
June 27 - East	Sam Snead	2.21-in	> 50 yr	50 yr	10 yr	10 yr
July 18 - East	McRae	3.28-in	> 250 yr	> 200 yr	75 yr	25 yr
August 12 - Central	Fort Blvd	4.65-in	> 500 yr	>500 yr	> 500 yr	> 100 yr

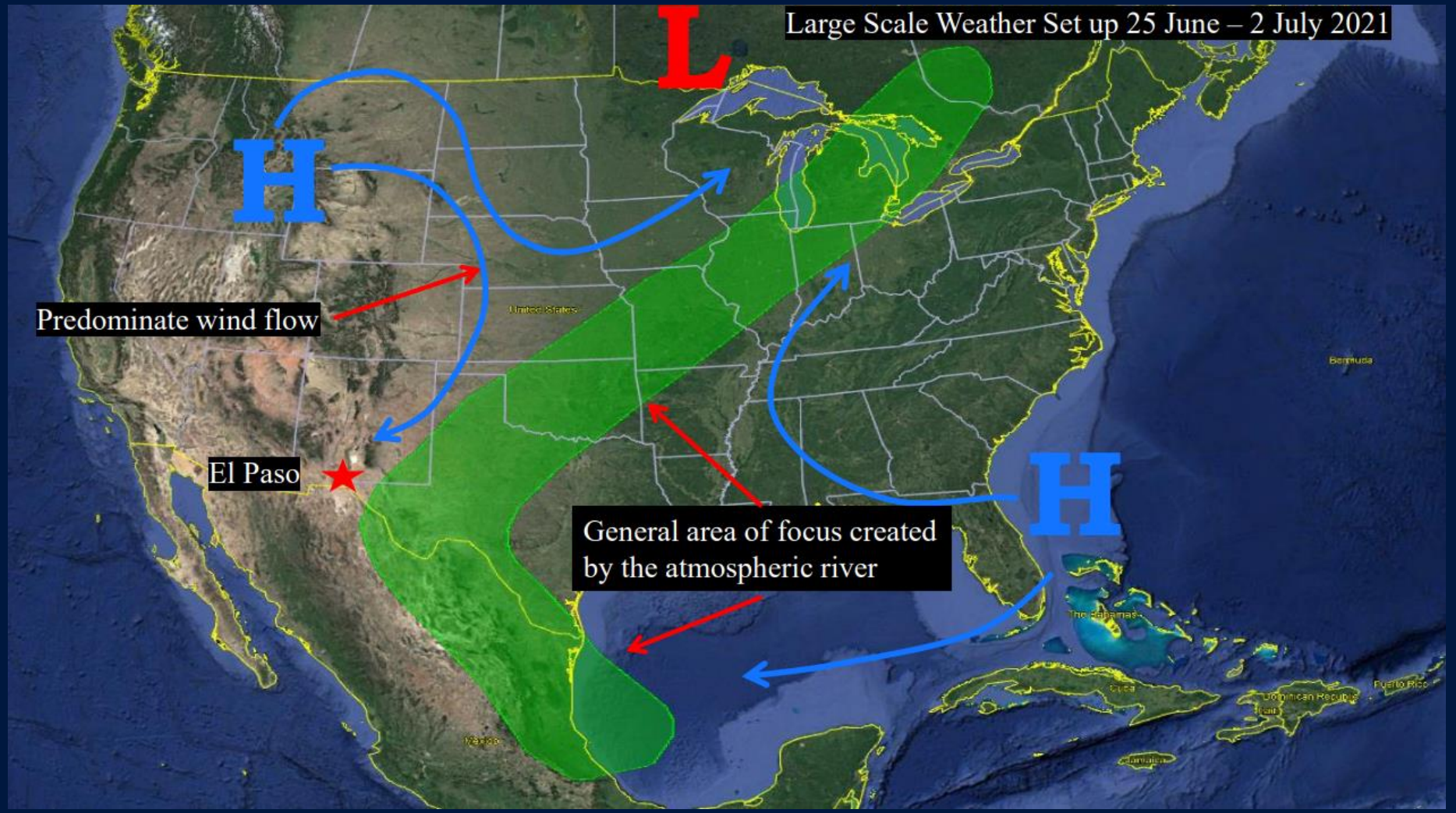
NOAA Atlas-14: new standard adopted by Texas

Storm Events
June 27, 2021 to July 5, 2021

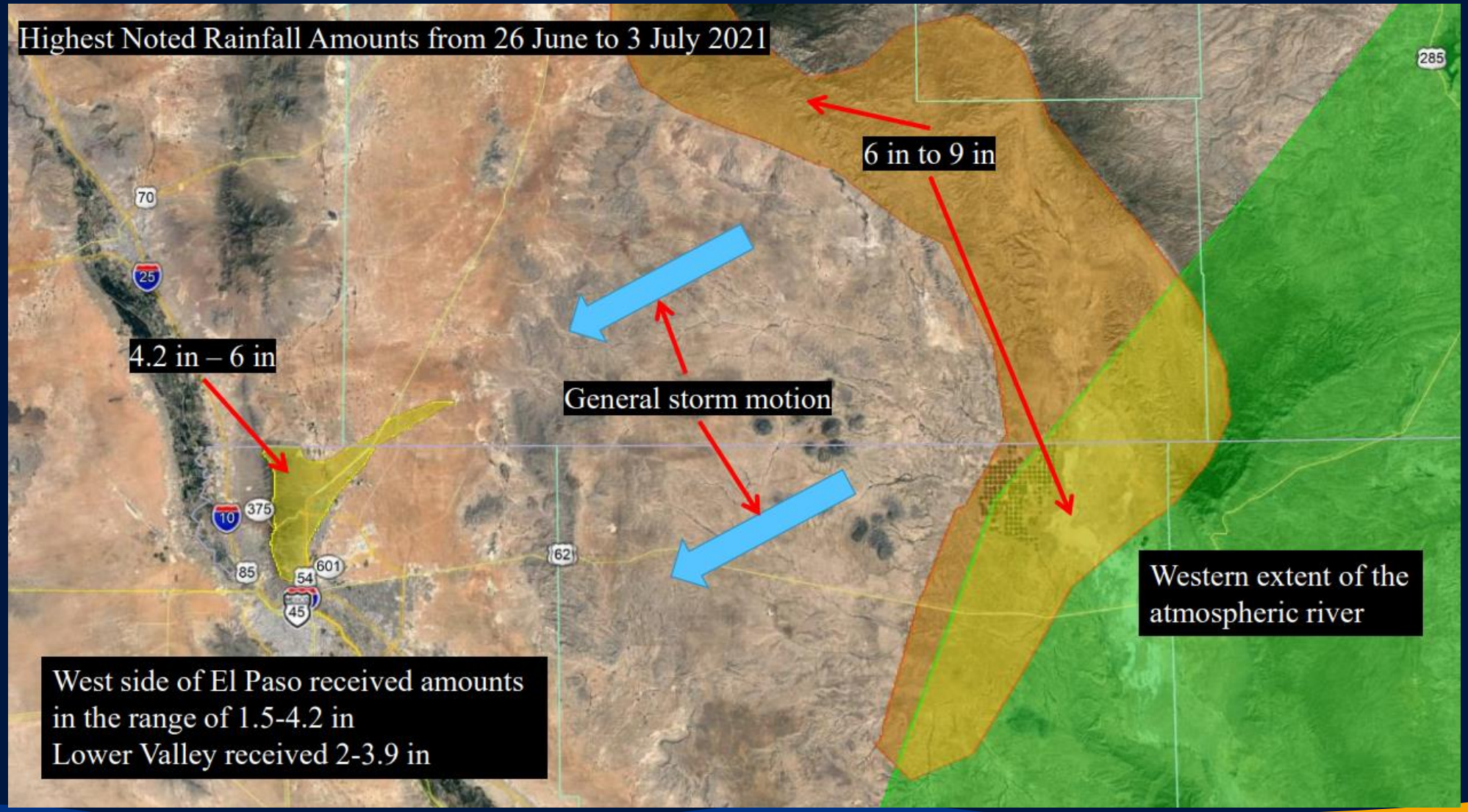
Moisture Conditions

- Strong high-pressure system
- Lake Superior, Central plains MO, KS, OK to Eastern NM, West of El Paso, Chihuahua and Coahuila Mexico
- Moisture transported in large quantities - "Atmospheric River": El Paso in western fringe of river
- Its scale is unusual for our region and had potential to create large amounts of rain
- Last time atmospheric river centered over El Paso was in 2006
- This time El Paso was in the western fringe of river. If centered, storms would have been more severe

