



New Mexico's Risk MAP Program

Curry & Roosevelt County
Discovery

Pre-Discovery Webinar

August, 7, 2019

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FEMA



Agenda

- What is Risk MAP?
- Base Level Engineering
- Discovery
- Why is Discovery Important?
- Curry and Roosevelt Counties history
- Meetings and Participants
- Data to be Collected from the Community
- Next Steps

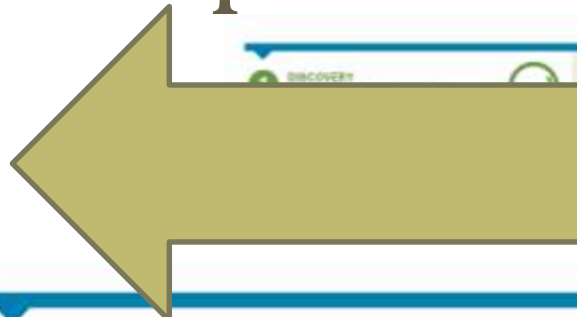


What is Risk MAP?

- **Mapping** – Identification of areas of natural hazard risk
- **Assessment** – Review and analysis of hazard areas
- **Planning** – Mitigation activities to reduce risk

Risk Map Process

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DISCOVERY

FEMA gathers information about local flood hazards and their risk in close coordination with the community to prioritize future mapping, risk assessment, or mitigation planning assistance.



Watershed/County
Community
Identification



Research



Hazard Mitigation
Plan Review



Determination
to move
forward with
Risk MAP
study.



Partner
Identification



Community
Outreach



Discovery Meeting

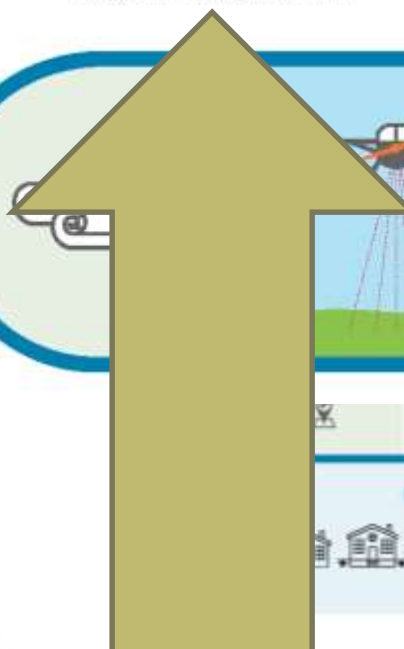


Discovery Report

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ENGINEERING & MODELING

FEMA analyzes the information gathered during Discovery and develops the first draft of the maps, called "work maps."



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RESILIENCE MEETING

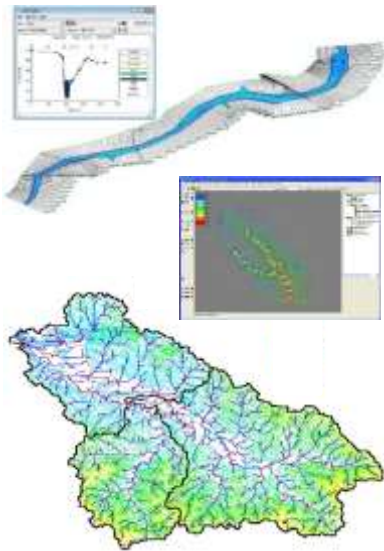
FEMA, State and local officials and partners work to identify and review resilience strategies, planning options, and potential actions to reduce risk.

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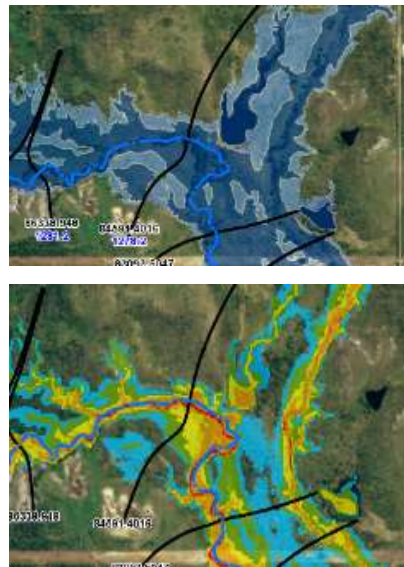
EFFECTIVE MAPS

Once effective, new maps and products are available through FEMA's Flood Map Service Center. The new data will inform flood insurance decisions and local building regulations. Community members can submit data to amend or review the FEMA as part of a Letter of Map Change (LOMC) process.

