Discovery Report

Valencia County, New Mexico

Valencia County, New Mexico September 25, 2019



Project Area Community List

Community Name*	CID
Valencia County Communities	
Valencia Unincorporated Areas	350086
Belen, City of	350088
Bosque Farms, Village of	350142
Isleta, Pueblo of	350057
Laguna, Pueblo of	350003
Los Lunas, Village of	350144
Peralta, Town of	350040
Rio Communities, City of	355333 ^E

^{*}Communities without CIDs are not included.

Table of Contents

Acrony	ms and Abbreviations	iii
I.	Discovery Overview	1
i.	Watershed Selection	2
II.	Discovery Efforts	14
i.	Engagement Plan	14
ii.	Pre-Discovery Data Collection	18
iii.	Discovery Meeting	
iv.	Discovery Implementation	
v.	Data Gathering Overview	
III.	Watershed Findings	
	_	
i.	Pre-Discovery Hydrology	
ii.	Pre-Discovery Hydraulics and Floodplain Analysis	29
iii.	Post-Discovery CNMS Analysis	29
IV.	Watershed Options	31
i.	Project Prioritization	37
List of	<u> Tables</u>	
Table 1:	NFIP Status of Project Area Communities	2
	Total NFIP Insurance Claims	_
	Repetitive or Severe Repetitive Loss within the Watershed	
-	Disaster Declarations in the Watershed	_
	Regional Project Team	
	FEMA History of Engagement	
	: Mitigation Plan Status	_
	o: Congressional Information	
	: Data Collection for the Watershed	
Table 12	: Project Discovery Workshop Times and Locations	19
Table 13	: Data Collection Summary - Pre-Discovery Workshop	21
Table 14	: Data Collection Summary - During and After Discovery Workshop	22
_	: Discharge Comparison at Community Limits	-
	5: Summary of Hydrologic Analysis	
-	r: Summary of Hydraulic Analysis	-
	S: CNMS Analysis	
	: CNMS Category Descriptions	
Table 20	o: Potential Watershed Activities	32

Table 21 Metrics and Rankings of Needs	33
<u>List of Figures</u>	
Figure 1: Watershed and Communities	4
Figure 2: Population Density in the Watershed	6
Figure 3: Current Percent Urban Coverage	7
Figure 4: Urban Changes Last Five Years	8
Figure 5: Single Claims in the Watershed	10
Figure 6: Risk, Need and Available Topographic Data	13
Figure 7: Grants Activity	16
Figure 8: Repetitive and Severe Repetitive Losses	24
Figure 9: Letter of Map Changes (LOMCs)	25

The basis and format of this document is derived from FEMA Guidance and Specification, Procedure Memorandums, Operational Guidance, Regional Standard Operating Procedures, and current draft revisions and proposed guidance to include, but not limited to;

Guidance and Specifications: Appendix I - Discovery

Guidance and Specifications: Appendix M – Data Capture Standards

PM 56: Guidelines for Implementation of Coordinated Needs Management Strategy (CNMS)

PM 59: Guidance for Implementation of Watershed-Based Studies

PM 60: Guidance for Flood Risk Assessment Data Development and Analysis

Operational Guidance No. 1-11: Risk MAP Guidance for Incorporating Mitigation Planning Technical Assistance and Training into Flood Risk Projects

Operational Guidance No. 4-11: Risk MAP Meeting Guidance

FEMA Region 6 Discovery & Project Pre-Planning SOP

Any revisions or changes to this document will require FEMA Region 6 Authorization prior to implementation.

Acronyms and Abbreviations

BFE base (1-percent-annual-chance) flood elevation

BLM Bureau of Land Management CFR Code of Federal Regulations

cfs cubic feet per second

CID Community Identification number
CLOMR Conditional Letter of Map Revision

CNMS Coordinated Needs Management Strategy

CRS Community Rating System

DFIRM Digital Flood Insurance Rate Map

EDAC Earth Data Analysis Center

FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map

FIS Flood Insurance Study

FPA Floodplain Administrator

GIS geographic information system

HEC-1 Hydrologic Engineering Center – Hydrologic Model Program
 HEC-2 Hydrologic Engineering Center – Hydraulic Model Program
 HEC-HMS Hydrologic Engineering Center – Hydrologic Modeling System

H&H hydrologic and hydraulicHMP Hazard Mitigation PlanHUC Hydrologic Unit Code

HWM high water mark

LiDAR Light Detection and Ranging System

LOMA Letter of Map Amendment

LOMC Letter of Map Change
LOMR Letter of Map Revision

MAT Mitigation Assessment Team

MDP Master Drainage Plan

MXD Map Exchange Document

MRGCD Middle Rio Grande Conservancy District

NFIP National Flood Insurance Program

NHD National Hydrologic Dataset

NMDHSEM New Mexico Department of Homeland Security and Emergency

Management

NM RGIS New Mexico Resource Geographic Information System

NRCS Natural Resources Conservation Service NVUE New Validated or Updated Engineering

RAMPP Risk Assessment, Mapping and Planning Partners

Risk MAP Risk Mapping, Assessment, and Planning

RL Repetitive Loss

PMR Physical Map Revision
RSC Regional Service Center
SFHA Special Flood Hazard Area

SHMO State Hazard Mitigation Officer

SHP ESRI Shape File

SRL Severe Repetitive Loss

USACE U.S. Army Corps of Engineers
USDA U.S. Department of Agriculture

USGS U.S. Geological Survey

USFWS U.S. Fish & Wildlife Service

I. Discovery Overview

The Federal Emergency Management Agency (FEMA) is currently implementing the Risk Mapping, Assessment, and Planning (Risk MAP) Program across the Nation. The purpose of Risk MAP is continued improvement of flood hazard information for the National Flood Insurance Program (NFIP), the promotion of increased national awareness and understanding of flood risk and the support of Federal, State, and local mitigation actions to reduce risk.

The vision and intent of the Risk MAP program is to, through collaboration with the State of New Mexico, local and tribal entities, deliver quality data that increases public awareness and leads to mitigation actions that reduce risk to life and property. To achieve this vision, FEMA has transformed its traditional flood identification and mapping efforts into a more integrated process of more accurately identifying, assessing, communicating, planning and mitigating flood risks. Risk MAP attempts to address gaps in flood hazard data and form a solid foundation for risk assessment, floodplain management, and provide the State of New Mexico, local and tribal entities with information needed to mitigate flood related risks.

The FEMA Region 6 office, in partnership with the Earth Data Analysis Center, University of New Mexico began the Discovery process in Valencia County in December 2018 to gather local information and readily available data to determine project viability and the need for Risk MAP products to assist in the movement of communities towards resilience. The watershed location can be seen in Figure 1.

Through the Discovery process, FEMA can determine which areas of the HUC8 Discovery watersheds may/will be funded for further flood risk identification and assessment in a collaborative manner, taking into consideration the information collected from local communities during this process. Discovery initiates open lines of communication and relies on local involvement for productive discussions about flood risk. The process provides a forum for a watershed-wide effort to understand how the included watershed community's flood risks are related to flood risk throughout the watershed. In Risk MAP, projects are analyzed on a watershed basis, so Discovery Meetings target numerous stakeholders from throughout the watershed on tribal, local, regional, State, and Federal levels.

In March 2019 FEMA and EDAC, as the State CTP, held a Discovery Meeting in Valencia County and one at the Pueblo of Laguna. During Discovery, FEMA and EDAC reached out to tribes and local communities to:

- Gather information about local or Tribal flood risk and flood hazards
- Reviewed current and historic mitigation plans to understand local and Tribal mitigation capabilities, hazard risk assessments, and current or future mitigation activities.
- Include multi-disciplinary staff from within their community to participate and assist in the development of a watershed vision.

The results of the Discovery process are presented in a Discovery Report, a watershed scale Discovery Map and the digital data that were gathered or developed during the process under under the fiscal year 2018 CTP Agreement, EMT-2017-CA-00010, Mapping Activity Statement (MAS) 12, between FEMA and EDAC.

This document contains the Discovery Report. The digital data submitted with this report contain correspondence, exhibits used at the Discovery meetings, geographic information system (GIS)

data, mapping documents (PDF, shapefiles, personal geodatabases and ESRI ArcGIS 10.x Map Exchange Documents [MXDs]), or other supplemental digital information. Graphics in this Discovery Report are available as larger format graphics files for printing and as GIS data that may be printed and used at any map scale.

Watershed Selection

For the Discovery process, watersheds or communities are selected and analyzed at the HUC 8 level and evaluated using three major factors (or trifecta factors): population, topographic data availability and risk decile. Decile risk calculated from 9 parameters including total population density, historical population growth, predicted population growth, housing units, flood policies, single claims, repetitive losses, repetitive loss properties and declared disasters.

Valencia County located in central New Mexico encompasses an area of approximately 1,4588 square miles and portions of three HUC 8 watersheds, the Rio San Jose (13020207), Rio Puerco (13020204), and the Rio Grande-Albuquerque (13020203). Tribal Lands belonging to the Pueblo of Isleta, and Pueblo of Laguna are located in Valencia County. Major communities include the municipalities of Belen, Bosque Farms, Los Lunas, and Peralta and a number of unincorporated communities including towns of Jarales, Pueblitos, Bosque, Tome, Adelino, El Cerro, Meadowlake, Valencia, Rio Communities, Tierra Grande, Casa Colorada, Highland Meadows, and Los Chavez. . The County is bordered by Bernalillo County to the north, Torrance County to the east, Cibola County to the west, and Socorro County to the south. There are no levees in the watershed that are shown to provide protection from the base flood on the DFIRMs.

Table 1 provides a status update for each community's NFIP participation, CRS rating, and current FIRMs. Six communities are participating in the NFIP and both Tribal communities are not participating in the NFIP. Significant efforts have been made to invite the tribal communities to join the NFIP. Additionally, none of the communities or Valencia County is participating in CRS. Figure 1 shows the locations of all communities in the watershed.