Moisture Pattern



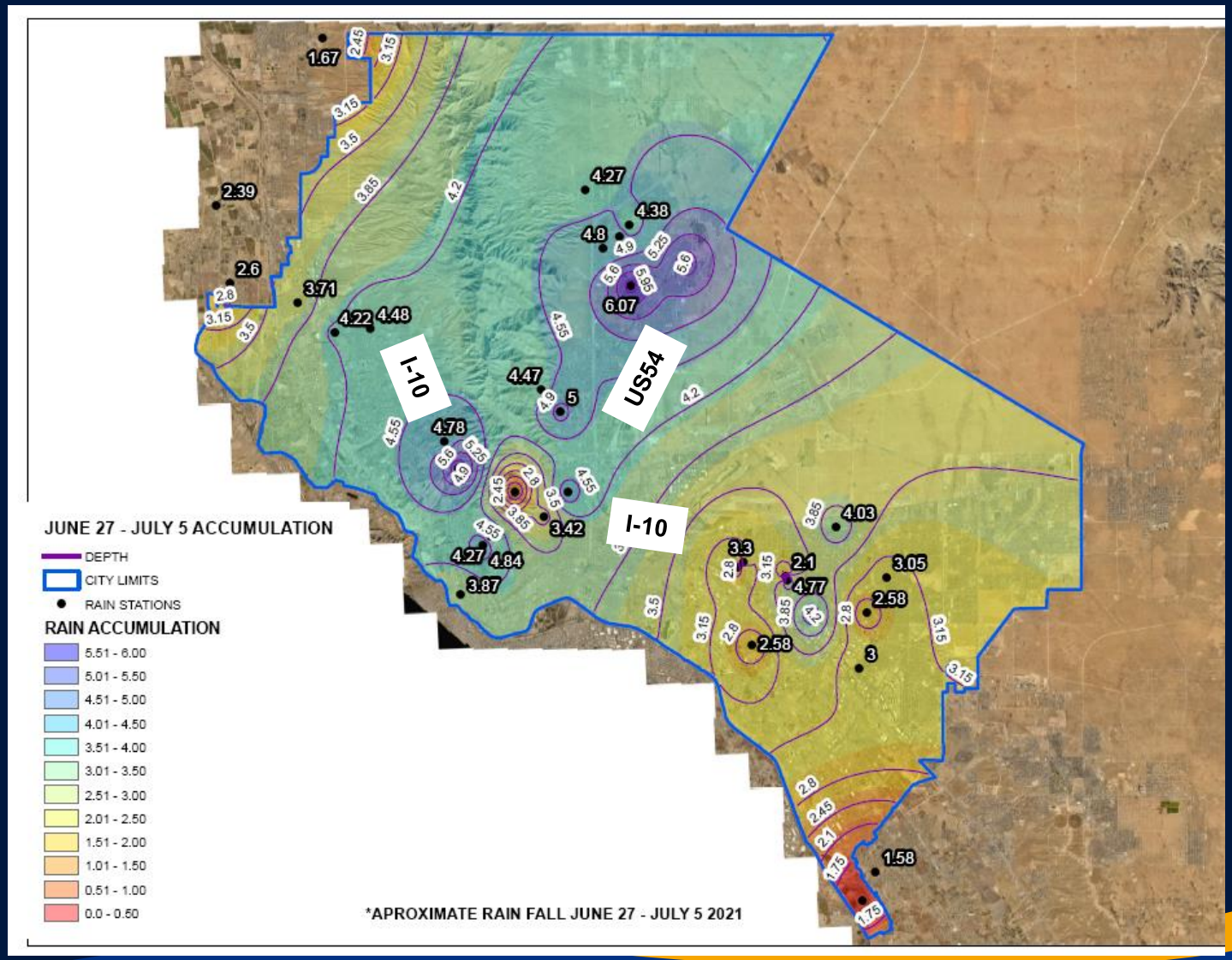
Highest Noted Rainfall Amounts



CoCoRahs Rain Interpolation : June 27 – July 5

- **West**
  Grand Teton / Mesa Park / Executive at Paisano - 5.6"
- **Northeast**
  Old Spanish Trail / Clearview Channel / Fort Bliss Diversion – 5"

  Range Dam into Diana Ditch – 6"
- **Central**
  Cincinnati - 4.55"
- **West Central**
  Piedmont - 4.84”
- **East**
  Sam Snead – 4.77"



Storm Event
August 12, 2021

Storm Conditions - August 12 (24-hour)

- Heaviest rain fell on the east side of the Franklin mountains
- Storm came from the north-northwest, and most of the rain slipped around the mountains from that direction, avoiding the rain shadow effect
- Area of heaviest rainfall includes the watershed that drains into the Gateway Ponds; the volume of rainfall filled up the ponds
  - This prevented a significant amount of flooding that would have occurred if they hadn't been built
- **CoCoRaHS** station within the Gateway Ponds watershed measured a 24-hour rainfall total of 4.65", which is greater than the **500-yr** event per to the Drainage Design Manual (DDM) and approximately the **100-yr** event per to Atlas-14

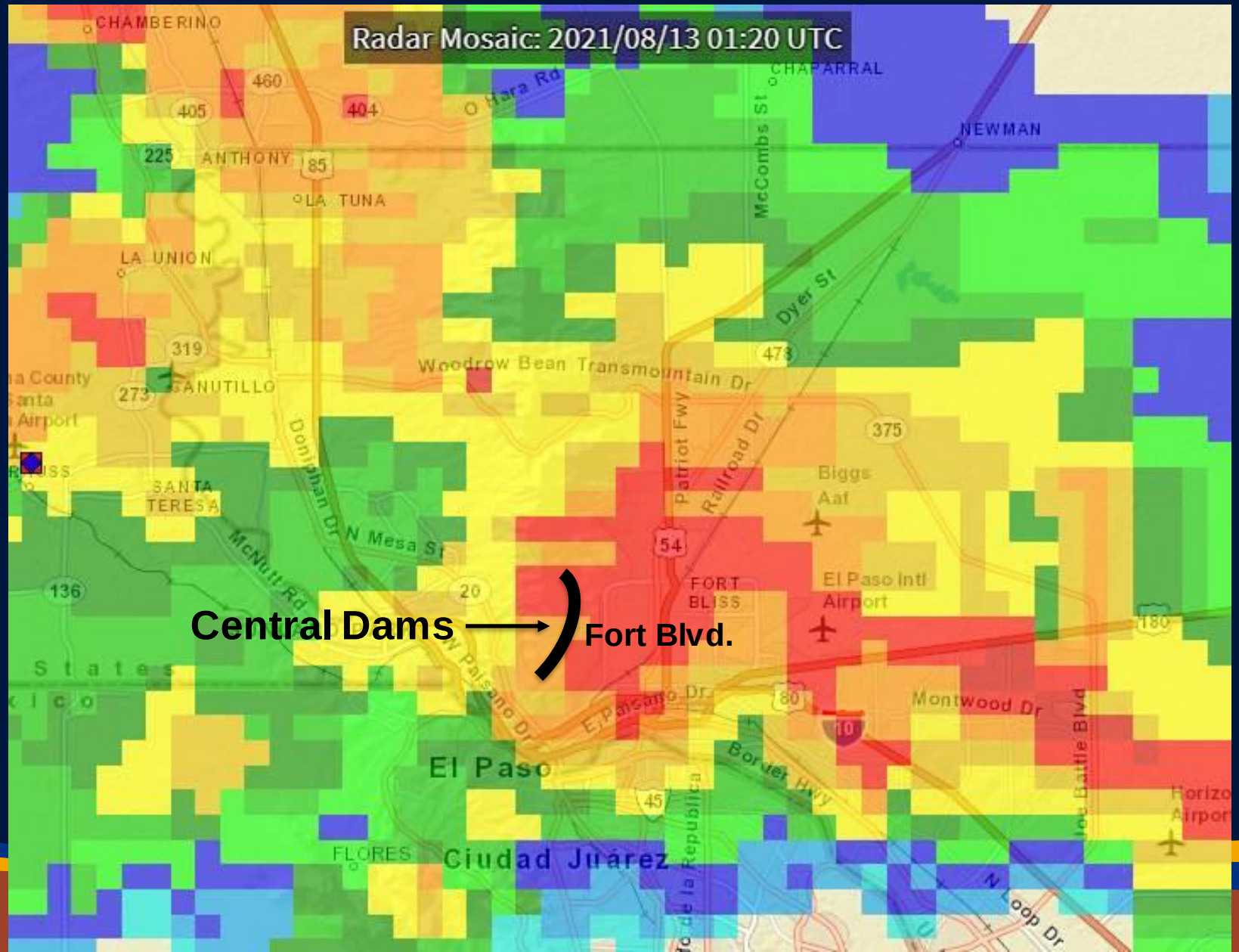
Storm Conditions - August 12 (1-hour)

According to a **Weather Underground** station in the Central watershed:

- The most severe rainfall fell from 6:30-7:30 p.m. At that station 3.18” of rain fell within that one hour alone
- According to the DDM this rainfall is greater than the **500-yr** event and per NOAA Atlas-14, this 1-hr rainfall was above the **200-yr** event