Base Level Engineering is a programmatic evolutionary step which provides:



Credible engineering analysis and modeling for local communities and developers.



Estimation of flood extents, water surface elevations and flood depths



May be adopted as Best Available Information (BAI) by communities & inform development decisions.

Base Level Engineering

- 2015 QL-2 Lidar collected
- 2017 Base Level Engineering initiated, completed 2018
 - The Lidar was collected based on the county boundaries and the BLE analysis will be conducted by watershed within the county.
 - Portales April 26, 2018
 - Clovis April 27, 2018

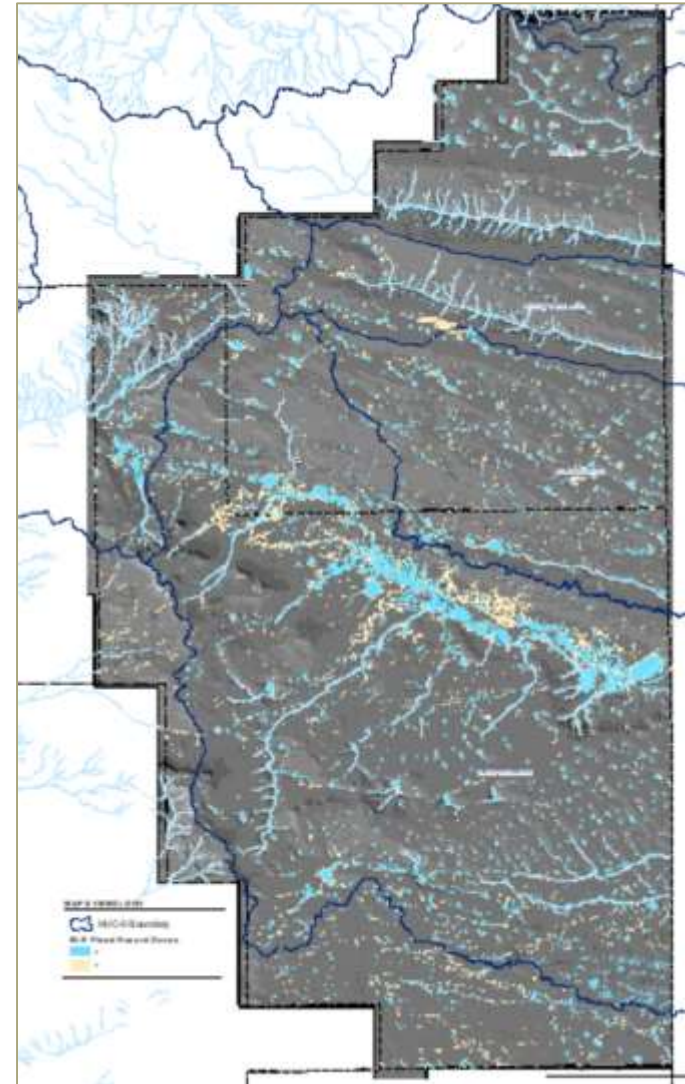
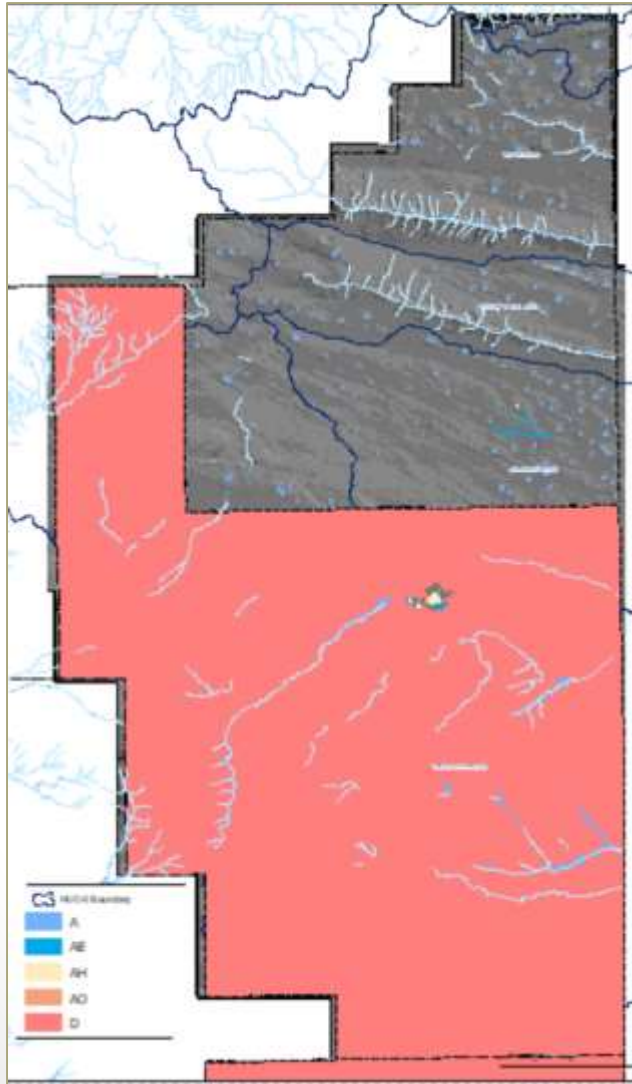