Table 1: NFIP Status of Project Area Communities

County	Community Name	Community Identification Number (CID)	Particip ating Commu nity?	CRS Rati ng	FIRM Date	FIRM Status	Populatio n (2010 Census)
Valencia	Valencia Unincorporated Areas	350086	Yes	NR	08/19/ 2010	Revised	47,458
Valencia	Belen, City of	350088	Yes	NR	08/19/ 2010	Revised	6,502
Valencia	Bosque Farms, Village of	350142	Yes	NR	08/19/ 2010	Revised	3,829
Valencia	Isleta, Pueblo of	350057	No	NR	08/19/ 2010	Revised	6,522
Valencia	Laguna, Pueblo of	350003	No	NR	08/19/ 2010	Revised	11,457
Valencia	Los Lunas, Village of	350144	Yes	NR	08/19/ 2010	Revised	14,905

Valencia	Peralta, Town of	350040	Yes	NR	08/19/ 2010	Revised	3,875
Valencia	Rio Communities, City of	355333 ^E	Yes	NR	08/19/ 2010	Revised	4,555

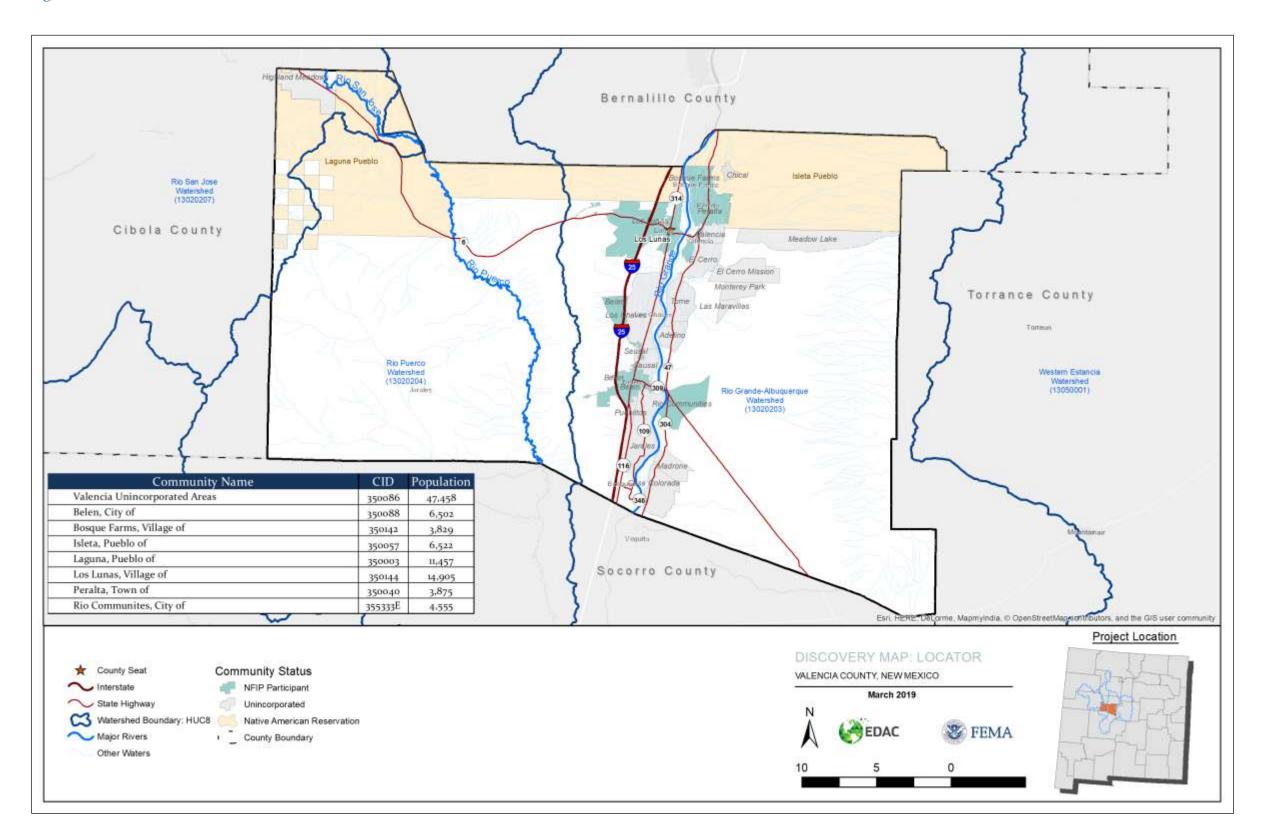
The Rio Grande is the primary river in the county flowing through the center of the county. The Rio Grande flow is regulated by Cochiti Dam, the only impoundment in the Middle Rio Grande Valley. The facility is authorized to regulate Rio Grande flows for flood and sediment control and is managed by the Albuquerque District of the U.S. Army Corps of Engineers authorized by PL 86-645, Pl 543 as amended, Senate Document No. 97, and PL 88-293. The dam's construction was completed in August of 1975. The Middle Rio Grande Conservancy District (MRGCD) is the governing authority for the river and their jurisdiction runs from ditchbank to ditchbank.

The Rio Puerco is the largest tributary to the Rio Grande, it drains a watershed area of 7,350 square miles.

Additionally as part of FEMA's Map Modernization program in 2010, Valencia County received a countywide update to the 1994 FIRMs. The effective date of the current Valencia County FIRMs is 8/19/2010.

According to the USACE National Levee Database there are 67 miles of levees representing 35 systems in Valencia County. None of these levees are accredited and none are owned by the USACE. In 1929, much of the low lying land outside the banks of the Rio Grande in the Middle Rio Grande Valley was flooded, prompting construction projects to reduce flood risk over the next decade. From 1930 to 1935, the Middle Rio Grande Conservancy District (MRGCD) constructed 190 miles of spoil banks (non-engineered levees) in the Middle Rio Grande Valley. The spoil banks were constructed using material excavated from earthen channels and then side-cast, or "spoiled," on the river-side of the excavated channel. The excavated channels served to drain irrigation water from agricultural fields on the landward side, and the spoil banks provided a degree of protection against future floods from the Rio Grande. In Valencia County 58.78 miles of levees are owned by MRGCD. In the decades that the spoil banks have been in place, river sediment has been deposited on the floodplain within the floodway, but not on the floodplain outside the floodway (landward of the spoil banks). Because sediment deposition has been contained between the spoil banks, the floodway has become elevated above the surrounding floodplain. As outlined in the Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units Integrated General Reevaluation Report and Supplemental Environmental Impact Statement. U. S. Army Corps of Engineers, Albuquerque District. DRAFT September 2017 (Downloaded April 4, 2019.) the USACE is studying the feasibility for replacing these levees. The current recommendation plan consists of constructing engineered levees for approximately 48 miles along four levee segments from Bernalillo to Belen, New Mexico. The USACE report and recommendations have not been finalized. The Middle Rio Grande Conservancy District is the non-Federal sponsor that has been identified by the USACE for this levee project.

Figure 1: Watershed and Communities



The western portion of the County is a checkboard of BLM, state-owned and private land while the northern portion of the county is Isleta and Laguna Pueblo lands. The majority of land within Valencia County is in private ownership however, the Bureau of Land Management (BLM) owns 48 square miles; the USFS manages 25 square miles in the Manzano Mountains along the eastern edge of the county, and the Pueblos of Isleta and Laguna include 217 square miles. The State of New Mexico owns 45 square miles in addition the New Mexico Department of Game and Fish owns approximately 1.4 square miles in Valencia County that it manages as wildlife refuges. The Bernardo Waterfowl Management Area contains 1,675 acres, Casa Colorado Waterfowl Management Area contains 420 acres, and the Belen Waterfowl Management Area is 230 acres.

There is one EPA Superfund(EPA Registry Id: 110010646024) site in Valencia County located at 102 Edeal Road, Los Lunas. It is the location of a former electric transfer waste salvage yard.

Population

The population in this county totals 76,571 people, based on the 2010 census. Los Lunas is one of the county's highest population center (population: 14,905). There are, in total, 17 populated areas inside this watershed. Figure 2 shows the population densities within Valencia County based on U.S. Census Data 2010.

Land Use

The land use of Valencia County is predominately rural land that is either herbaceous cover or shrublands. The area along the Rio Grande is used for agricultural purposes and a small portion of the County is forested. Figure 3 identifies the land cover classes for the county. Over time there has been an increase in the urban area of Valencia County mostly on the eastern side of the Rio Grande. Figure 4 shows the changes in the percent urban coverage that have occurred in the watershed in the since 2001.