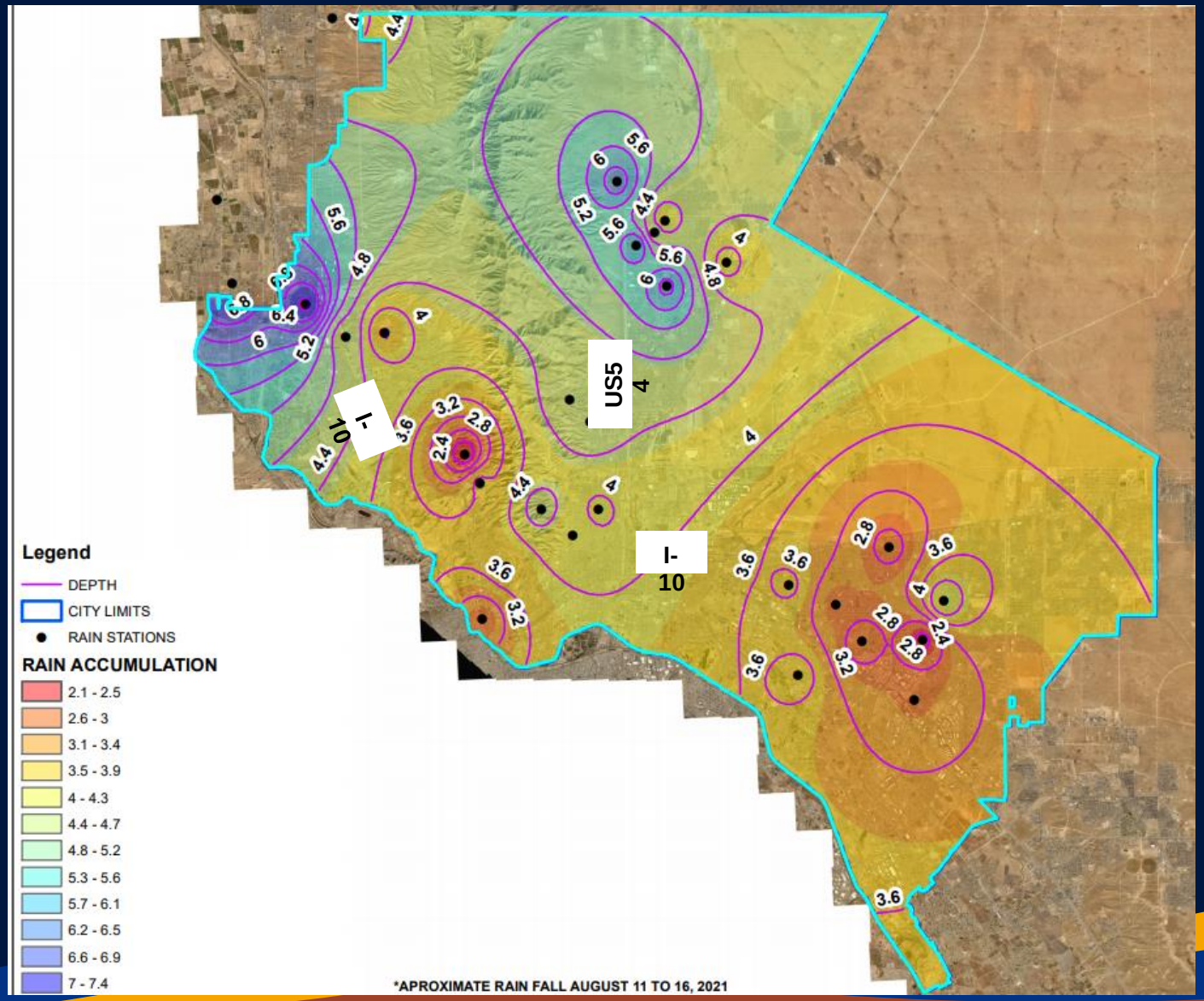
Rainfall Amount August 12, 2021

Radar Intensity at 7:20 p.m.



CoCoRahs Rain Interpolation: August 12 – August 13

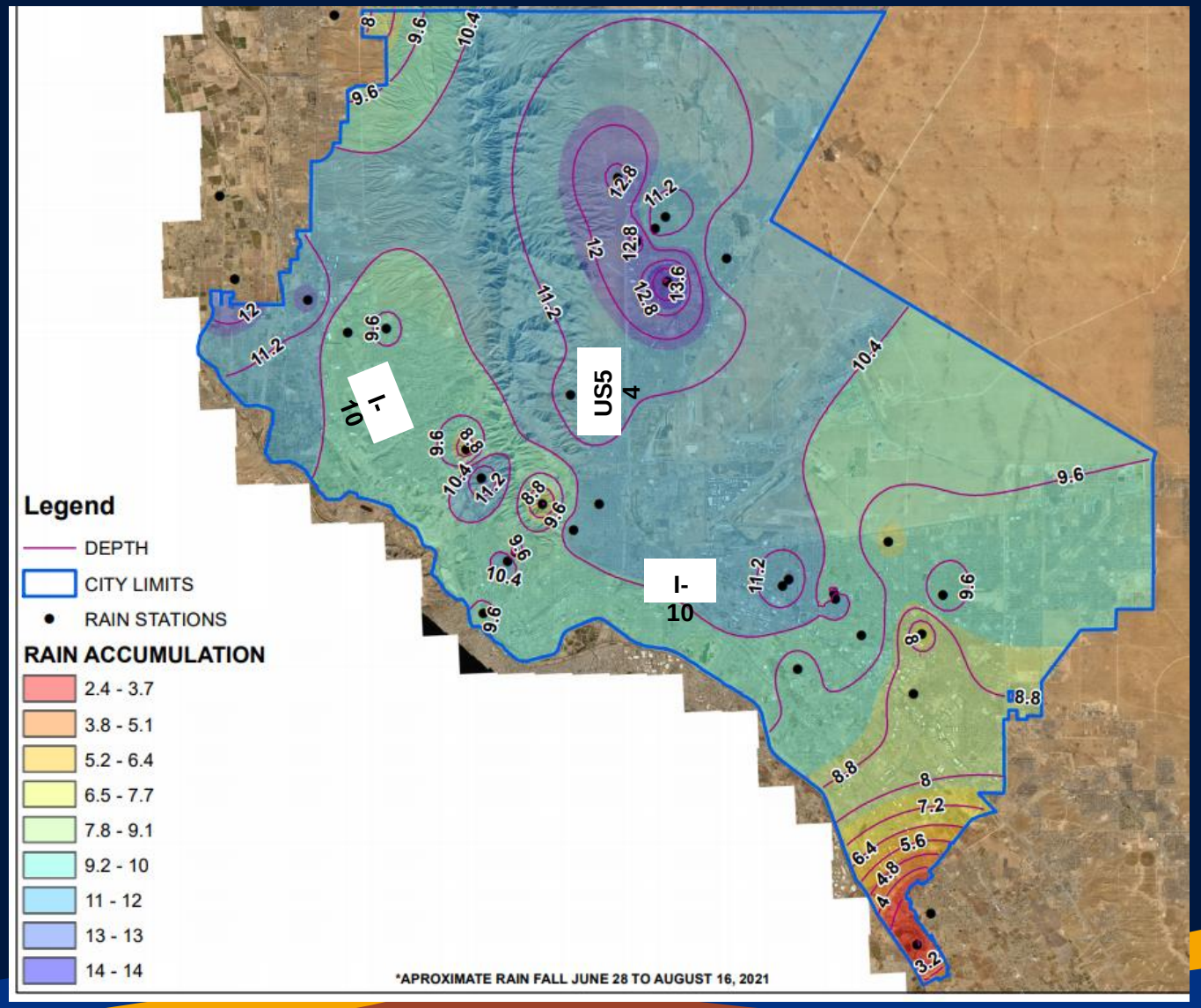
- **West**
  Grand Teton / Mesa Park / Executive at Paisano: 2.4” – 3.6”
- **Northeast**
  - Old Spanish Trail / Clearview Channel / Fort Bliss Diversion: 4.4” - 6"
  - Range Dam into Diana Ditch – 6“
- **Central**
  Dams: 4.4” - 4.8“
- **West Central**
  Piedmont - 4.4”
- **East**
  Sam Snead – 2.8"



Storm Events
June 27, 2021 – August 12, 2021

CoCoRahs Rain Interpolation: June 28 – August 16

- **West**
  Grand Teton / Mesa Park / Executive at Paisano – 11.2“
- **Northeast**
  - Old Spanish Trail / Clearview Channel / Fort Bliss Diversion: 11.2 - 13.6“
  - Range Dam into Diana Ditch – 12.8“
- **Central**
  Dams: 10.4” - 11.2“
- **West Central**
  Piedmont – 8.8” – 10.4”
- **East**
  Sam Snead – 9.6"



