Discovery Report

Lake Conway – Point Remove Watershed, HUC - 11110203

Conway, Faulkner, Perry, Pope, Pulaski, Van Buren, and Yell Counties, Arkansas

07/06/2015

Project Area Community List

Community Name	CID
Conway County Communities	
Conway County Unincorporated Areas	050426
Menifee, Town of	050266
Morrilton, City of	050044
Oppelo, City of	050597
Plumerville, City of	050364
Faulkner County Communities	
Conway, City of	050078
Faulkner County Unincorporated Areas	050431
Mayflower, City of	050079
Vilonia, City of	050417
Perry County Communities	
Adona, City of	050376
Bigelow, Town of	050387
Fourche, City of	050600
Perry County Unincorporated Areas	050165
Perry, Town of	050276
Perryville, City of	050362
Pope County Communities	
Atkins, City of	050304
Hector, Town of	050254
Pottsville, Town of	050277
Pope County Unincorporated Areas	050458
Russellville, City of	050178
Pulaski County Communities	
Pulaski County Unincorporated Areas	050179
Van Buren County Communities	
Van Buren County Unincorporated Areas	050566
Yell County Communities	
Dardanelle, City of	050233
Yell County Unincorporated Areas	050469

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Acronyms and Abbreviations

AAL	Average Annualized Loss
ADEM	Arkansas Department of Emergency Management
AGFC	Arkansas Game and Fish Commission
AGIO	Arkansas Geographic Information Office
AHTD	Arkansas Highway and Transportation Department
ANRC	Arkansas Natural Resources Commission
AOMI	Area of Mitigation Interest
BFE	base (1-percent-annual-chance) flood elevation
CAPDD	Central Arkansas Planning and Development District
CDBG	Community Development Block Grant
CID	Community Identification number
CLOMR	Conditional Letter of Map Revision
CNMS	Coordinated Needs Management Strategy
CRS	Community Rating System
CTP	Cooperating Technical Partners
EAP	Emergency Action Plan
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FTN	FTN Associates, Ltd. (State Contractor)
GIS	geographic information system
HMP	Hazard Mitigation Plan
HUC	Hydrologic Unit Code
HUC- 8	HUC for watershed unit with average size of 700 square miles
HUC-12	HUC for watershed unit with average size of 40 square miles
LIDAR	Light Detection and Ranging System
LOMA	Letter of Map Amendment
LOMC	Letter of Map Change
LOMR	Letter of Map Revision
Map Mod	Map Modernization
MAS	Mapping Activity Statement
MXD	Map Exchange Document

Acronyms and Abbreviations (Cont'd)

NFIP	National Flood Insurance Program
NHD	National Hydrologic Dataset
NRCS	Natural Resources Conservation Service
NVUE	New, Validated, or Updated Engineering
OEM	Office of Emergency Management
Risk MAP	Risk Mapping, Assessment, and Planning
RL	Repetitive Loss
SFHA	Special Flood Hazard Area
SHMO	State Hazard Mitigation Officer
SHP	ESRI Shape File
SRL	Severe Repetitive Loss
UA	University of Arkansas
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
WAPDD	Western Arkansas Planning and Development District

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 State and Local 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 State and Local entities with information needed to mitigate flood related risks.

The FEMA Region 6 office and the Arkansas Natural Resources Commission (ANRC) entered into a Cooperating Technical Partners (CTP) partnership agreement for implementation of Risk MAP in the State of Arkansas. As part of this partnership, the ANRC and its contractor, FTN Associates, Ltd. (FTN), began the Discovery process in the Lake Conway - Point Remove Watershed in October 2014 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, Watershed and Communities Map.

Through the Discovery process, FEMA and the State CTP can determine which areas of the Hydrologic Unit Code (HUC) 8 watersheds may be examined 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 local, regional, State, and Federal levels.

In late March – early April 2015, ANRC, as the State CTP, held Discovery Meetings in this watershed. During Discovery, ANRC and FEMA reached out to local communities to:

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

County	Community	CID	Population
Conway	Menifee, Town of	050266	302
Conway	Morrilton, City of	050044	6,767
Conway	Oppelo, City of	050597	781
Conway	Plumerville, City of	050364	826
Conway	Conway County (Unincorporated Areas) *	050426	12,597
Faulkner	Conway, City of	050078	58,908
Faulkner	Mayflower, City of	050079	2,234
Faulkner	Vilonia, City of	050417	3,815
Faulkner	Faulkner County (Unincorporated Areas) *	050431	40,499
Perry	Adona, City of	050376	209
Perry	Bigelow, Town of	050387	315
Perry	Fourche, City of	050600	62
Perry	Perry, Town of	050276	270
Perry	Perryville, City of	050362	1,460
Perry	Perry County (Unincorporated Areas) *	050165	7,785
Pope	Atkins, City of	050304	3,016
Pope	Hector, Town of	050254	450
Pope	Pottsville, Town of	050277	2,838
Pope	Russellville, City of	050178	27,920
Pope	Pope County (Unincorporated Areas) *	050458	25,113
Pulaski	Pulaski County (Unincorporated Areas) *	050179	48,752
Van Buren	Van Buren County (Unincorporated Areas) *	050566	11,814
Yell	Dardanelle, City of	050233	4,745
Yell	Yell County (Unincorporated Areas) *	050469	12,256

WATERSHED AND COMMUNITIES MAP

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

FEMA

0 6 12 Miles

N W E S

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Lake Conway-Point Remove
- Other Waters
- Large Waterbody
- Lake Conway-Point Remove HUC 8 Watershed

* Population includes all of unincorporated county

Project Location

FIGURE 1

DATE: 2/19/2015

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The results of the Discovery process are presented in this Final Discovery Report, a watershed scale Discovery Map and the digital data gathered or developed under the fiscal year 2014 CTP Agreement, EMW-2014-CA-00163, Mapping Activity Statement (MAS) 7, between FEMA and ANRC.

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

i. Watershed Selection

For the Discovery process, watersheds 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. Risk decile is calculated from nine 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.

The Lake Conway - Point Remove Watershed (HUC 11110203) encompasses an area of approximately 1,139 square miles and extends across seven counties (Conway, Faulkner, Perry, Pope, Pulaski, Van Buren, and Yell) in the central portion of the State. Major communities include the cities of Dardanelle and Morrilton, and portions of Conway, Russellville, and Vilonia. Smaller communities include Adona, Atkins, Mayflower, Oppelo, Plumerville, Perry, and Pottsville, and a portion of Bigelow, Fourche, Hector, Menifee, and Perryville.

The Lake Conway - Point Remove Watershed was selected by the ANRC, the State's CTP with FEMA Region 6, for the reasons summarized below.

- Topographic data developed from a Light Detection and Ranging System (LIDAR) is available throughout the watershed aiding in providing quality data.
- Repetitive losses in Faulkner and Conway counties have exceeded $2.5 million from 1978 through February 2012, and there are over 850 policies. These reported values include entire counties which may or may not be wholly located in the watershed.
- During FEMA's past Map Modernization (Map Mod) activities, from approximately 2007 – 2010, for Conway and Pope Counties, the following items were noted:
    - The scoping process revealed mapping along the following streams provided significant differences in mapped boundaries:
        - Cherokee Creek (Conway County): from most upstream railroad crossing to the upstream limit of study.
    - The scoping process revealed community study requests along the following streams:
        - Galla Creek (Town of Pottsville): from 2,200 feet downstream of confluence with Galla Creek Tributary 11 to Lake Atkins Dam.
        - White Oak Creek (City of Atkins): Upstream of US Highway 64 to immediately downstream of Missouri Pacific Railroad.
    - For the streams in Pulaski County, a portion of the Arkansas River was restudied, but did not make it to the effective Flood Insurance Rate Maps (FIRMs) due to the ongoing levee certification issues.

- The communities of Conway, Mayflower, Morrilton, and Faulkner County have a large number of claims, including Repetitive Loss and Severe Repetitive Loss locations, within the watershed.
- In recent years, Lake Conway has been involved in many ongoing studies, which may be usable for mitigation activities or resources for future flood studies.
- Lake Conway is owned and operated by the Arkansas Game and Fish Commission (AGFC); therefore any changes or future improvements in and around the lake could lead to additional state partnerships.

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:

- The Lake Conway - Point Remove Watershed has elevation data for the watershed, which could be used by communities to pursue updated hydrologic and hydraulic studies and result in improved mapping of the Special Flood Hazard Areas (SFHAs), and
- Mitigation activities to reduce risk to life and property are being evaluated and may be underway in the watershed.

Table 1, NFIP Status of Project Area Communities, provides the current status for each community's NFIP participation, Community Rating System (CRS) rating, and FIRMs. All seven of the counties and fourteen of the seventeen communities are participating in the NFIP. Currently, only the communities of Adona, Fourche, and Hector do not participate in the NFIP. Additionally, no communities are participating in CRS. Pulaski County has recently expressed an interest in learning more about CRS and the requirements to implement the program locally.