Figure 2: Population Density in the Watershed

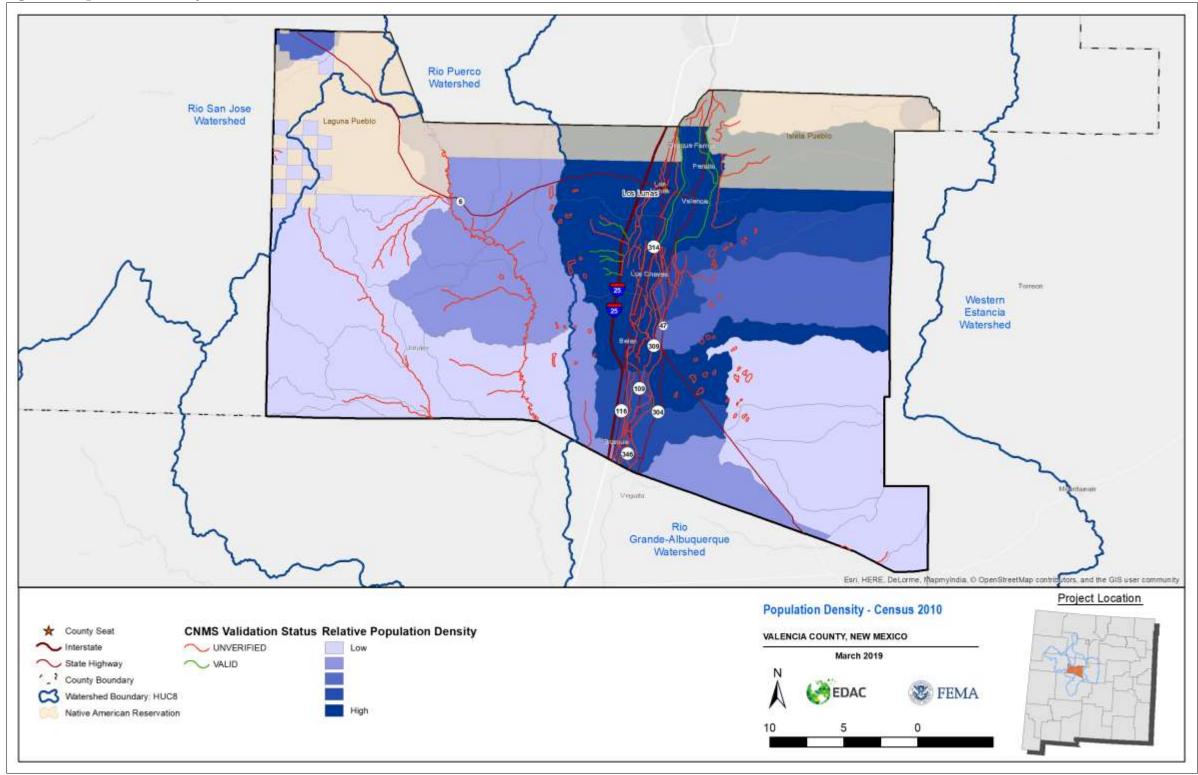


Figure 3: Valencia County Land Cover

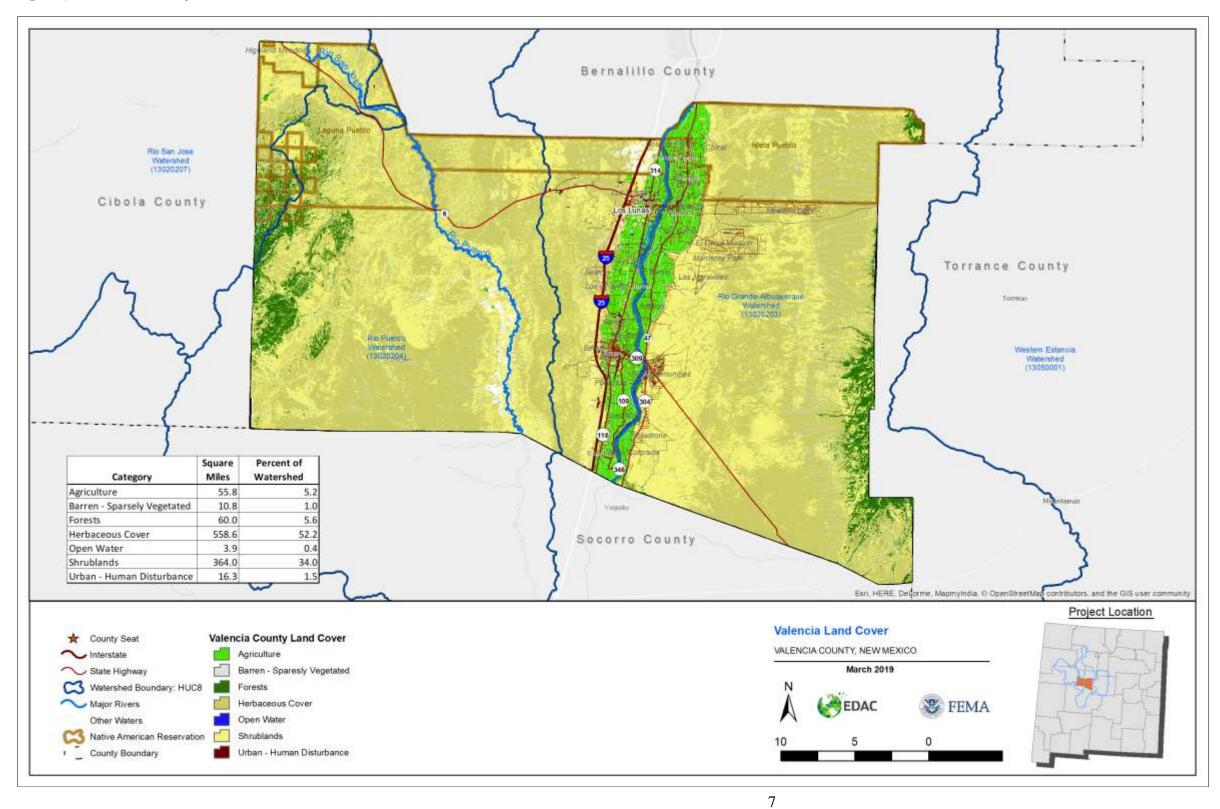


Figure 4: Urban Change

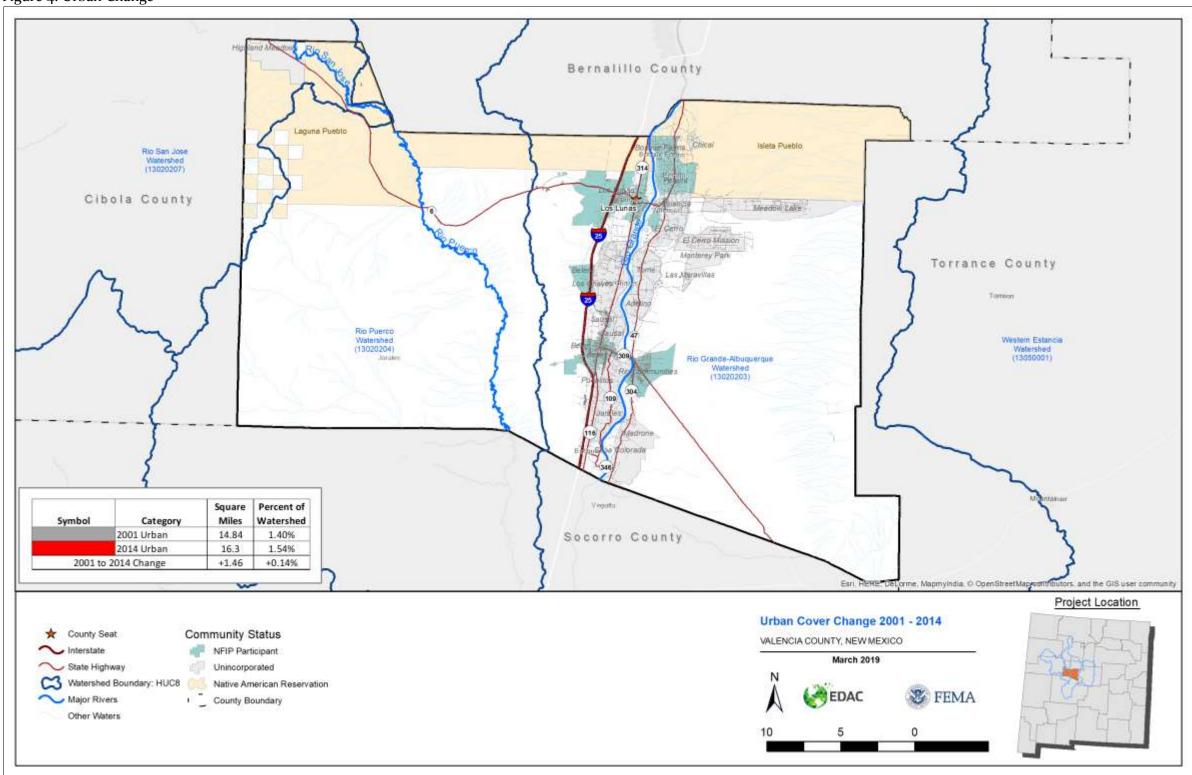


Table 2 lists the number of NFIP insurance claims for the portions of the communities within the County. Of the insurance claims filed within the watershed, 22 percent have been filed in the community of Belen and 61 percent were filed in the unincorporated areas of the county. Figure 5 depicts the distribution of NFIP insurance claims within the Valencia County.

Table 2: Total NFIP Insurance Claims

Total NFIP Insurance Claims by Community				
Community	Claims			
Belen	21			
Bosque Farms	6			
Los Lunas	4			
Peralta	6			
Rio Communities	1			
Unincorporated Valencia County	59			

In addition to NFIP claims, there are no Repetitive or Severe Repetitive Loss properties within Valencia County, see Table 3.

Table 3: Repetitive or Severe Repetitive Loss within the Watershed

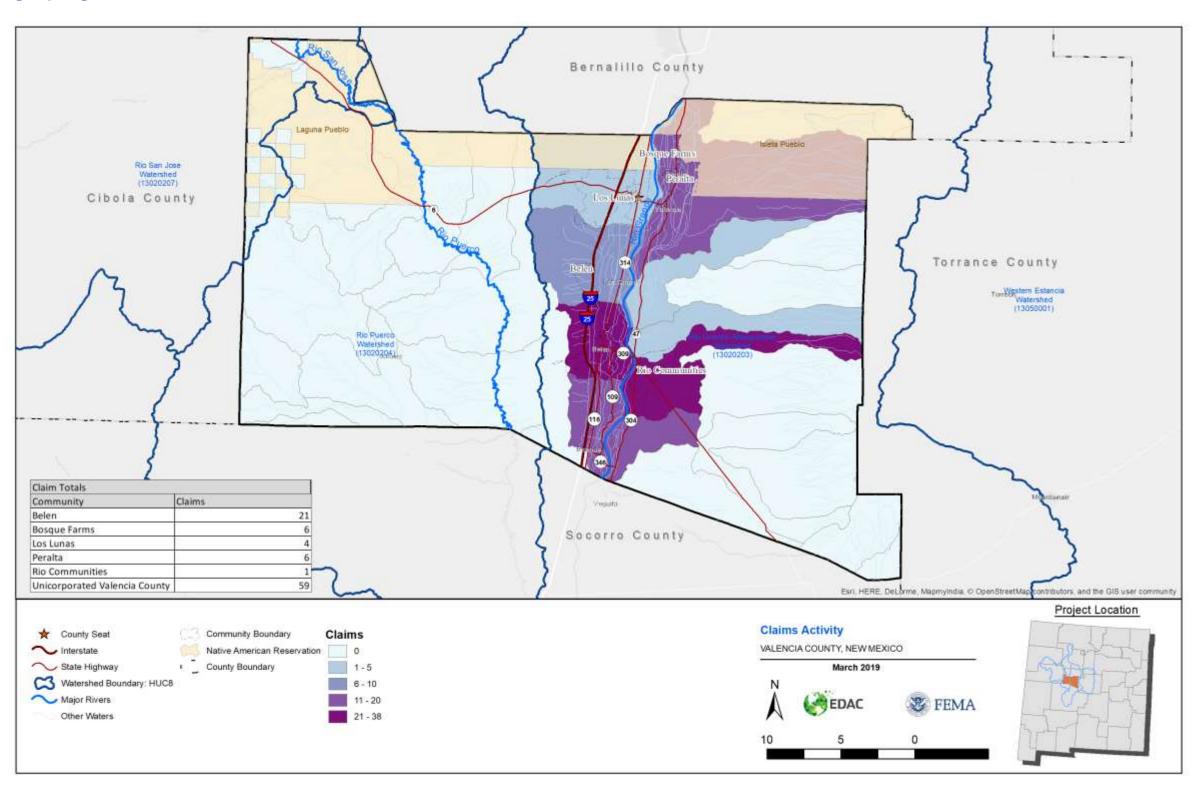
Repetitive Losses/Severe Repetitive Losses By Community							
Number of Average Claim Per							
Community Properties Total Claims Property							
N/A	None	None	None				

Valencia County has had a history of flooding as demonstrated by presidential disaster declarations with 3 issued in the past 42 years. A recent Presidential Disaster Declaration included many counties near and adjacent to Valencia County, but did not include Valencia County itself: DR-4148, declared in July 2013, included Socorro County to the south and Bernalillo County to the north and the Pueblo of Isleta. The County did however received damages during this event. Table 4 lists recent disaster declarations for multiple hazards within the watershed.