Digital Elevation Model

The screenshot displays the RGIS web application interface. At the top, the 'RGIS' logo is on the left, followed by a 'Hide Map' button, a search bar, and a 'Clear Search' button. Below the search bar, a message states: 'Your search in: /RGIS/Elevation and Terrain/LIDAR/DEM for any description with a format of all and at location anywhere found 1 results.' On the left side, a tree view shows the directory structure: RGIS > Elevation and Terrain > DEM. A large yellow arrow points to the 'DEM' folder. The main map area shows a geographical view of the region around Lubbock, Texas, with a white rectangular box highlighting a specific area. Below the map, the search results list 'Roosevelt-Curry DEM' with buttons for 'Add to map', 'Go to extent', and 'Download +'. Another large yellow arrow points to this result. At the bottom, a pagination bar shows 'First', 'Previous', '1', 'Next', and 'Last'.

<http://rgis.unm.edu/rgis6/>

BLE - Results



FEMA Region 6 BFE Viewer

Welcome to the

Base Level Engineering assessments are produced using high resolution ground data to create technically creditable flood hazard information that may be used to expand and modernize FEMA's the current flood hazard inventory.

The Estimated Base Flood Elevation Viewer allows users to:

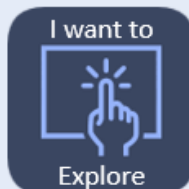
View Base Level Engineering Data

Access all Base Level Engineering available without GIS software.

Click **LEGEND** tab to view an explanation of all data shown in the viewer.

Click **MAP VIEW** button to open or close a second viewing window, for side by side comparison.

Click **DATA LAYERS** to add or remove layers from the map.

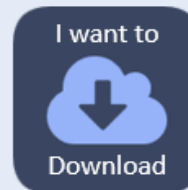


Estimated Base Flood Elevation Viewer

Download Dataset & Models

Our Data Download feature makes all of our Base Level Engineering data available to you for download.

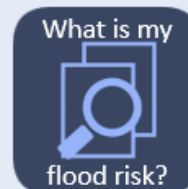
Click **DATA LAYERS** and add the **DOWNLOADABLE DATA** layer. Once loaded, users can choose which datasets to save.



Property Look Up

Where data is available, users can produce a property specific report with estimated Base Flood Elevation and Flood depth information.

Click **TOOLS** tab to create a property specific flood risk report with details in your vicinity.



Estimated Base Flood Elevation Viewer



1% and 0.2%
Estimated Flood Extent

1%
Estimated Flood Depth

www.InFRM.us/estBFE

Download the Data

The screenshot displays the FEMA Estimated Base Flood Elevation (EBFE) web application interface. A modal window titled "Download Data" is open, showing a table of available data sets for the location "San Marcos". The table lists various data sets, their file names, sizes, and download links. The background shows a map of the study area with a legend and a base map.