Service Request Calls

Constituents

91 received

25 completed

City – Council Members and Staff

38 received

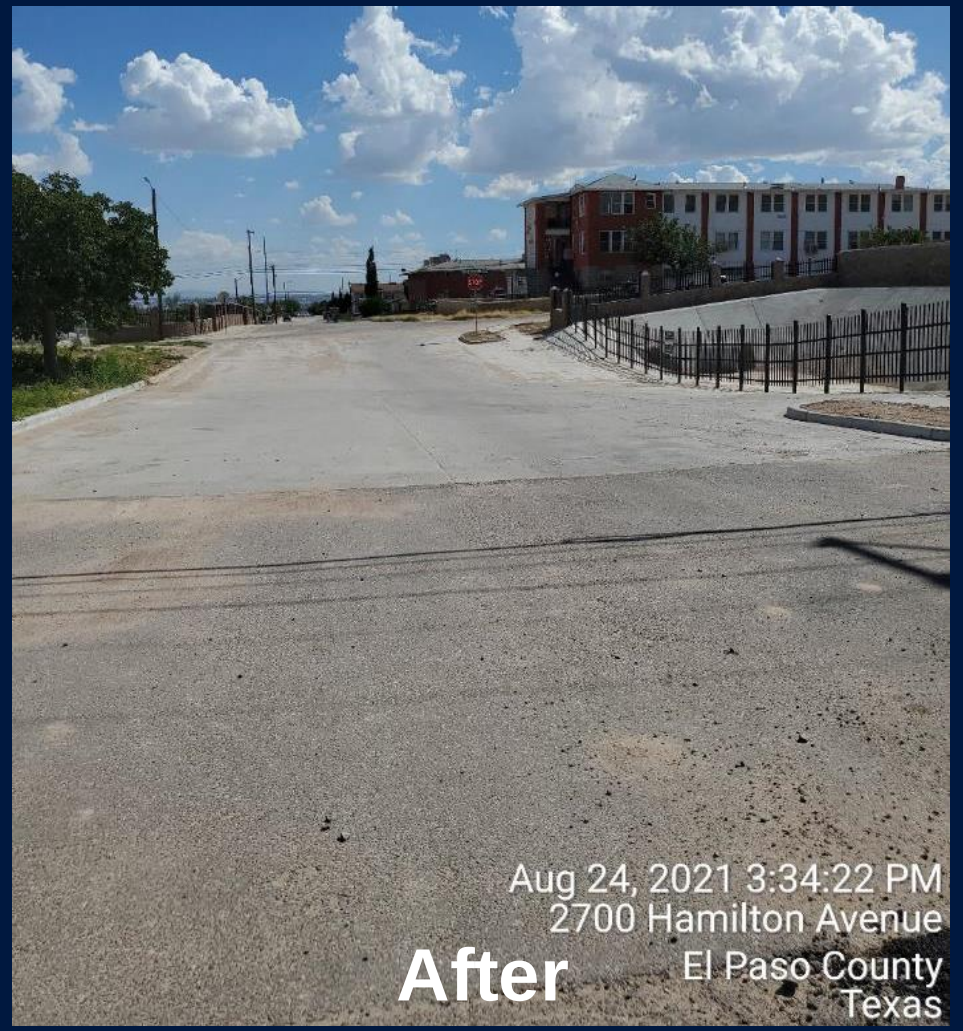
30 completed

Street Cleanup List

Street Name	Limits / Intersection
Copia	Douglas, Morehead, Mountain, Cotton, Justus
Piedras	Gold
Elm	Jefferson to San Jose (1.7 miles)
Alabama	Fort, Porter, McKinley, Russell
Van Buren	Piedras to Dyer (1 mile)
Continuous coordination and assistance to Street and Maintenance	

Street Cleanup Location

Hamilton and Louisiana



Fort and Alabama

Cleanup by EPWater and Streets and Maintenance. Paving by Streets and Maintenance.

Fort Boulevard to Morehead Dam

Before

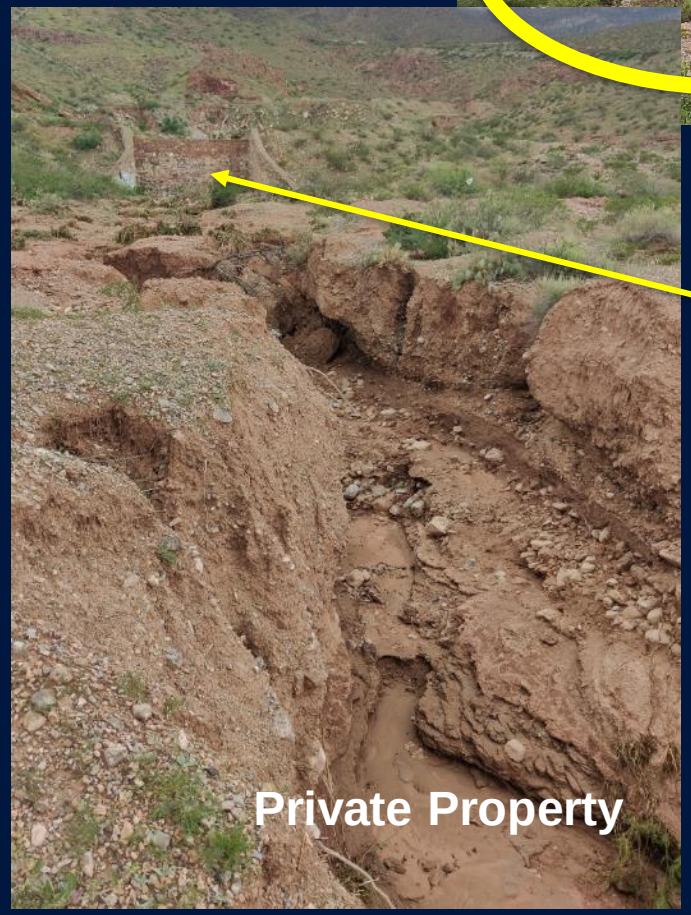
After

Fort Boulevard – Thomason Reservoir Access Road

Before

Reconstruction in progress

Erosion downstream of Morehead Dam



Morehead Dam

Private Property

Emergency Items

- 62 Locations
- 8 Completed
- 21 In progress
- 7 CIP items
- 2,533 Inlets cleaned
  600 cleaned twice

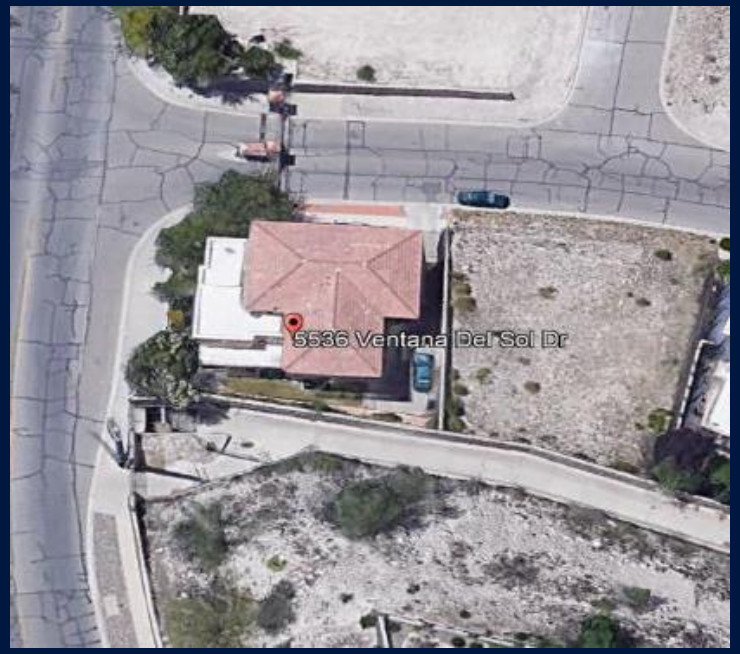
Completed

Project	Scope of work
Canterbury Channel – (twice)	Sediment and debris removal
New York Channel crossings debris removal – (twice)	Debris removal and rock wall reconstruction
Silver Springs Dam desilting and erosion – (twice)	Desilting
Fort Bliss Diversion conduit evaluation	Culvert Structural analysis
Thorn Dam	Exposed pipe, backfill and compaction
Montwood and Estrada	Clean inlet
Viscount and Hawkins	Clean inlet
Colfax / Euclid Neighborhood	Pump station and clean pond
Alabama at Harrison	Erosion and sidewalk reconstruction
Vasco Channel	Sediment and trash clean up
Pollard Pond	Vegetation removal
O'Keefe Basin	Trash removal