Table 1: NFIP Status of Project Area Communities

County	Community Name	Community Identification Number (CID)	Participating Community?	CRS Rating
Conway	Conway County Unincorporated Areas [1]	050426	Yes	N/A
Conway	Menifee, Town of [1]	050266	Yes	N/A
Conway	Morrilton, City of	050044	Yes	N/A
Conway	Oppelo, City of	050597	Yes	N/A
Conway	Plumerville, City of	050364	Yes	N/A
Faulkner	Faulkner County Unincorporated Areas [1]	050431	Yes	N/A
Faulkner	Conway, City of [1]	050078	Yes	N/A
Faulkner	Mayflower, City of	050079	Yes	N/A
Faulkner	Vilonia, City of [1]	050417	Yes	N/A
Perry	Perry County Unincorporated Areas [1]	050165	Yes	N/A
Perry	Adona, City of	050376	No	N/A
Perry	Bigelow, Town of [1]	050387	Yes	N/A
Perry	Fourche, City of [1]	050600	No	N/A
Perry	Perry, Town of	050276	Yes	N/A
Perry	Perryville, City of [1]	050362	Yes	N/A
Pope	Pope County Unincorporated Areas [1]	050458	Yes	N/A
Pope	Atkins, City of	050304	Yes	N/A
Pope	Hector, Town of	050254	No	N/A
Pope	Pottsville, City of	050277	Yes	N/A
Pope	Russellville, City of	050178	Yes	N/A
Pulaski	Pulaski County Unincorporated Areas [1]	050179	Yes	N/A
Van Buren	Van Buren County Unincorporated Areas [1]	050566	Yes	N/A
Yell	Yell County Unincorporated Areas [1]	050469	Yes	N/A
Yell	Dardanelle, City of	050233	Yes	N/A

[1] Community is located within one or more HUC8 watersheds.

Drainage and Flooding

The Lake Conway - Point Remove Watershed lies within the Arkansas River Basin and is located in Central Arkansas. The Lake Conway - Point Remove Watershed consists of mountainous terrain in the north to flat, low-lying area with numerous interconnected channels around the Arkansas River. Flood problems continue to be present throughout the communities and have persisted for some time due to the nature of the watershed and localized development.

The primary river in the watershed is the Arkansas River. The Arkansas River has its origins in Colorado and ultimately empties into the Mississippi River in southeastern Arkansas. Other primary streams in

the watershed are Point Remove Creek, East Fork Point Remove Creek, West Fork Point Remove Creek, Galla Creek, Palarm Creek, and Cypress Creek.

On July 6, 2015, Pulaski County is due to be issued countywide FIRMs for use in the management of their floodplains. Additionally as part of FEMA's Map Mod Program, Conway County and Pope County received countywide FIRMs on July 4, 2011 and March 2, 2010 respectively. Faulkner County, Perry County, and Yell County received partial updates to their FIRMs on December 19, 2006, June 20, 2000, and March 4, 2002 respectively. Van Buren County has no countywide FIRMs to date.

There are multiple levees in the Watershed (West Conway County Levee District No. 3, Willow Bend Levee District No. 1, Conway County Levee District No. 6, East Conway County Levee includes multiple levee districts, and Roland Drainage District Levee) that show some protection from the base flood on the current effective FIRMs. There are also some levees (West Point Remove Levee) that are not shown as providing protection from the base flood on the current effective FIRMs. Conway County has multiple FIRMs that identify an area as a shaded Zone X, with a provisionally accredited levee note that indicates compliance is required by June 5, 2011 (Conway County Panels 05029C0250C, 05029C0275C, 05029C0400C, 05029C0425C). To date, no levee certification documentation has been submitted to FEMA for review. Pulaski County has multiple FIRMs (Pulaski County Panels 05119C0110G, 05119C0130G, 05119C0140G) that are impacted by the Roland Drainage District Levee. These FIRMs include a Seclusion Zone, which defaults the effective mapping back to previous effective FIRMs.

Three of the seven counties within the watershed have had their FIRMs updated to a countywide and digital format through FEMA's Map Mod Program, which is referred to as "modernized", the exceptions are Faulkner County, Perry County, Van Buren County, and Yell County, which are referred to as "non-modernized". Pulaski County's map modernization was initiated in 2004 and has been in progress for many years. Pulaski County's FIRMs are scheduled to be issued on July 6, 2015; however, they reflect some information that was developed nearly 10 years prior to their becoming effective. Faulkner County does have a countywide FIRM and associated database, but since it was prepared prior to the Map Mod Program is not considered "fully modernized". A summary of the community FIRM dates is included on Table 2, Community FIRM Status.