Data Set	File Name	Size	Download this table
HECRAS models	12100203_Models.zip	57.32 MB	Description Download
1% event depths, raster	12100203_Depth01.zip	56.12 MB	Description Download
0.2% event depths, raster	12100203_Depth002.zip	66.42 MB	Description Download
1% event elevations, raster	12100203_Elev01.zip	18.68 MB	Description Download
0.2% event elevations, raster	12100203_Elev002.zip	20.15 MB	Description Download
Vector spatial data, file geodatabase	12100203_VectorData.zip	46.18 MB	Description Download
Reports and documents	12100203_Documents.zip	2.60 MB	Description Download

Close

www.InFRM.us/estBFE

Estimated Base Flood Elevation (estBFE) Viewer

 Report

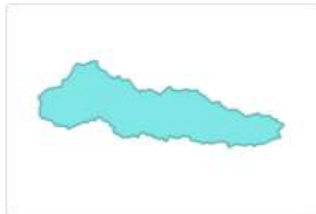
Legend


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 Data Layers

Downloadable Data (BLE)

✕ Remove



 Base Level Engineering (BLE) study area with data available for download

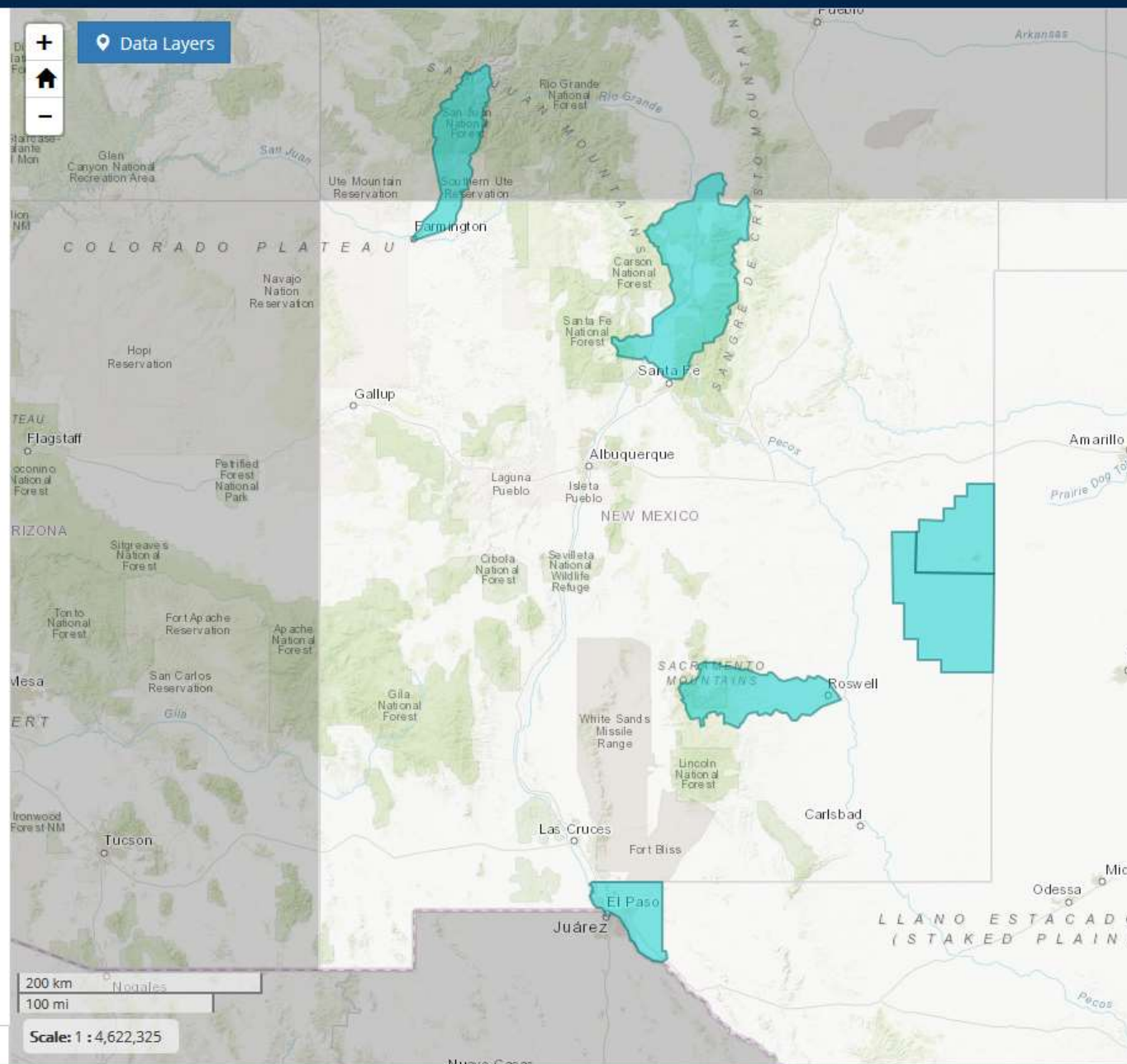
Tip: Click areas to open a download dialog.