Canterbury Channel Sediment Removal

Debris removal within channel and crossing

New York Channel



Debris removal within channel and crossing

New York Channel Debris Removal

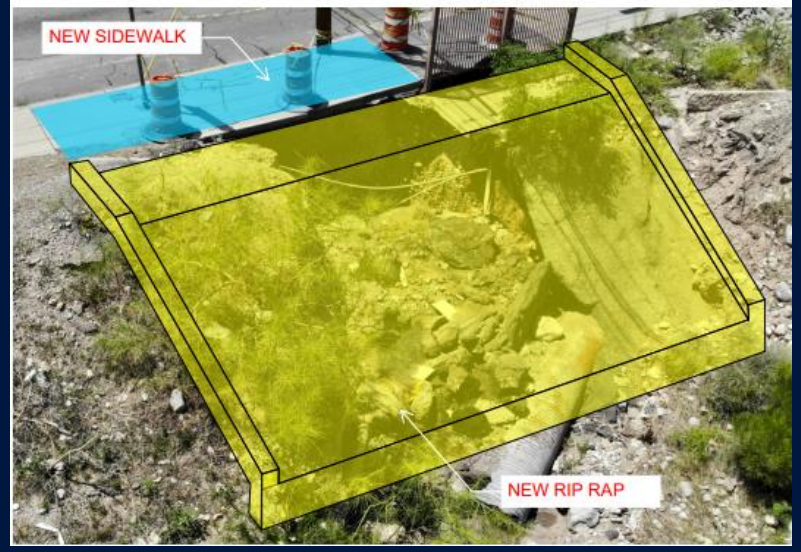
Channel stabilization in the works

Before

After

Same grate

Alabama and Harrison



Before

After

Fort Bliss Diversion Access Structures
Northeast

No structural damages; covers have been welded

Silver Springs Dam

O’Keefe Basin - Illegal Dumping

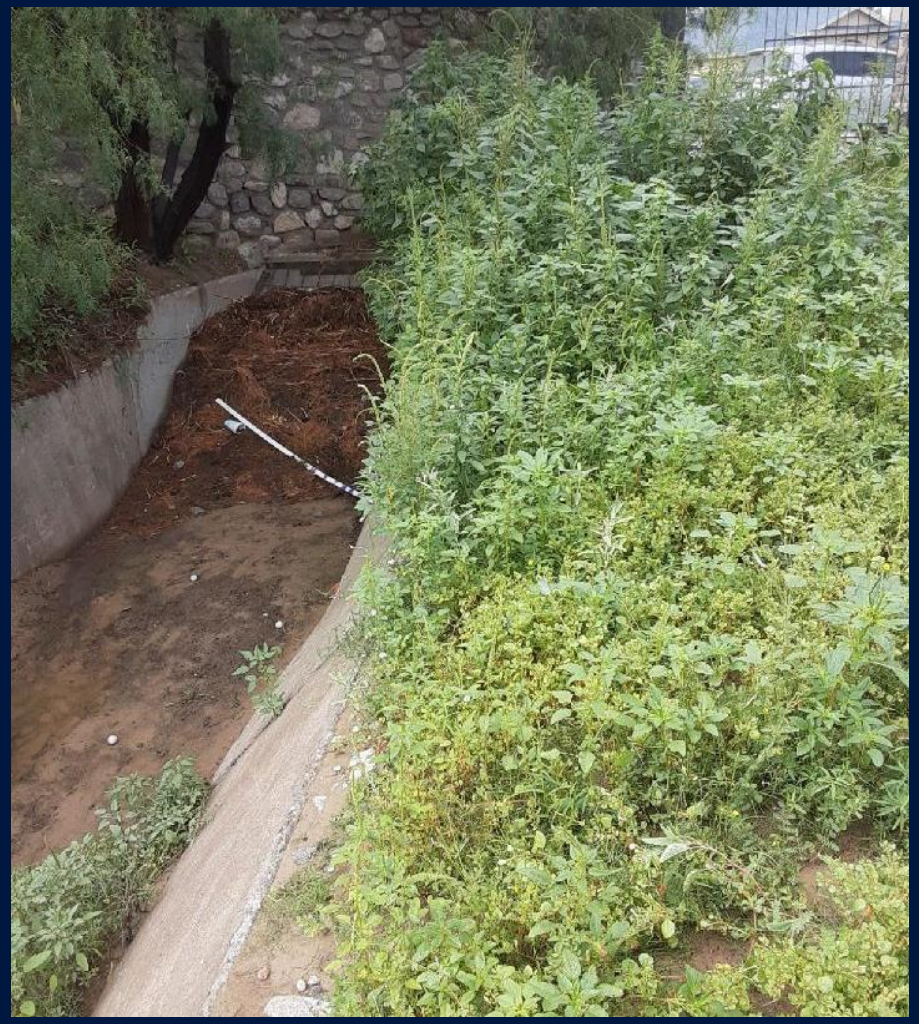
Inlet Clean Up

200 N. Copia

601 Resler

Pollard Pond II - Sacramento and Pollard

Vasco Channel - Vasco and Belvidere



In Progress

Project	Scope of work
Ojo De Agua Channel	Rebuild channel section and channel evaluation
Mesa Park Arroyo - twice	Rebuild arroyo, slope protection and culvert installation
Sam Snead Drainage	Complete system and rebuild street
High Ridge Channel	Repair broken concrete slab
Morehead Dam	Build access ramp and desilt
Memphis Dam	Obtain access easement, build access ramp and desilt
Edgemere and Airway	Rebuild drainage flume
Canterbury Channel – 2nd clean up	Debris removal and channel repairs

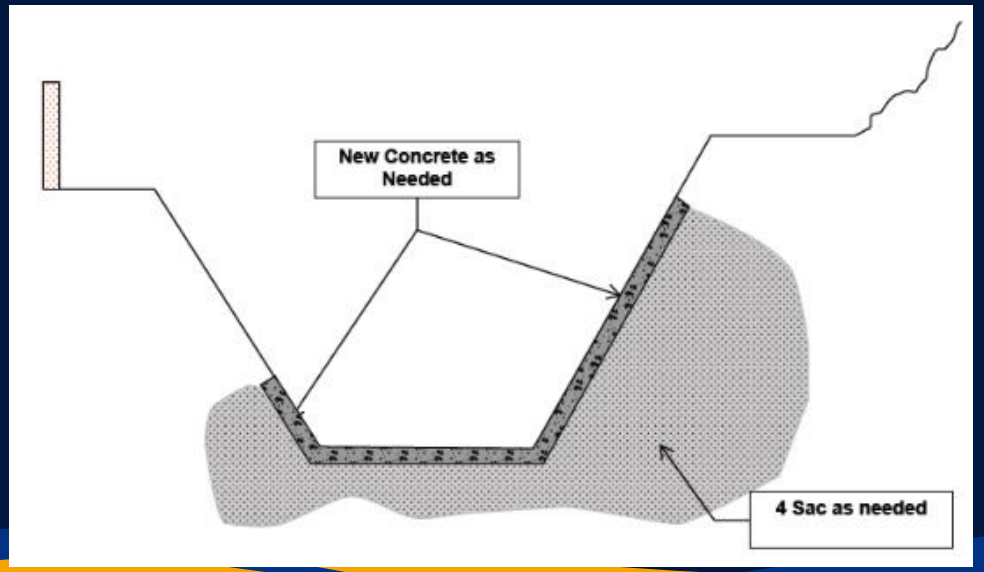
In Progress

Project	Scope of Work
Maple Street between Grant and Arizona	Replace west grated inlet on Maple Street with curb inlet, north of alley
Clark and El Paso Drive	Channel erosion and undermining
Lake Omega, North of Montwood	Design and Construction removal of blockage and concrete flume, cmp pipe colapsed
Yandell and Boone erosion repair	Backfill
New York Channel crossings debris removal - twice	Debris removal and channel construction
Fort Bliss Diversion Conduit	Trash grate design and construction
NE Ponding System	Backfill erosion and rebuild maintenance road
Thunderbird Channel	Repair concrete and erosion
Pico Norte Pond - North slope erosion	Build flume along north slope
Wallenberg / 5400 Sunscrest	Debris cleanup, construction of parapet wall
Robinson, downstream of tank	Repair flume and backfill erosion

Ojo De Agua Channel

210 linear feet of concrete channel repair

Thunderbird Channel



Mesa Park – Extreme Erosion

Work prior to 06/28 event

Repairs prior to August 12 event

June 28 event damages

August 12 event damages

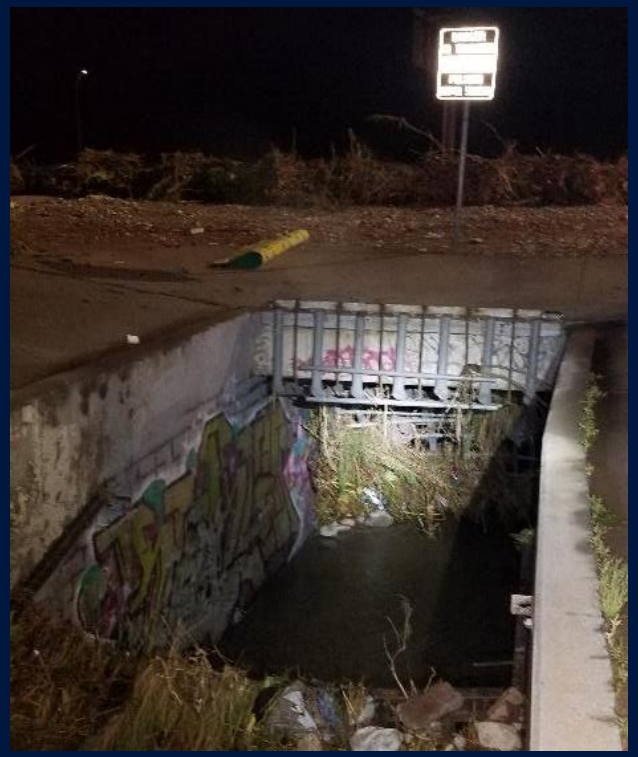
High Ridge

Protruding cement slab – design in progress

Sam Snead - Eastside

Undermining – reconstruction in progress

Fort Bliss Diversion / Julian Conduit



Structural Grate design in progress

San Marcos

Heavy sediment accumulation
Structure cleaned, pipe cleaning pending specialized contractor