Table 4: Disaster Declarations in the Watershed

Date of Declaration	Community Declared	For Hazard
9/22/2013	Pueblo of Isleta	Severe Storms and Flooding, and Mudslides
7/26/2003	Valencia County	Severe Storms and Flooding

Figure 5: Single Claims in the Watershed



Topographic Data

Recent or pending planned acquisitions of topographic data have been made for Valencia County. Topographic coverage totals are at 100 percent for the entire watershed. The Middle Rio Grande Council of Governments' 2018 Lidar Project collected LiDAR data for the central portion of the county. The 2018 Rio San Jose, Rio Puerco, the 2017 Mountain Air District, Cibola National Forest and other NRCS/FEMA Lidar acquisitions the remainder of the County. All of the LiDAR data is available from the NM RGIS Clearinghouse. Figure 6 provides a snapshot of CNMS factors for each stream segment, the HUC 12 risk decile, and the availability of topographic data.

CNMS

Significant streams in this watershed include the Rio Grande and the Rio Puerco. The USGS provides a National Hydrologic Dataset (NHD) that can be used to identify stream miles that reflect drainage areas of one square mile from available topographic data. The NHD stream mileage may be used to gain a sense of the total potential stream miles for a watershed. Using the NHD, there are approximately 1,404 miles of streams in Valencia County.

The Coordinated Needs Management Strategy (CNMS) Inventory provides a snapshot of the status and attributes of currently studied streams existing within FEMA's floodplain study inventory. In general, the stream mileage shown in CNMS reflects streams with an approximately one-mile drainage area and that currently have effective Special Flood Hazard Areas (SFHA) designated for them. CNMS does not reflect the total potential of stream miles to be studied within a watershed.

In addition to listing the miles of studied stream within a watershed, CNMS documents certain physiological, climatological, or engineering methodological factors that may have changed since the date of the effective study. The stream miles shown in CNMS are attributed with an evaluation of a Validation Status and Status Type that allows an examination of the condition of a given study or group of studies. Studies which are considered Valid in CNMS are the only studies which contribute to the New Validated or Updated Engineering (NVUE) metric.

The NVUE metric is used as an indicator the status of studies for FEMA's mapped SFHA Inventory. Those studies which are categorized as 'unverified', typically indicate that there are some factor of change since the SFHA became effective or may have a deficiency warranting restudy. CNMS stream mileage categorized as 'Requires Assessment' require further input to determine their validity – often because they represent paper inventory or non-modernized studies. CNMS aids in identifying areas to consider for study during the Discovery process by highlighting needs on a map, quantifying them (mileage), and providing further categorization of these needs in order to differentiate factors that identify the needs.

Table 5 compares the NHD data to the CNMS data and summarizes the Validated NVUE stream mileage from CNMS for the watershed.

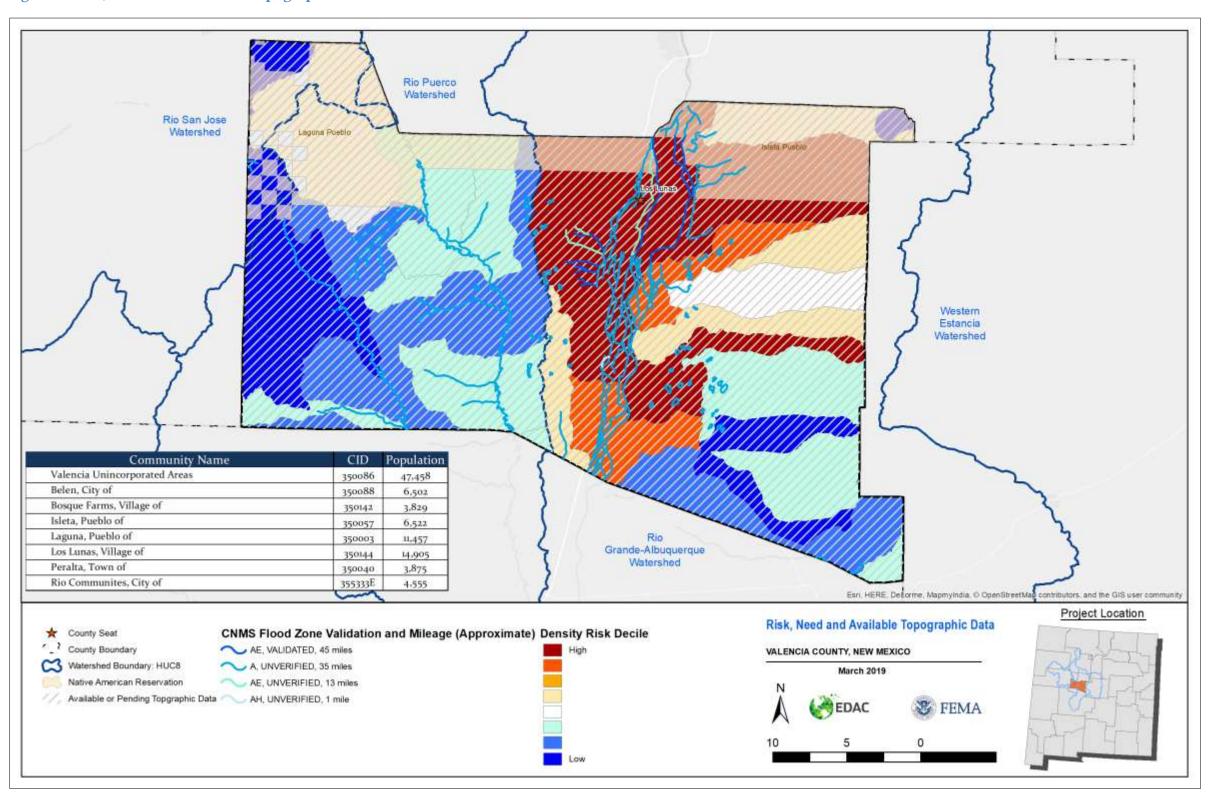
Table 5: NVUE Approximate Stream Mileage in the Watershed

NVUE Validation	Stream Miles
NHD Streams (streams with a drainage area of greater than one square mile)	852.91
CNMS Streams (streams with effective SFHA)	381.95
Stream Miles not accounted for in CNMS	470.96
CNMS Valid Zone AE / AH	44.73
CNMS Valid Zone A	0
CNMS Unverified Zone AE / AH	13.97
CNMS Unverified Zone A	323.25
CNMS Zone AE / AH Requiring Further Assessment or in the process of being studied	0
CNMS Zone A Requiring Further Assessment	0
All Stream Miles not accounted for in CNMS as there are no effective SFHAs (sum of the below)	470.96
Stream Miles not accounted for in CNMS that would fall in land that <i>could be</i> developed	438.98
Stream Miles not accounted for in CNMS that would fall in land that <i>could not be</i> developed	31.98

Within Valencia County and using these criteria from CNMS, approximately 323.25 miles of Zone A and 13.97 miles of Zone AE areas were identified as being unverified. Streams included in the unverified grouping include the Rio Grande and the Rio Puerco with approximately o miles of Zone AE flagged as requiring further assessment or are in the current process of being studied with ongoing projects. Additionally, o miles of Zone AH and approximately 44.73 miles of Zone AE in the watershed were characterized as being Valid under the NVUE metrics.

Figure 6 provides a snapshot of CNMS factors for each stream segment, the HUC 12 risk decile, and the availability of topographic data. The combination of these three factors resulted in the selection of Valencia County for a Discovery Project.

Figure 6: Risk, Need and Available Topographic Data



II. Discovery Efforts

i. Engagement Plan

Pre-Discovery Community Engagement

Table 7 provides the members of the Regional Project Team was made up of the following staff.

Table 6: Regional Project Team

Organization	Name	Project Role
FEMA R6	Jerry Clark	Project Monitor
FEMA R6	Shanene Thomas	Tribal Liaison and Mitigation Planning
FEMA R6	Trey Rozelle	Floodplain Management & Insurance
FEMA R6	Christie King	Hazard Mitigation Assistance
NMDHSEM	Veronica Chavez	NFIP Coordinator
NMDHSEM	Wendy Blackwell	State Hazard Mitigation Officer
Earth Data Analysis Center	Shawn L. Penman	CTP Coordinator

FEMA and the Regional Project Team were in contact with all Watershed stakeholders via letters, email, and phone calls before this Discovery meeting to request local participation. In addition to assisting scheduling the meeting, locals were asked to help identify additional key people who should be included in the Discovery process and acquire any data that will assist in the risk identification and assessment for Valencia County. A detailed list of Communities, local officials, federal, state and regional agencies that were invited to participate in the Discovery Process is included with the supplemental digital data accompanying this report.