Base Map: Topographic



Comments: This base map includes administrative boundaries, cities, water features, physiographic features, parks, landmarks, highways, roads, railways, and airports.

Data Source: ESRI ArcGIS Online



Quick Start

Glossary

 About

Risk MAP Discovery

The Goal

To work closely with communities to better understand local flood risk, mitigation efforts, and other topics and spark watershed-wide discussions about increasing resilience to flooding. The Discovery process of FEMA's Risk MAP program helps communities identify areas at risk for flooding and solutions for reducing that risk.



Next Step

DISCOVERY

Risk MAP Discovery

Capturing a More Complete Picture
of Your Watershed

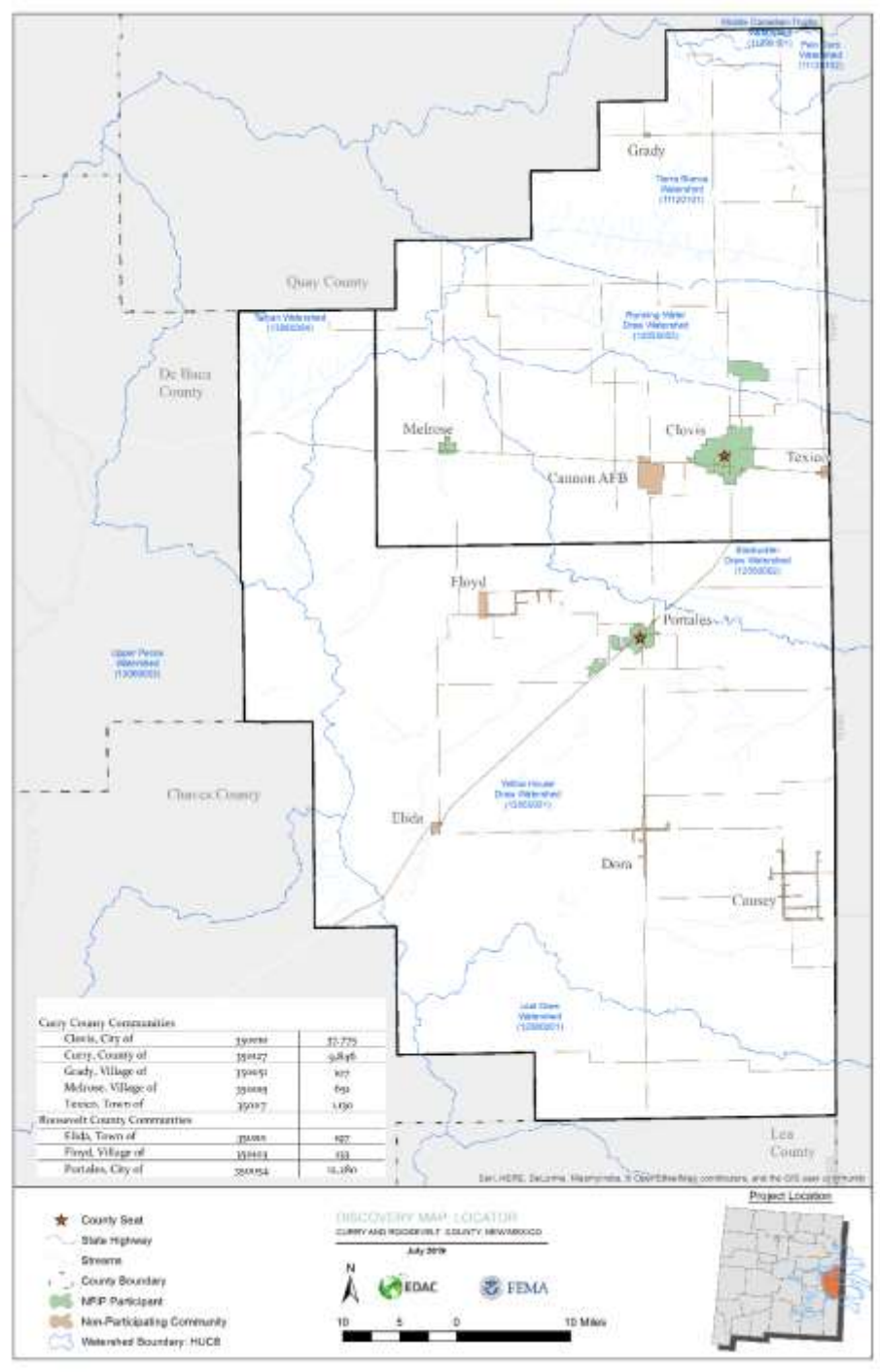
Discovery

- Holistic view of a geographic area; watersheds cross jurisdictional borders – Ownership of Risk
- Develop partnerships, combine resources, share flood risk information, develop a vision for the watershed – Whole Community
- Identifying and empowering communities to take action to reduce their flood risk - Resiliency

Why is Discovery Important?

- First face-to-face meeting in the community
- Know your risk
- Review Mitigation Plans
- Discuss mitigation opportunities
- Provide flood risk information





Curry and Roosevelt Counties

History and Local Issues

- Curry

- 1,407 sq miles
- Clovis 16 LOMAs, 1 LOMR-F
- Repetitive loss in Clovis

- Roosevelt

- 2,454 sq miles
- Portales 12 LOMAs, 1 LOMR
- Repetitive loss in Portales
- Zone D (Roosevelt)

Discovery Meetings

Meeting #1	Tuesday August 13th, 2019 2:00 pm – 4:00 pm	Bert Cabiness Government Center Assembly Room 321 Connelly Street Clovis, NM
Meeting #2	Wednesday August 14 th , 2019 10:00-12:00pm	Yam Theatre 219 S. Main Street Portales, NM

Participants in Discovery

- State National Flood Insurance Program (NFIP) Coordinator
- State Hazard Mitigation Officer
- State Floodplain Management Association
- Local elected officials
- Regional authorities
- Local floodplain administrators
- Local emergency management officials
- Local watershed groups

What Kind of Information?

- Areas of repeated flooding and insurance claims
- Future development plans
- Areas of low water crossings
- High water marks from recent floods
- Areas of evacuation during high water
- Wildfire perimeters