Canterbury Channel – Second Clean Up

Debris removal, erosion and channel repairs

Pending Items

Clearview Channel

Trash removal and erosion repair

Franklin Crest

Large erosion compromising flume and sidewalk
Erosion repairs

Yandell and Boone - Central

Erosion repairs

Palisades

Erosion repairs

Pond 2 / Redd Road

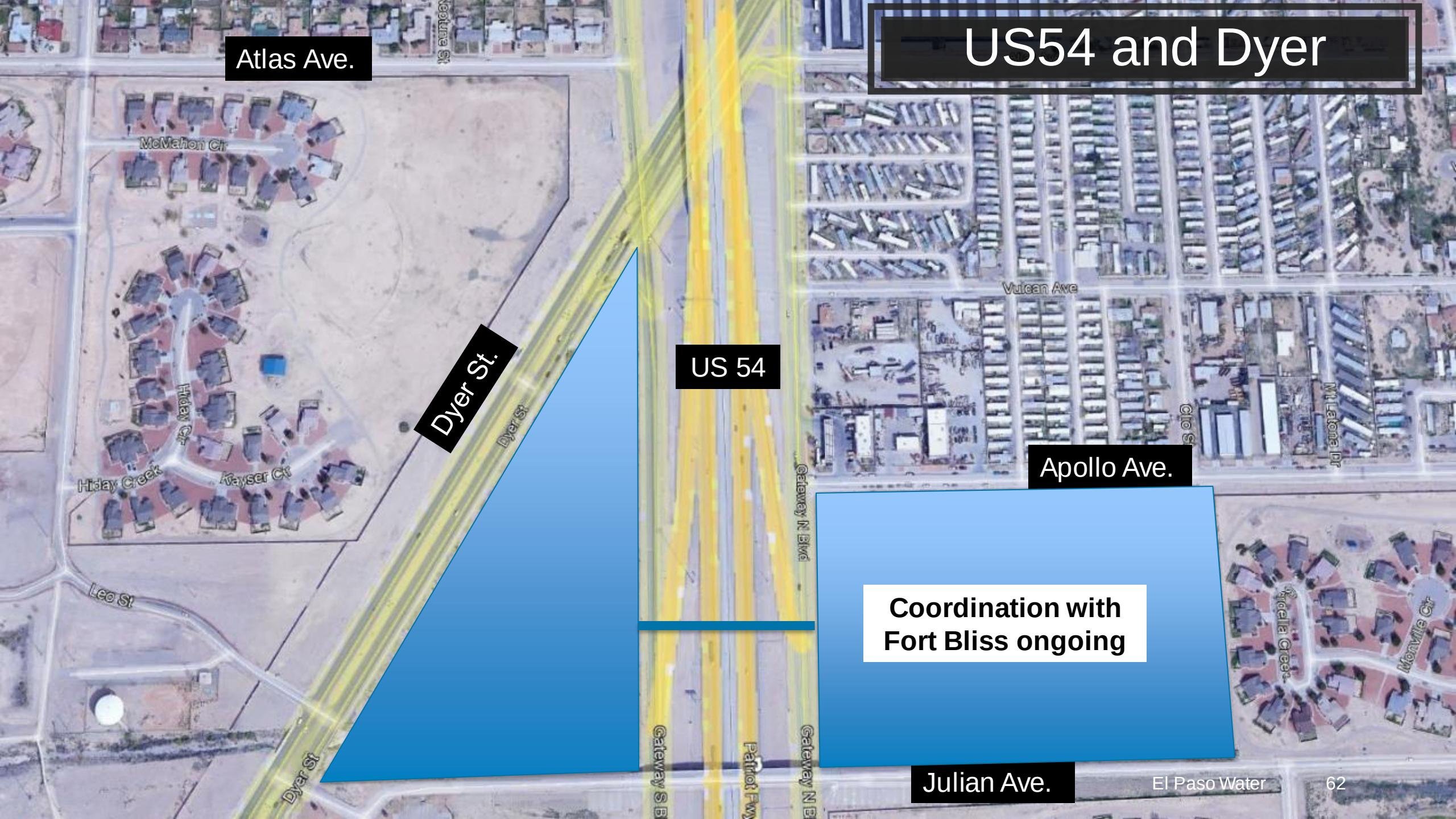
Erosion repairs

CIP Action

Project	Scope of Work
Buffalo Soldier Channel at International Underpass aka Chevron Channel	Land Acquisition, design and construction of linear pond
Clearview Channel desilting basin	Land acquisition, design and construct desilting basin
US54 and Dyer - NE Flooding	Coordinate with Fort Bliss – design and construction of dual ponds with tunnel connection
Magdalena Pond	Re-excavate pond
Doniphan 2 Pump Station – trash rack / sediment control	Construct inlets with sediment and debris trap
Lincoln Drain	Rebuild channel
Colfax / Euclid neighborhood	New pump station in design, land acquisition needed

Magdalena Pond

Intersection: Racetrack and Doniphan
Extreme flooding


US54 and Dyer
Atlas Ave.
McMahon Cir
Hiday Cir
Hiday Creek
Kayser Cir
Leo St
Dyer St.
Dyer St
Dyer St
US 54
Vulcan Ave
Gateway N Blvd
Apollo Ave.
Coordination with
Fort Bliss ongoing
Gateway S Blvd
Patriot Fwy
Gateway N Blvd
Julian Ave.

Successful Projects

Projects	Projects
Gateway Ponds	Van Buren Dam
Saipan Park Pond	Ocotillo Channel
Magnolia Pump Station	NE Channels
Dallas Pump Station	Austin Pond
Morenci Pond	Copia Pond
Grand Teton Basin	Kentucky Dam
Government Hills	Fairbanks Catch Basin
Mulberry Dam	Keystone Dam
Barker Storm System	Lee Trevino Phase I and II
Basin G System Improvements	Louisiana Dam Improvements
Belvidere Channel Spillway	Magnolia-Piedras Force Main
Cebada Outfall Conduit Clearance	Magnolia-Piedras Pump Station

Successful Projects

Projects	Projects
Cebada Outfall System Improvements	Mesa Dam Slope Erosion
Chihuahuita PS	Mesa Drain Improvements
Construction 85' Jersey Curve Drainage Easement	Mesa Hills Control Basin
Copia Pond Construction and Conveyance Improvements	Mesa Park Spillway Structure
Copper Queen Slope Stabilization	Montoya Drain Culvert Crossings
Dallas Conduit Clearing of Utilities	Morenci Pond
Dallas Conduit Structural Repairs Ph 1 and 2	Northeast Channel 2 Improvements
Dam No 9 Improvements	O'Keefe Conduit Repair
Doniphan Ditch Improvements	West Hills 23
Doniphan and Frontera junction box repairs	Pellicano Pond 1 Repairs
Eastwood Dam Excavation	Pershing Dam
Electric Ditch Improvementss	Pollard Pond (CE2 NADB)

Successful Projects

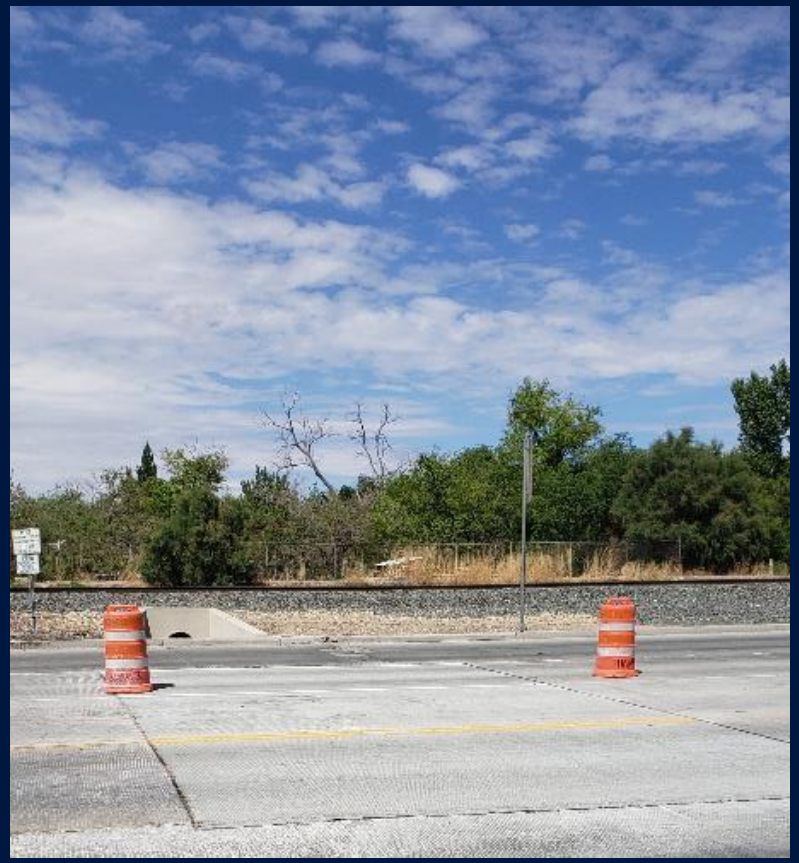
Projects	Projects
Gateway East Pond	Resler Canyon Outfall
Gateway West Pond	RV Channel Spillway
Gateway West Pond Expansion	San Lorenzo Street and Drainage Improvements
Glen Campbell Spillway Construction	Silver Springs Dam (NW19)
Government Hills Channel Inlet Improvements	South Central Projects
Grand Teton Basin	Thomas Manor Park-Pond and Pump Station Improvements
Ramos Court drainage	Van Buren Dam Improvements

Grand Teton

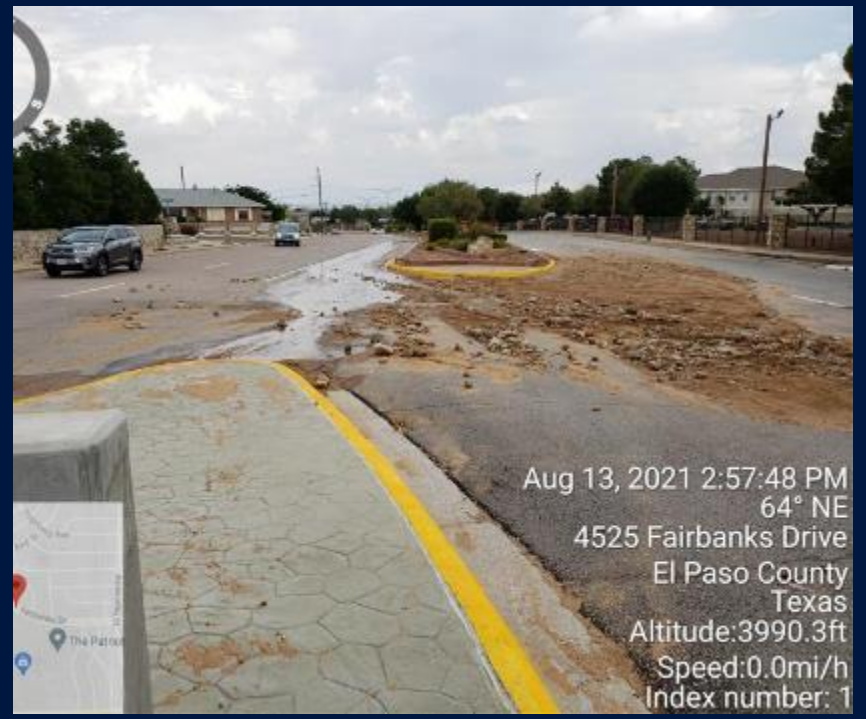



San Lorenzo

Doniphan and Frontera



Fairbanks Catch Basin - Northeast



5 feet of sediment and silt in some areas

Mulberry Dam - Westside

Keystone Dam - Westside

CoCoRaHS

Community Collaborative Rain, Hail & Snow Network

CoCoRaHS

Who can participate?