In preparation for the Discovery meeting, the Regional Project Team:

- Gathered information about local flood risk and flood hazards
- Reviewed mitigation plans to understand local mitigation capabilities, hazard risk assessments, current or future mitigation activities, and areas of mitigation interest
- Mapped known and available Grant Activity in the Watershed
- Mapped known and available Claims Activity in the Watershed
- Mapped Percent Urban Cover in the Watershed
- Mapped Urban Change from 2001 2014
- Mapped Population Density in the Watershed

The Regional Project Team began outreach efforts to the local governments within the Watershed, Congressional and public officials, to inform them of the Discovery process and to invite them to participate and contribute information about the Watershed about water resource concerns.

Discussions are being held with federal and state agencies about potential partnership opportunities, as well as their help in identifying flood risk throughout the watershed.

Table 7: FEMA History of Engagement

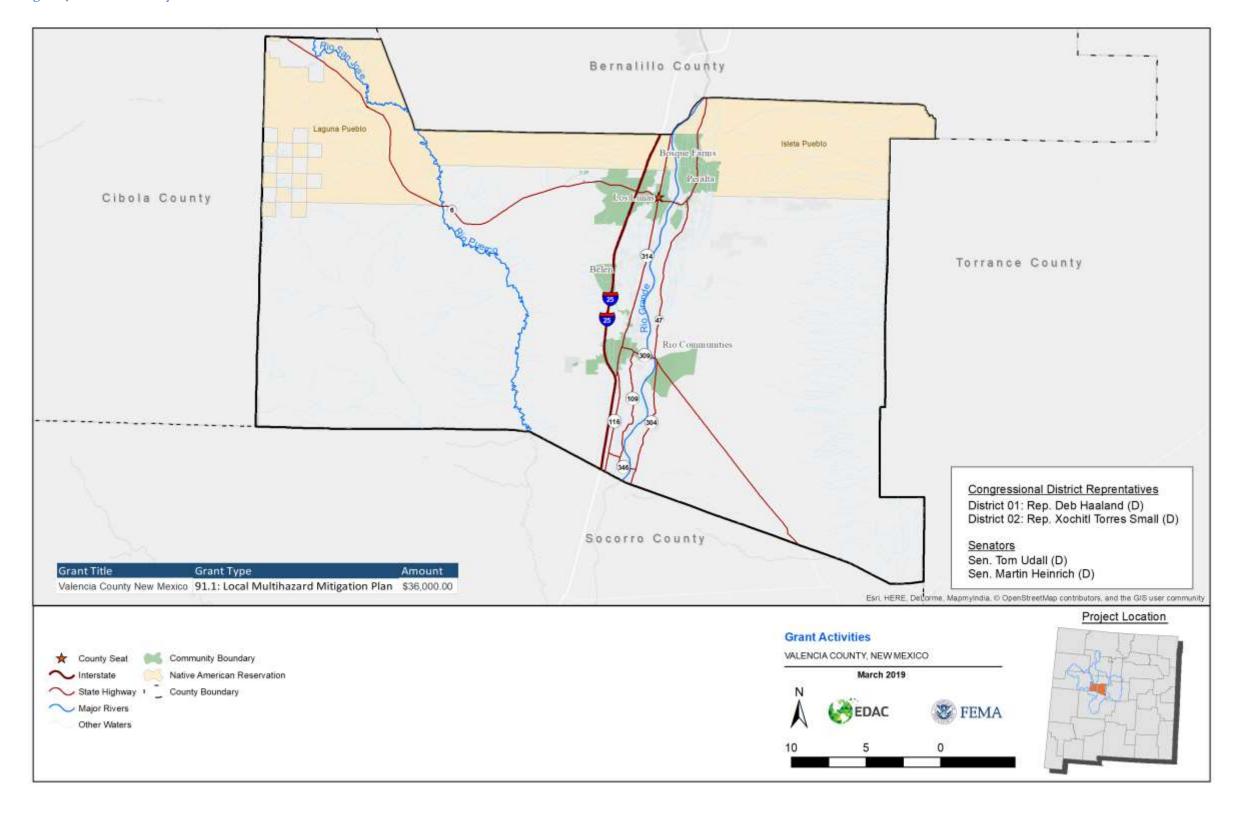
Community Name	Type of Engagement	Date	Agency	Comments
Valencia County	CAV/CAC	4/23/2019	FEMA, NMDHSEM	Findings Minor (Note CAV open as of June 2019)
Valencia County	New Mexico Floodplain Managers Association, Session, "Mapping Priorities for the State of New Mexico" Data Gathering Effort	4/17/2014	FEMA, RAMPP, STATE, EDAC	Data hosted on RMD Sharepoint
Valencia County	Topographic Acquisition / LIDAR	2017/2018	MRCoG, FEMA, NRCS	Coordinated through NM Lidar Subcommittee
Valencia County	FIRM Map Updates	2010	FEMA	

Table 8: Mitigation Plan Status

Community Name	Community Mitigation Action:	Hazard Mitigation Plan Name:	Plan Status:	Plan Approved	Plan Expires
New Mexico		New Mexico State Hazard Mitigation Plan	Approved	9/7/2018	2023
Valencia County		Valencia County/ City of Belen/Town of Peralta/Village of Bosque Farms/ Village of Los Lunas Hazard Mitigation Plan	Approved	6/1/2015	5/30/2020
Pueblo of Laguna		Laguna Pueblo Hazard Mitigation Plan	Approved	7/9/2015	7/8/2020
Pueblo of Isleta		N/A	Expired		

Figure 7 displays the locations and types of mitigation grant activity in Valencia County which have been approved by FEMA. This map only shows approved grant activity. There may be additional grants being pursued at both the state and local level within the watershed.

Figure 7: Grants Activity



Pre-Discovery Congressional Engagement

In order to achieve success with any Region 6 Risk MAP project, members of Congress and their staff members, as well as the media must be aware and understand the study process. Working with FEMA External Affairs to inform both legislators and the media will improve credibility and opens the door to understanding risk in a more holistic, comprehensive manner. An initial contact briefing of the legislators will occur prior to the Discovery meeting.

Congresswoman Xochitl Torres Small, New Mexico 2nd Congressional District, serves on the House Committee on Homeland Security and is Chair of the Subcommittee on Oversight, Management and Accountability.

Table 9: Congressional Information

II.C.C.		Term	FEMA III storm of Engagoriant
U.S. Senat		Expiration	FEMA History of Engagement
Tom Udall ((D)		November 2018, Congressional &
			Intergovernmental Affairs Liaison, Juan J. Ayala met
		2020	with staffers
Martin Heinric	ch (D)		November 2018, Congressional &
			Intergovernmental Affairs Liaison, Juan J. Ayala met
		2024	with staffers
U.S.	District	Term	
Representative	Number	Expiration	FEMA History of Engagement
Xochitl Torres			Congressional & Intergovernmental Affairs Liaison,
Small (D)			Juan J. Ayala anticipates meeting with staffers in
	2	2021	Spring 2019
Debra Haaland (D)			Congressional & Intergovernmental Affairs Liaison,
			Juan J. Ayala anticipates meeting with staffers in
	1 1	2021	Spring 2019

	State Senators		
District	Name		
29	Gregory A. Baca (R)		
30	Clemente Sanchez (D)		
39	Elizabeth Stefanics (D)		

	State Representatives			
District	Name			
07	Kelly K. Fajardo (R)			
08	Alonzo Baldonado (R)			
49	Gail Armstrong (R)			
50	Matthew McQueen (D)			
69	Harry Garcia (D)			

Contact information for the community and additional stakeholders can be found with the supplemental digital data.

Tribal Engagement

The two Tribal Nations in Valencia County, the Pueblo of Isleta and the Pueblo of Laguna were invited to participate in the Discovery process with the other incorporated communities and the county. The FEMA Region 6 Tribal liaison and project monitor contacted the Tribal Nations and coordinated/invited the Pueblos to separate meetings with each Tribal Nation. A meeting was schedule with the Pueblo of Laguna, however, no meeting was able to be scheduled with the Pueblo of Isleta.

ii. Pre-Discovery Data Collection

Table 10: Data Collection for the Watershed

Data Types	Deliverable/Product	Source
Average Annualized Loss Data	Discovery Map Geodatabase	FEMA Region VI Sharepoint
Boundaries: Community	Discovery Map Geodatabase	New Mexico Resource Geographic Information System (RGIS)
Boundaries: County and State	Discovery Map Geodatabase	New Mexico Resource Geographic Information System (RGIS
Boundaries: Watersheds	Discovery Map Geodatabase	New Mexico Resource Geographic Information System (RGIS
Census Blocks	Discovery Map Geodatabase	New Mexico Resource Geographic Information System (RGIS
Contacts	Table	Local Web Sites, State/FEMA Updates
Community Assistance Visits	Discovery Report	NMDHSEM – NFIP Coordinator
Community Rating System (CRS)	Discovery Report	FEMA's "Community Rating System Communities and Their Classes"
Dams and Levees	Discovery Map Geodatabase	FEMA Mid-term Levee Inventory (MLI)/USACE

iii. Discovery Meeting

A two-hour workshop, was held in Los Lunas and one tribal meetings was held. Workshop times and locations are shown in Table 11. Each Workshop site was prepared with a series of stations, envisioned to be an interactive setting for the Regional Project Team and Discovery Workshop attendees listen, discuss and document any issues for the Watershed. Additionally, CTP Staff met with the Middle Rio Grande Conservancy District (MRGCD) Engineer and staff to discuss the Discovery process and gather information.

Table 11: Project Discovery Workshop Times and Locations

Workshop	Date and Time	Location
1	March 4, 2019	Valencia County Council Chambers
	1:00 pm – 3:00 pm	444 Luna Ave, Los Lunas, NM 87031
2	Not scheduled	Pueblo of Isleta
3	March 5, 2019, 1-3pm	Pueblo of Laguna
	_	K-Center 22 Bay Tree Rd., Paraje, NM, 87007

Jerry Clark, the FEMA Project Monitor and New Mexico CTP personnel(EDAC), greeted each attendee as they arrive. Attendees will be rotated around the following four Discovery stations:

- Community Benefits and Grant Opportunities (*Grants station*) Maps of current floodplain-related grants; risk, needs and topographic availability; RL/SRL properties; letters of map change (LOMCs); urban changes over the last 5 years; and single claims. The station also had handouts on various FEMA grant programs.
- Mitigation Planning and Mitigation Activities (*Planning station*) Handouts on mitigation plans, understanding Risk MAP and determining risk.
- NFIP Community Actions (*Compliance and Mitigation station*) Effective FIRMs, FIS and LOMCs; maps of RL/SRL properties; single claims; and urban changes over the last 5 years.
- Risk Identification and Communication (Mapping station) Maps of risk/need/topographic availability, LOMCs, population density in the watershed, urban change in the watershed, estimated dollar exposure of parcels near SFHA areas, high-water marks and low water crossings.