- Master drainage plans, flood risk reduction projects and large areas of fill placement
- Local Hazard Mitigation Plans
- Other flood risk information

What Mitigation Actions will you take?

- Mitigation is any sustained action taken to reduce or eliminate long-term risk to life and property
 - What are some areas of mitigation interest in your community?



**Land Use
Ordinances**



**Local Building
Codes**



**Management
Best Practices**



**Mitigation
Projects**



**Community
Identified
Mitigation
Programs**

Five Action Categories	Land Use Ordinances	<ul style="list-style-type: none"> • Zoning, Open space preservation • Floodplain management, Stormwater management • Coastal zone management • Setbacks, Freeboard requirements, Higher standards
	Local Building Codes	<ul style="list-style-type: none"> • Local Inspections & Enforcement • International Building Codes • Local Regulations, Permitting Development
	Best Management Practices	<ul style="list-style-type: none"> • Hazard Mitigation Plan is a living document – update often • Integrate Natural Hazards into other Planning Efforts • Community resource management • Inter-Agency Agreements, Increase capability through partnering • Lessons learned for process improvement • Education and Training for local staff (EMI)
	Mitigation Projects	<ul style="list-style-type: none"> • Floodproofing, Relocation, Elevation, Demolition, and Acquisition • Elevate or bury utilities • Drainage Improvements (Bridge, Culverts, Dams, Levees, etc) • Restoration of Beaches, Dunes Wetlands, Erosion Control, Soil Stabilization • Non-Structural and Structural Retrofits • Safe Room Construction
	Community Identified Mitigation Programs	<ul style="list-style-type: none"> • CRS, Firewise, StormReady • National Dam Safety Program • Community Emergency Response Teams • Community Outreach and Risk Awareness - Turn Around Don't Drown

Next Steps

- FEMA and the CTP will determine the path forward and scope for the study based on data and discussions with community
- Communities will be notified of the decision
- Information gathered will help the communities make better informed decisions to address the flood hazard risks that are identified



Questions?

Curry and Roosevelt County Discovery Meetings

August 13 and 14, 2019

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