- Anyone interested in watching and reporting weather conditions

What will our volunteer observers be doing?

- Each time a rain, hail or snowstorm crosses an area, volunteers take measurements of precipitation from as many locations as possible
- Precipitation reports are recorded at www.cocorahs.org, and data is displayed and organized for users

Who uses CoCoRaHS?

- The National Weather Service, meteorologists, hydrologists, emergency managers, city utilities (water supply, water conservation, storm water), insurance adjusters, USDA, engineers, mosquito control, ranchers and farmers, teachers, students, and neighbors in the community

To sign up, apply online: https://www.cocorahs.org/Application.aspx

CoCoRaHS Volunteer

Community Collaborative Rain, Hail & Snow Network (CoCoRaHS) rain gage and application

COMMUNITY COLLABORATIVE RAIN, HAIL AND SNOW NETWORK
(www.cocorahs.org)

Volunteer Observer Application Form

Name: _____ Date: _____
Street Address: _____
City: _____ State:_____ Zip: _____ County: _____
Home Phone: ( ) _____ Daytime Phone: ( )_____
E-mail Address: _____ Daily Internet Access: Yes / No
Give a brief description of your map location (**Latitude/Longitude if available**): _____
_____
Nearest cross streets/roads: _____
(Please use back of application to draw a map of your site, if located in a rural area – thanks!)
If 18 years or younger (optional for adults), please fill out the shaded section below:

Age: _____ Parent or Guardian Name: _____
Grade: _____

How did you find out about this project? _____

In order to participate in this project, you are strongly encouraged to attend a special 60-minute training session on measuring rain and hail. Dates, times, and locations are posted on our Web site.

You will need a high capacity 4" diameter rain gauge to participate in this network (other gauges not accepted)
❑ I already have this particular type of gauge.
❑ I will purchase one from www.weatheryourway.com or
http://www.ambientweather.com/strgloteprra.html

Rain gauge will be read and emptied daily at:
❑ 7:00 a.m. *(highly recommended)* ❑ 6:00 a.m. ❑ 8:00 a.m. ❑ Other time: _____
It is important to the project that your rain gauge is read and emptied at the same time each day. We ask that when you are not at home please report your "accumulated amount" for the days that you are away.

If you or a family member would like to volunteer for additional network duties, check here:
❑ YES, I would like to help — Contact me!

I would prefer: ❑ On-line Training ❑ To attend a Training Session ❑ Walk-in Training

Please return this form to:
Local CoCoRaHS Coordinator

CoCoRaHS – Colorado Climate Center
Department of Atmospheric Sciences
Colorado State University - Fort Collins, CO 80523-1371

For Staff Use Only
*Station Name:*_____
*Station Number:*_____
*Latitude:*_____ *Longitude:*_____
*Date Trained:*_____ *Date Station Num. Issued:*_____
*Date Received/Shipped Gauge:*_____
*Date Contacted:*_____

Stormwater CIP FY21-22

Stormwater CIP FY21-22

- 5 Year (Years 1-5)
- 10 year (Years 6-10)
- Annual items included in 5-year CIP (Years 1-10)

5-Year CIP (Years 1-5)

Project	Estimated Cost
Flow Path 39A Detention (TIRZ 10)	$12.2M
Palisades Stormwater System	$ 6.4M
Dallas Street Outfall Basin – Land	$10.0M
Will Ruth Pond	$26.6M
Dam No. 2 (Morehead) Improvements	$ 420k
Dam 4 Upgrade – (Memphis Dam)	$ 912k
Arroyo 1A Dam – Detention Improvements	$ 7.3M
Humane Society Ponding Area	$ 763k
Dam 8 Upgrade (Murchison Dam)	$ 1.1M
Dam 6 Upgrade (Scenic Dam)	$ 1.0M
Dam 7 Upgrade (Tremont St)	$ 1.4M
***Northeast Flow Path 15 – Alcan Pond**	$23.9M
SAC 2 Detention Basin	$10.5M

Projects in **bold** text require land acquisition

Project	Estimated Cost
Sunmount Channel Expansion – EA2	$ 1.4M
Coates Dam Spillway	$ 696k
Dam 10 Improvements (Cliff Dam)	$ 810k
Clardy Fox Pump Station Improvements	$ 6.0M
City of El Paso CDB Paving Projects	$ 6.8M
Stormwater and Development of Natural Open Space	$ 5.7M
Coors Channel Improvements	$ 2.8M
Stevens Street Alley Conduit Improvements	$ 627k
Grissom and Hunt Corrugated Metal Pipe Replacement	$ 1.1M
Other East El Paso Drainage Systems	$27.9M
Old Spanish Trail Spillway Structural Repairs	$ 974k

Starred (*) projects continue throughout years 6-10

5-Year CIP Continued

Project	Estimated Cost
*Corrugated Metal Pipe (CMP) Replacement Program	$ 8.6M
Lorne Channel Improvements	$ 4.3M
Tobin Drain at Northgate Development	$ 2.7M
Other East El Paso Drainage Systems	$17.0M
Government Hills 90-in Conduit	$ 3.6M
St. Mark Drainage System	$ 1.8M
Fort Bliss Diversion Access Boxes	$ 2.6M
Keystone Conduit Lining	$14.8M
Carolina Drive CMP Rehabilitation	$ 1.5M
*Channel Improvements with El Paso County Water Improvement District	$ 2.0M
*Monsoonal Emerging Projects	$25.1M
Citywide Land Acquisition	$11.7M
Montoya Drain Wetlands	$12.5M
Northgate Diversion Channel Improvements	$ 6.0M

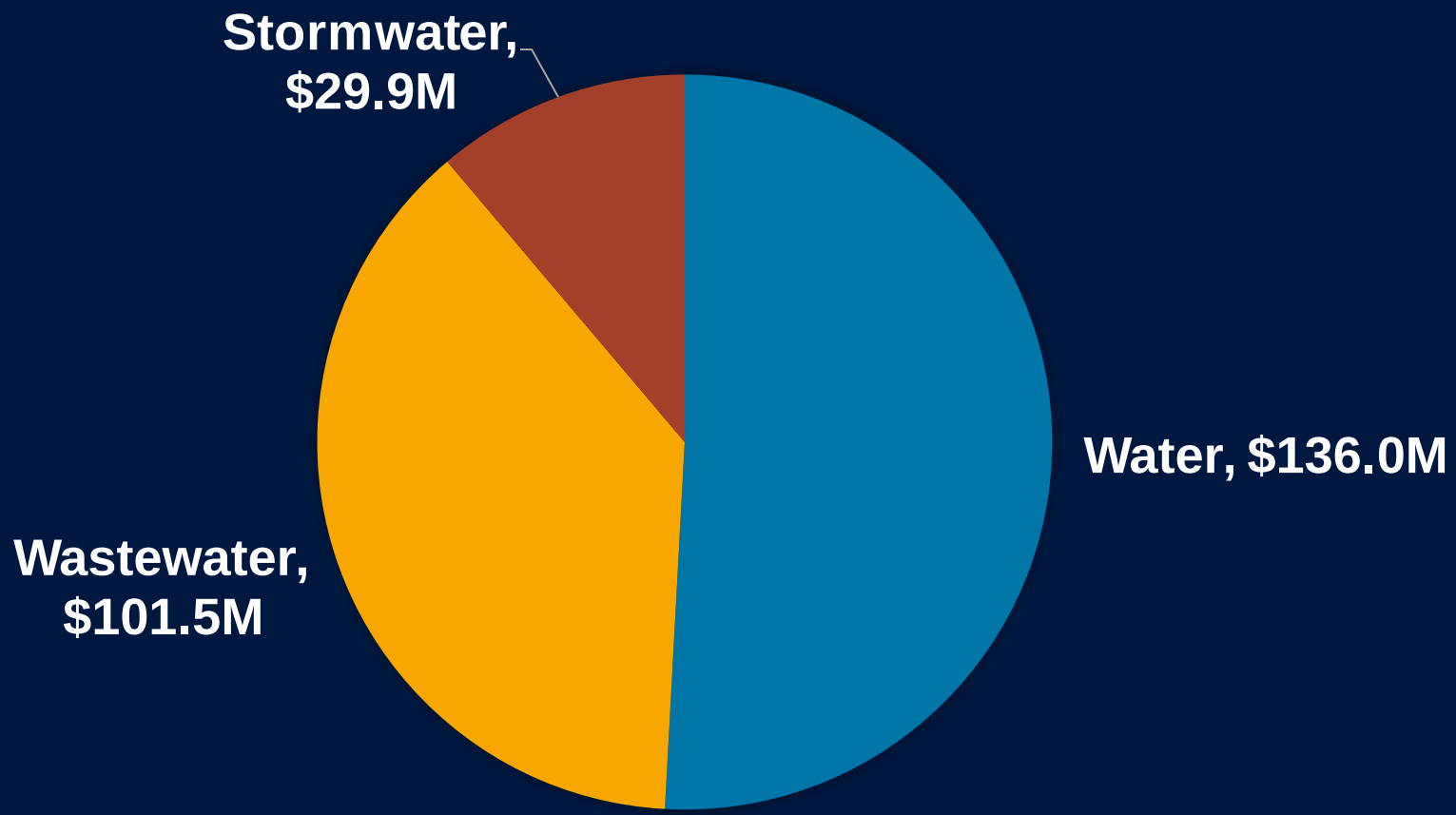
CIP 10-Year Plan (years 6-10)