At each station, attendees were asked to actively contribute information about concerns in the Watershed by identifying a relevant location on the large watershed map and then providing a short explanation on the comment form. The activity at the stations was intended to be interactive where attendees and staff at the stations work together to listen discuss and document any topical items for the watershed. Members of the Regional Project Team (FEMA, State of New Mexico) were at the stations to answer questions and engage the attendees. During each workshop, Regional Project Team members requested that attendees provide any additional information within 2 weeks of the workshop.

Each station was equipped with a series of large-format watershed maps with an aerial photo of the Watershed displayed, along with community boundaries and road names to assist in identifying areas of concern. Additionally, the stations had several 11-inch by 17-inch maps of the watershed with information related to that station's content.

Information sheets were collected at each station for locations that were identified and labeled on the Discovery watershed maps. These information sheets are included in the external files included with this report.

iv. Discovery Implementation

All Discovery Workshops were attended by local stakeholders. A full list of attendees is provided in the sign-in sheets included with the supplemental digital data accompanying this report. Some attendees included:

- Pueblo of Laguna: Tribal Leaders, Law Enforcement, Public Works, Planning, GIS, Legal
- Valencia County: Floodplain Administrator, Emergency Manager
- City of Belen: City Councilor
- Village of Bosque Farms: Floodplain Administrator, Clerk
- Senator Heinrich Staff
- Senator Udall Staff

The Workshops afforded personal, interactive communication with attendees at each station. The Project Team interviewed attendees and discussed areas of positive mitigation and areas of continuing concern for the Watershed as a whole. As attendees visited each station, they not only discussed their own local concerns but also listened to the concerns of others in the Watershed.

Attendees were polled by the FEMA Project Monitor as they exited the Workshop. Verbal feedback from the attendees indicated they felt the Workshop was an opportunity to express their issues and concerns for the Watershed. Many attendees were appreciative of the chance to speak with the various Regional Project Team members from FEMA and the State of New Mexico. The community perception conveyed to FEMA was that attendees felt more engaged in the process to determine where needs and projects may be identified.

v. Data Gathering Overview

Information about Valencia County was gathered both prior to the Discovery Workshops and interactively during the Workshops. Much of data collected in pre-discovery was obtained from FEMA or other national datasets. Additional data was collected from NMRGIS, tribal nations and from local communities via their public web sites. Table 12 summarizes the data collected prior to the Discovery Workshop and the primary sources of the data.

During the pre-discovery process phone calls were made to local FPAs, Emergency Managers, and Mitigation planners to collect current and proposed mitigation actions. This data was collected in spreadsheets and will be used by FEMA to track mitigation actions within the region. The final spreadsheets are included in the supplemental digital data.

Table 12: Data Collection Summary – Pre-Discovery Workshop

Data Location	Data Custodian	Data Set Description
Watershed-wide	FEMA	Effective FIRM and FIS and backup information available from FEMA's Map Service Center and FEMA Library
Watershed-wide	FEMA	LOMC locations from FEMA's Map Service Center and FEMA Library
Watershed-wide	FEMA, Valencia County	Locations of RL/SRL properties and Claims
Watershed-wide	FEMA	Location of Grants being funded
Watershed-wide	FEMA	Participation in the NFIP, Community Rating System (CRS) ratings
Watershed-wide	FEMA	Disaster Declarations
Watershed-wide	FEMA	CNMS information
Watershed-wide	FEMA	AAL data
Watershed-wide	FEMA, NMDHSEM	Approved HMPs
Watershed-wide	FEMA, NMRGIS, EDAC	Location of available or planned areas of updated LiDAR or other topographic data
Watershed-wide	FEMA, U.S. Census, NMRGIS, EDAC	Transportation features
Watershed-wide	FEMA, U.S. Census, NMRGIS	Populated places and population characteristics
Watershed-wide	USGS	Watershed HUC (8 & 12) boundaries, NHD streams, stream gage information, land use and land cover
Watershed-wide	USDA	NAIP Imagery
Watershed-wide	Local FPAs, Mitigation Planners and Emergency Managers, FEMA	Mitigation Actions identified by local stakeholders and collected by phone call
Watershed-wide	USFWS	Critical habitat locations
Watershed-wide	USGS	Gage locations
Watershed-wide	USACE	Rio Grande Information
Watershed-wide	EPA	Superfund site locations and details

Table 13: Data Collection Summary - During and After Discovery Workshop

Flooding Source	Information Provided By	Discovery Workshop Comment Summary
Mesas west of Belen	Valencia County FPA, Valencia	Develop on the mesas west of Belen has caused flooding in Belen. Areas no
	County Manager	in the SFHA.
No specific source	Valencia County FPA	Areas of County where she has issued lots of LOMA due to inaccurate BFE
		on maps.
Rio Grande	Valencia County HMP	Rio Grande Levee Upgrade, levees are old spoil bank levees that are
		degrading
Rio Grande	Middle Rio Grande Conservancy	Working with USACE to upgrade old spoil bank levees
	District	

Valencia_Discovery \Correspondence \Discovery_meeting

\Discovery_Meeting_Outreach_Materials

- Meeting Invitation Word/PDF
- Engagement/ Pre-Discovery Report Word/PDF
- Meeting Invitations Word/PDF
- Meeting Attendance Records PDF

\Discovery_Preperation

\Independent QA_QC

\Post_Discovery

\Community_Comments \Discovery_Meetings_Photos

- Discovery Map (s) Final PDF
- Discovery Report Final PDF

\Spatial_Files

- Valencia Discovery.gdb
 - Community Contact List (L_Mtg_POC)
 - Source Citations (L_Sources)
 - o Political Areas (DCS_S_Pol_AR)
 - Transportation (DCS_Trnsport_Ln)
 - o HUC-8 (DCS_S_HUC)
 - Discovery Map (DCS_Discovery_Map)

\Supplemental_Data

• All other data collected during Discovery

\Task Documentation

\Validation

III. Watershed Findings

Figure 8: Repetitive and Severe Repetitive Losses

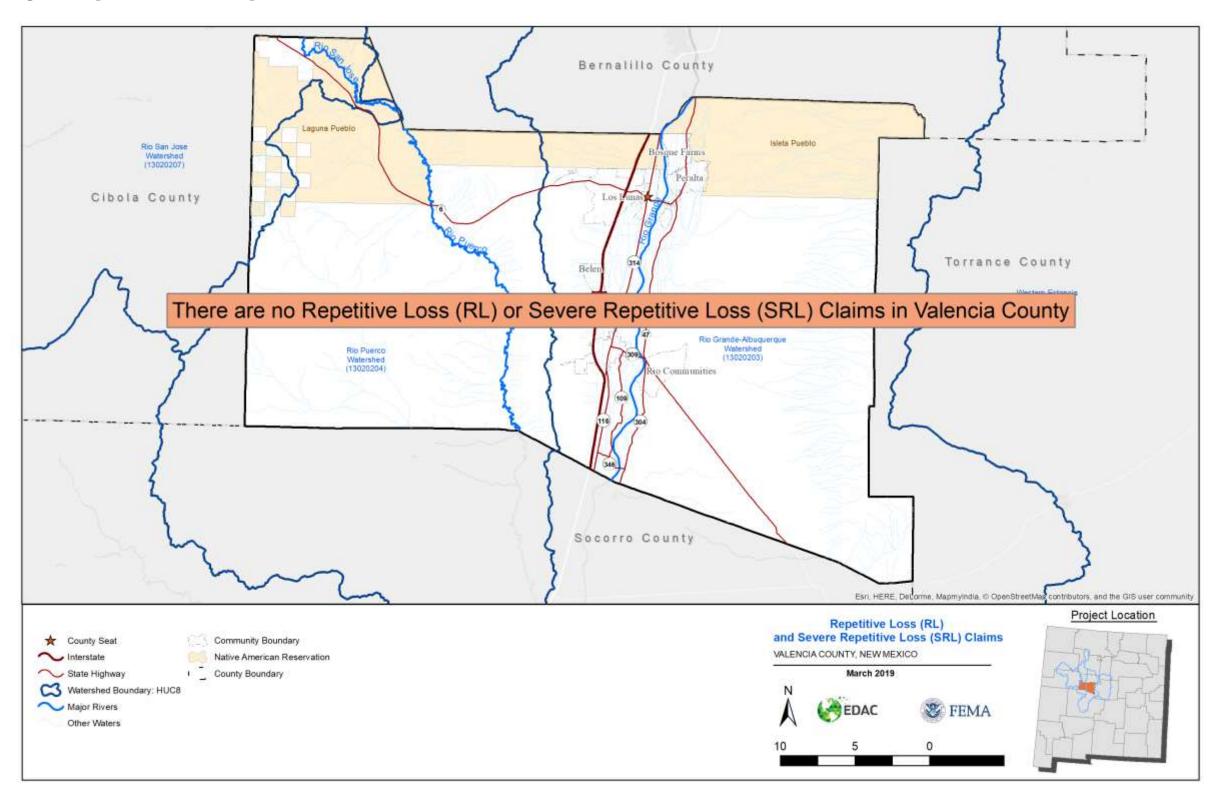
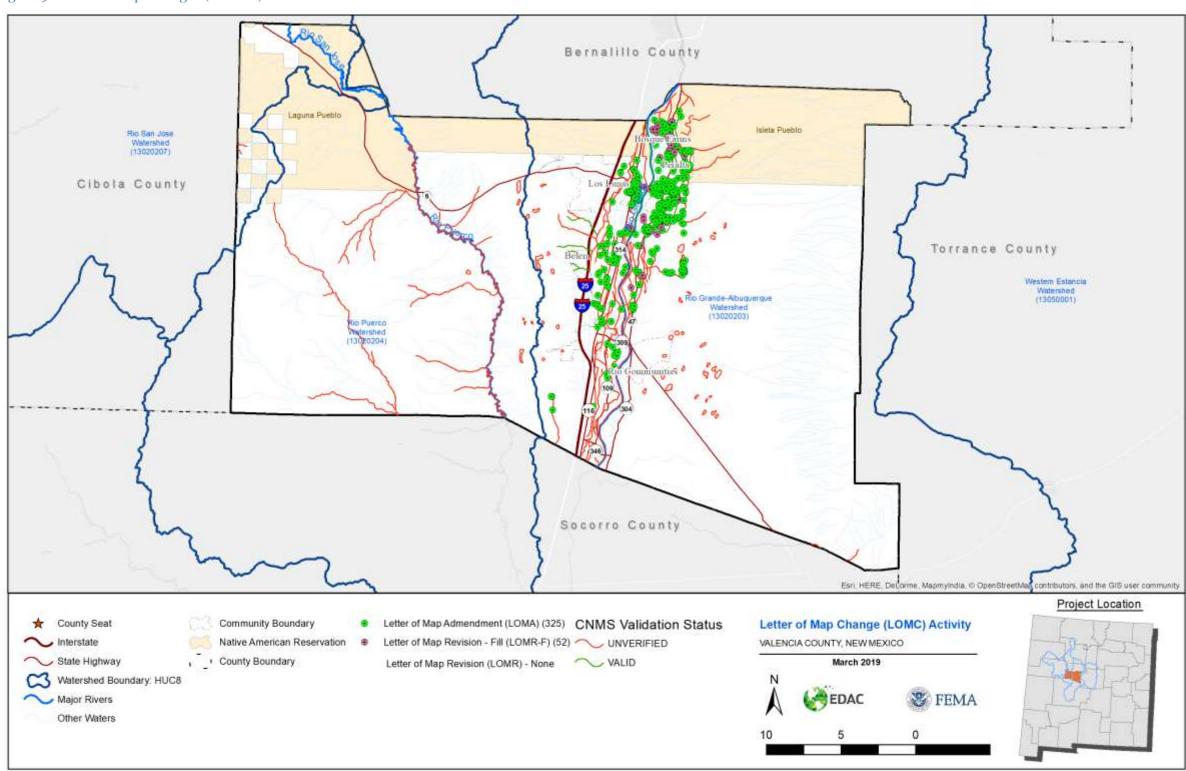


Figure 9: Letter of Map Changes (LOMCs)



i. Pre-Discovery Hydrology

Two limited reviews of hydrologic information were performed for Discovery analysis within Valencia County. These reviews were focused on:

- Review of Peak Discharges in the watershed
- Limited Gage analysis for the watershed

For the watershed as a whole, the one-percent annual chance peak discharges were reviewed for all streams within a community and across community boundaries looking for discharge anomalies, places where LOMRs demonstrate that the effective discharges may be suspect on a more global basis. Any notes were added if these changes can be eliminated as a concern due to hydrologic factors including local flood control structures, detention, flow break outs, sinks or other natural or manmade factors that may significantly alter hydrology flows. Finally, a watershed wide high-level gage analysis was reviewed comparing the information on any available gages within the watershed that had appropriate historical information to the effective FIS, discharges for streams with gages. This analysis could potentially flag any anomalies that would indicate that the hydrology may be out of date, too high, or too low for sub-basin areas within the watershed. Note there are two gages in this county and they are both on the Rio Grande which is regulated by nine main reservoirs and many small reservoirs managed mostly by the USACE.

Review of Peak Discharges

Peak discharges were reviewed based on available FIS reports, hydraulics models, flow gages and available LOMRs within the watershed at the crossing of SHFA areas at corporate limits (county, city and town). A comparison of discharges was made for the same streams across county boundaries as shown in Table 14, Discharge Comparison at Community Limits.

Table 14: Discharge Comparison at Community Limits

Stream Name	County/Parish	Effective one- percent annual chance discharge (cfs)	Effective Discharges Source	Notes
Rio Grande at upstream corporate limits of Bosque Farms	Valencia	18,100	County FIS	

Table 15: Summary of Hydrologic Analysis

Stream Name	Drainage Area from USGS Gage (square mile)	Effective discharges Source	Effective one- percent annual chance discharge (cfs)	95 confidence limits lower (cfs) (Gage)	one-percent annual chance discharge from PeakQ (Gage)	95% confidence limits upper (cfs) (Gage)	Number of peaks in record
Rio Grande near Bosque Farms, NM	17,718	FIS	18,400	5,647	7,203	14,430	11
Rio Grande at State Hwy 346 near Bosque, NM	18,406	FIS	18,400	5,761	7,557	16,360	12

^{*}Note: The Rio Grande is regulated by upstream dams under USACE management.

ii. Pre-Discovery Hydraulics and Floodplain Analysis

Hydraulics, hydrology, floodplains, and floodways were reviewed based on the FIS reports, available hydraulic models, available hydrologic models, and FIRMs.

Table 16 shows the hydraulic analyses used for streams studied by enhanced methods.

Table 16: Summary of Hydraulic Analysis

Stream Name	Validation Status	Date of Effective Analysis	Hydrology Model	Hydraulic Model
Rio Grande	Valid	2/9/2000	Regression Equations	HEC-2
Rio Grande East Overbank	Valid	2/9/2000	Regression Equations	HEC-2
Rio Grande East Split Flow	Valid	2/9/2000	Regression Equations	HEC-2
Rio Grande West Overbank	Unverified	2/9/2000	Regression Equations	HEC-2
Rio Grande West Split Flow	Valid	2/9/2000	Regression Equations	HEC-2
Rancho Cielo Arroyo 3	Valid	8/31/2008	HEC-1	HEC-RAS 3.1.3
Rancho Cielo Arroyo 5	Valid	8/31/2008	HEC-1	HEC-RAS 3.1.3
Rancho Cielo Arroyo 6	Valid	8/31/2008	HEC-1	HEC-RAS 3.1.3
Rancho Cielo Arroyo 8	Unverified	8/31/2008	HEC-1	HEC-RAS 3.1.3
Rancho Cielo Arroyo 9	Valid	8/31/2008	HEC-1	HEC-RAS 3.1.3
Rancho Cielo Arroyo 9 Tributary No. 1	Unverified	8/31/2008	HEC-1	HEC-RAS 3.1.3

iii. Post-Discovery CNMS Analysis

Table 17 shows the detailed study streams in Valencia County that have failed one or more validation elements during the CNMS stream reach level validation process. The CNMS validation elements attempt to identify changes to the Physical Environment, Climate and Engineering Methodologies since the date of the Effective Analysis (different from the Effective issuance date). Per the CNMS validation process, the study is considered as having a need or assigned an 'Unverified' status, if one of seven critical elements fail, or if four or more of the 10 secondary elements fail during stream reach level validation.

Table 17: CNMS Analysis

Stream Name	Validation Status	Failed CNMS Elements	Date of Effective Study
Belen Waste Ditch	Unverified	C ₅ , S6	8/19/2010
Rancho Cielo Arroyo 9 Tributary No. 1	Unverified	C5, S6, S9	8/31/2008
Rancho Cielo Arroyo 3	Valid	S6, S9	8/31/2008
Rancho Cielo Arroyo 3 Tributary No. 1	Valid	S6, S9	8/31/2008
Rancho Cielo Arroyo 5	Valid	S6, S9	8/31/2008
Rancho Cielo Arroyo 5 Tributary No. 1	Valid	S6, S9	8/31/2008
Rancho Cielo Arroyo 6	Valid	S6, S9	8/31/2008
Rancho Cielo Arroyo 8	Unverified	C5, S6, S9	8/31/2008
Rancho Cielo Arroyo 9	Valid	S6, S9	8/31/2008
Rio Grande	Valid	S6	2/9/2000
Rio Grande East Overbank	Valid	S6	2/9/2000
Rio Grande West Overbank	Unverified	C6, S5, S6	2/9/2000
Rio Grande West Split Flow	Valid	S6	2/9/2000

Table 18 provides a description of the validation elements that failed as identified in the CNMS database.

Table 18: CNMS Category Descriptions

Element	Issue being identified by	
Name	the Element	Element Description
C5	Current channel reconfiguration outside effective SFHA	Failure of this element indicates the streamline is seen on imagery as outside the SFHA and cannot be explained by a minor mapping error, which could be corrected through base fitting.
C6	Five or more new or removed hydraulic structures (bridge/culvert) that impact BFEs	Failure of this element indicates that five new or removed hydraulic structures that impacts BFEs have been observed since the effective analysis was completed.
S6	Better topographic or bathymetric data available	Failure of this element indicates better topographic or bathymetric data has been made available since the Effective Study date.
S9	Significant storms with high water marks	Failure of this element indicates that recent storm surge high waters marks were not identified.

Summary of CNMS Concerns

The CNMS review for Valencia County showed that the failed elements are mostly related to the availability of better topography. The only deficient detailed studies within the county are Rancho Cielo Arroyo 8, Rancho Cielo Arroyo 9 Tributary No. 1, the Rio Grande West Overbank, and the Belen Waste Ditch (AH) and those deficiencies are related to changes in hydraulic structures, changes to the stream channel, and lack of high water marks.

IV. Watershed Options

In conjunction with the assessment of risk, need, and the availability of topographic data, as well as the input of stakeholders within in this Watershed, future projects within Valencia County are recommended. FEMA looks to promote mitigation action within the watershed. After internal and partner review of the communities within the watershed, the following are overarching opportunities identified to promote community action within the watershed.

Table 19 lists some potential needs in the Watershed and actions that could be taken under each of the four areas discussed during the Discovery meetings, including:

- Risk Identification and Communication traditional flood studies and data updates
- NFIP Community Actions insurance-related mitigation or information
- Mitigation Planning and Mitigation Actions items related to planning updates
- Community Benefits and Grant Opportunities outreach and disaster activities as well as non-flooding hazards like safe room information

Table 19: Potential Watershed Activities

Risk Identification and Communication

- Base Level Engineering
- Valencia County updating FIRMs
- Utilize Base Level Engineering products to communicate risk

NFIP Community Actions

• Discuss CRS program with interested communities

Mitigation Planning and Mitigation Actions

• Assist communities in the update and adoption of HMP

Community Benefits and Grant Opportunities

• Apply for grants to assist in the mitigation of flooding concerns in the county

BFE = Base Flood Elevation

CAV = Community Assistance Visit

CFM = Certified Floodplain Manager

CLOMR = Conditional Letter of Map Revision

CNMS = Coordinated Needs Management Strategy

CRS = Community Rating System

DEM = Digital Elevation Model

FIRM = Flood Rate Insurance Map

FPA = Floodplain Administrator

G&S = FEMA's Guidelines and Standards for Flood

Hazard Mapping Partners

H&H = hydrologic and hydraulic

Hazus = Hazards U.S.