Project	Estimated Cost
Americas Ten Watershed Improvements	$4.4M
Album Park Area Drainage Improvements	$3.8M
SAC 1 Detention Basin	$2.0M
Montview PS and Basin Improvements	$3.6M
Cypress Pump Station by River	$9.2M
Railroad Dr. Upstream Crossings	$1.7M
Various Localized Flooding Projects	$229K

Projects in **bold** text require land acquisition

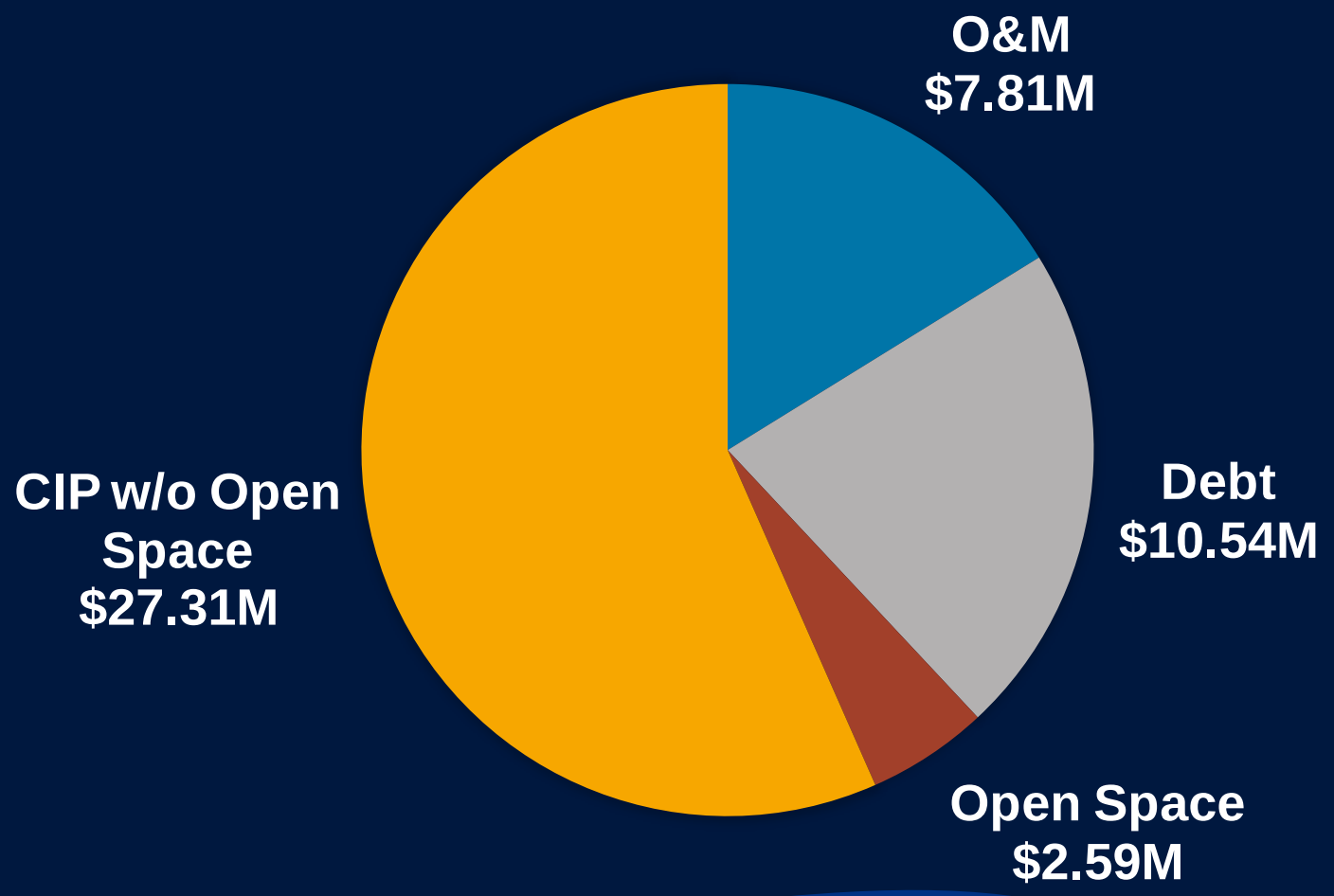
Total CIP Water, Wastewater, Stormwater

Approved Budget FY 21/22



Stormwater Budget Distribution

Stormwater Funds Layout



U.S. Army Corps of Engineers Partnership

- 3-year, $3 million feasibility study of Central watershed to assess condition of 10 dams and other structures and present alternatives for improved flood control.
- Design and construction of chosen option is then positioned to be funded by the Corps at the 65% level (35% match) with congressional approval.

Stormwater Fee

Rates and Fees for Residential Properties

Size	Area	Monthly Charge
Small	1-1,200 sq. ft.	$2.26
Typical	1,201-3,000 sq. ft.	$4.51
Large	3,001 sq. ft. +	$9.02

Rates and Fees for Non-Residential Properties

Type	Area	Monthly Charge
All	Each 2,000 sq. ft. Impervious Area	$4.60
Commercial	Fast Food Restaurant (11,123 sq. ft. approx. ¼ acre)	$24.14
Commercial	Car Dealership (176,068 sq. ft. approx. 4 acres)	$382.07

Stormwater Utility Responsibility (per SW Utility Ordinance #016668)

- **Reviewing and evaluating projects** and determining whether new projects need to be added and to adjust priorities. The priority projects are incorporated into the capital improvement program, where new infrastructure like dams, ponds, and channels are built with stormwater funds.

- **Improve public safety** with flood control efforts. This can include installation of pipelines and pump stations, drainage improvements, stormwater runoff channels, and multiple ponds.

- **Regularly scheduling maintenance** to ensure that personnel and equipment are used efficiently, and facilities are kept in working order. Stormwater crews remove trash, vegetation, debris and silt from facilities to keep stormwater flowing.

Stormwater Utility: Responsibility

Stormwater Utility:

- Plans
- Maintains
- Rehabilitates
- Prevents

However, the stormwater utility can only ensure, not insure.
What is outside the realm of responsibility to the utility cannot be executed. The stormwater utility works tirelessly to ensure public and private properties are removed from the flood zones to prevent damages. However, the utility cannot insure any damages not caused by the utility.

Stormwater Utility: Responsibility

Stormwater Management

- Responsible for proper operation and maintenance of stormwater system
- Stormwater is tasked with promptly addressing customer service requests

Design and Development Services

- Design, coordinate, manage in-house stormwater engineering projects & studies
- Coordinate and review drawings from various agencies
- Maintain record drawings and provide technical comments for new developments
- Develop and maintain technical design criteria, procedures, and drawing standards for preparation of construction documents

Project Administration

- Negotiate, administer and manage all consulting contracts for planning, pre-design, design, and construction of stormwater CIP
- Provide engineering and technical support to stormwater operations
- Oversee adherence to division policies, city, state and federal regulations; assist in formulating, maintaining, and executing EPWater's stormwater master plan

Stormwater Utility: Responsibility

Code Compliance

- Enforcement of prohibited discharges into stormwater system
- Conduct scheduled and non-scheduled inspections
- Receive complaints on illegal dumping and discharges and enforce compliance
- Emergency response on spills for impact to storm system

Open Space

- Considering the use of open space as natural drainage and the extent reasonably possible preserve the City's open spaces, greenways, arroyos and wilderness areas in their natural state, when developing the stormwater master plan

What Flood Insurance Covers

In the event of a flood, your National Flood Insurance Program (NFIP) policy covers direct physical losses to your structure and belongings. The NFIP offers two types of coverage – building coverage and contents coverage.

Building coverage protects your:

- Electrical and plumbing systems
- Furnaces and water heaters
- Refrigerators, cooking stoves, and built-in appliances like dishwashers
- Permanently installed carpeting
- Permanently installed cabinets, paneling, and bookcases
- Window blinds
- Foundation walls, anchorage systems, and staircases
- Detached garages
- Fuel tanks, well water tanks and pumps, and solar energy equipment

Contents coverage protects your:

- Personal belongings such as clothing, furniture, and electronic equipment
- Curtains
- Washer and dryer
- Portable and window air conditioners
- Microwave oven
- Carpets not included in building coverage (e.g., carpet installed over wood floors)
- Valuable items such as original artwork and furs (up to $2,500)

Questions?