HMP = Hazard Mitigation Plan

LiDAR = Light Detection and Ranging System

LOMR = Letter of Map Revision

NFIP = National Flood Insurance Program

NVUE = New, Validated, or Updated Engineering

PMRS = Physical Map Revision

Risk MAP = Risk Mapping, Assessment, and Planning

RL/SRL = Repetitive Loss/Severe Repetitive Loss

SFHA = Special Flood Hazard Area

SRA = Sabine River Authority

USGS = U.S. Geological Survey

Table 20 provides specific evaluation guidelines for streams or areas that could benefit from additional study. Any FEMA-based metrics that would be met if the need or issue was addressed are noted, as well as any current FEMA map actions that would affect the activity. Any comments or concerns raised by a stakeholder during the Discovery process that could be tied to one of the needs or actions for the Watershed are also noted. Some needs/actions are listed that were not raised by any specific community but were identified as general improvements that could be made in the Valencia County to meet general FEMA regional goals.

Needs are identified as being on the critical path as high, medium, or low priority or as a task that could be assigned to a State or local community to complete. These definitions are also included in Table 20.

- **High** The local community would immediately benefit from the action and FEMA's metrics would also be met.
- **Medium** The local community would benefit over the longer term from the action and a portion of FEMA's metrics may be met.
- Low The local community activities can continue without this revision and FEMA's metrics are not affected.
- **Community Action** The activity would be more appropriate as a community-led action rather than a FEMA-led action.

Table 20 Metrics and Rankings of Needs

Description of Need						
Item	Evaluation Guide		Impacts From Any Current Map Actions	FEMA Metric or Community Benefit	Evaluation	Relates to Community Comment Number
	High – Local community would immediately benefit from the action, and FEMA's metrics would also be met					
	Medium – Local community would benefit over the longer term from the action, and a portion of FEMA's metrics may be met					
	Low – Local community activities can continue without this revision, and FEMA's metrics are not impacted					
	Community Action – Activity would be more appropriate as a community-led action rather than a FEMA-led action					
	Location of Need/Project	Details				
A	Mitigation/ HMP Updates	Valencia County HMP (City of Belen, Town of Peralta, Village of Bosque Farms, Village of Los Lunas and County) expires 2020	• None	 Impacts all communities Facilitate the application for HMP Grants Expedite the Grant approval process 	Community Action	No specific comment
В	CRS	Valencia County expressed interest in the CRS program during the Discovery Meeting	• None	 Community's ability to mitigate risk FEMA increase public Awareness of risk management FEMA increase public Action toward managing flood risk 	Community Action	Sheet #7
С	Outreach / Coordination for Discovery	EDAC to provide Discovery Reports	• None	Community outreach improved	Community Action	No specific comment
D	Outreach / Flood Insurance Awareness Program	Per mitigation plan a public awareness program will provide the unprotected property owners throughout the planning area with information concerning their risk and available insurance.	• None	Community outreach improved	Community Action	НМР

	Evaluation Guide	ription of Need iately benefit from the action, and FEMA's metrics				
Item	would also be met Medium – Local community would benefit over the longer term from the action, and a portion of FEMA's metrics may be met		Impacts From Any Current Map Actions	FEMA Metric or Community Benefit	Evaluation	Relates to Community Comment Number
	Low – Local community activities can continue without this revision, and FEMA's metrics are not impacted					
	Community Action – Activity would be more appropriate as a community-led action rather than a FEMA-led action					
	Location of Need/Project	Details				
E	Outreach / Coordination to enter CRS Program	FEMA to continue to promote benefits of participation	• None	Community outreach improved	Community Action	
F	Outreach / Emergency Warning System	•	• None	Community's ability to mitigate risk	Community Action	НМР
G	Outreach / Dam Failure Warning System	Per mitigation plan coordinate with other communities and dam operators to develop a gauge and communication system that would provide warning in event of a dam failure	• None	 Community's ability to mitigate risk FEMA increase public Awareness of risk management FEMA increase public Action toward managing flood risk 	Community Action	НМР
Н	Mitigation	Mapping of Dam Failure Inundation Areas	• None	 Community's ability to mitigate risk FEMA increase public Awareness of risk management FEMA increase public Action toward managing flood risk 	Community Action	НМР
I	Belen Camino del Llano	Per mitigation plan install drainage system and retention pond. This would create proper drainage for the project area and reduce the exposure of underground water, sewer, electrical, and gas lines, that are currently subject to severe erosion during flood events in the immediate area.	• None	 Community's ability to mitigate risk FEMA increase public Awareness of risk management FEMA increase public Action toward managing flood risk 	Community Action	НМР
J	Salmon Estates Drainage Project	Per mitigation plan this subdivision sits on the east mesa of Valencia County. Water from a higher elevation point of this mesa sheds into this community flooding out roads and endangering mobile homes. This project would improve the drainage for this community by protecting homes and ingress/egress routes of transportation and evacuation.	• None	 Community's ability to mitigate risk FEMA increase public Awareness of risk management FEMA increase public Action toward managing flood risk 	Community Action	НМР

	Evaluation Guide	cription of Need diately benefit from the action, and FEMA's metrics				
Item	would also be met Medium – Local community would benefit over the longer term from the action, and a portion of FEMA's metrics may be met		Impacts From Any Current Map Actions	FEMA Metric or Community Benefit	Evaluation	Relates to Community Comment Number
	Low – Local community activities can continue without this revision, and FEMA's metrics are not impacted					
	Community Action – Activity would be more appropriate as a community-led action rather than a FEMA-led action					
	Location of Need/Project	Details				
K	Rio Grande Levee Upgrade	 Per mitigation plan the current natural levee system is not to current engineer's standards. This project would build upon the ongoing USACE study of the system with elements of implementation as recommended in the study. 	• None	 Impacts all communities in Valencia County FEMA increase public Action toward managing flood risk 	Community Action	НМР
L	Drainage Ditch Improvements and Maintenance	Per mitigation plan clean and repair drainage ditches and culverts to increase or maintain capacity. Develop and implement a maintenance plan. Suffering repetitive losses	• None	 Community's ability to mitigate risk FEMA increase public Awareness of risk management FEMA increase public Action toward managing flood risk 	Community Action	НМР
М	Multi-Jurisdiction Storm Water Management Plans	 Per mitigation plan develop regional stormwater management planning approach. Establish committee and coordinate with neighboring communities to establish better water management planning. 	• None	 Impacts all communities in Valencia County Community's ability to mitigate risk 	Community Action	НМР
N	Belen, City of	 Per Belen Comprehensive Land Use Plan preserve open space to protect natural resources and serve more than one purpose Per Belen Comprehensive Land Use Plan develop and implement a drainage plan and program Per Belen Comprehensive Land Use Plan City should improve enforcement of land use regulations Per Belen Comprehensive Land Use Plan designate development corridors and activity centers Per Belen Comprehensive Land Use Plan develop a groundwater protection plan 	• None	Community's ability to mitigate risk	Community Action	No specific comment

	Descri Evaluation Guide	ption of Need				
Item	High – Local community would immediately benefit from the action, and FEMA's metrics would also be met		Impacts From Any Current Map Actions	FEMA Metric or Community Benefit	Evaluation	Relates to Community Comment Number
	Medium - Local community would benefit over the longer term from the action, and a portion of FEMA's metrics may be met					
	Low – Local community activities can continue without this revision, and FEMA's metrics are not impacted					
	Community Action – Activity would be more appropriate as a community-led action rather than a FEMA-led action					
	Location of Need/Project	Details				
O	Los Lunas, Village of	 Per Comprehensive Plan update zoning ordinance to ensure land use goals, prevent land use that pollutes groundwater Per Belen Comprehensive Land Use Plan develop a comprehensive drainage management plan Per Belen Comprehensive Land Use Plan evaluate alternative stormwater retention techniques Per Belen Comprehensive Land Use Plan maintain arroyos and drainages in their natural condition Per Belen Comprehensive Land Use Plan maintain and update a park master plan Per Belen Comprehensive Land Use Plan work with the Middle Rio Grande Conservancy District to develop an open space plan for the Bosque (along Rio Grande) Per Belen Comprehensive Land Use Plan explore ways to preserve open space Per Belen Comprehensive Land Use Plan explore ways to preserve open space Per Belen Comprehensive Land Use Plan encourage permeable paving alternatives 	• None	Community's ability to mitigate risk	Community Action	No specific comment
P	Valencia County	Updating the FIRM and FIS for Valencia County 325 LOMAs have been submitted for Valencia County	• None	 Community's ability to mitigate risk FEMA increase public Action toward managing flood risk 		No specific comment

i. Project Prioritization

Flood risk projects are intended to be initiated and cataloged at a HUC-8 unit. This means that when a project is initiated, all flood hazards within the HUC-8 will be evaluated to determine the project scope within that HUC-8 boundary. Evaluation means that risk, need, available data, and desired output products are assessed for the entire HUC-8. Evaluation does not mean the actual development of new or updated flood risk products, only the assessment of what products would be required to fulfill the identified needs in light of the level of risk. Unmet needs must be cataloged in the Coordinated Needs Management Strategy Database (CNMS).

Once the entire HUC-8 has been evaluated, the Region will select the project tasks necessary to respond to the identified levels of risk and need. The Region is expected to maximize the amount and usefulness of project work to be performed in any HUC-8, but is not expected to perform every project task and meet all needs in every watershed. All scope with the HUC-8 boundary must be tasked/ordered at one time.

As a result of the Discovery process future projects were identified as show in Table 20.

Table 21 Project Prioritization

Project	Ranking	Need
Valencia County FIRM Update	High	325 LOMAs in the County