Population

The population in this watershed totals 131,391 people, based on the 2010 US Census. The cities of Conway, Morrilton, and Russellville are the highest population centers (population: 58,237; 6,767; and 7,045 respectively) located within the watershed. For the estimates for Conway and Russellville, the 2010 Census Block estimates were used to approximate the population within the watershed. There are portions of 17 populated areas inside this watershed. Figure 2 shows the population densities (number of persons per square mile) within the Lake Conway - Point Remove Watershed based on 2010 US Census' Census Block Data.

Coordinated Needs Management Strategy

Included on Figure 2, and subsequent figures, is the Coordinated Needs Management Strategy (CNMS) Inventory. CNMS 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 1-square mile drainage area and that currently have effective SFHAs designated for them. CNMS does not reflect the total potential of stream miles to be studied within a watershed.

Table 2: Community FIRM Status

County	Community Name	Community Identification Number (CID)	FIRM Date	FIRM Status
Conway	Conway County Unincorporated Areas [1]	050426	7/4/2011	REVISED; Modernized Countywide
Conway	Menifee, Town of [1]	050266	7/4/2011	REVISED; Modernized Countywide
Conway	Morrilton, City of	050044	7/4/2011	REVISED; Modernized Countywide
Conway	Oppelo, City of	050597	7/4/2011	REVISED; Modernized Countywide
Conway	Plumerville, City of	050364	7/4/2011	REVISED; Modernized Countywide
Faulkner	Faulkner County Unincorporated Areas [1]	050431	12/19/2006	Countywide format but not considered a Modernized Countywide
Faulkner	Conway, City of [1]	050078	12/19/2006	Countywide format but not considered a Modernized Countywide
Faulkner	Mayflower, City of	050079	12/19/2006	Countywide format but not considered a Modernized Countywide
Faulkner	Vilonia, City of [1]	050417	12/19/2006	Countywide format but not considered a Modernized Countywide
Perry	Perry County Unincorporated Areas [1]	050165	6/20/2000	Countywide format but not considered a Modernized Countywide
Perry	Adona, City of	050376	6/20/2000	Countywide format but not considered a Modernized Countywide
Perry	Bigelow, Town of [1]	050387	6/20/2000	Countywide format but not considered a Modernized Countywide
Perry	Fourche, City of [1]	050600	6/20/2000	Countywide format but not considered a Modernized Countywide
Perry	Perry, Town of	050276	6/20/2000	Countywide format but not considered a Modernized Countywide
Perry	Perryville, City of [1]	050362	6/20/2000	Countywide format but not considered a Modernized Countywide
Pope	Pope County Unincorporated Areas [1]	050458	4/17/2012	REVISED; Modernized Countywide
Pope	Atkins, City of	050304	3/2/2010	REVISED; Modernized Countywide
Pope	Hector, Town of	050254	3/2/2010	REVISED; Modernized Countywide
Pope	Pottsville, City of	050277	3/2/2010	REVISED; Modernized Countywide

[1] Community is located within one or more HUC8 watersheds.

Table 2: Community FIRM Status (Continued)

County	Community Name	Community Identification Number (CID)	FIRM Date	FIRM Status
Pope	Russellville, City of	050178	4/17/2012	REVISED; Modernized Countywide
Pulaski	Pulaski County Unincorporated Areas [1]	050179	10/19/2001	REVISED; Modernized Countywide Includes Seclusion Areas around Levees
Van Buren	Van Buren County Unincorporated Areas [1]	050566	8/19/1991	Not Modernized
Yell	Yell County Unincorporated Areas [1]	050469	3/4/2002	Countywide format but not considered a Modernized Countywide
Yell	Dardanelle, City of	050233	3/4/2002	Countywide format but not considered a Modernized Countywide

[1] Community is located within one or more HUC8 watersheds.

POPULATION DENSITY (2010)

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

FEMA

tn Associates Ltd

N W E S

0 6 12 Miles

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Watershed
- Large Waterbody
- Watershed Boundary

CNMS Validation Status

- Unverified
- Assessed
- Valid

Population Density - 2010 Census

Pop. / Sq. Mi.

- 0 - 56
- 57 - 253
- 254 - 1,284
- 1,285 - 3,641
- 3,642 - 142,200

Project Location

FIGURE 2

DATE: 3/5/2015

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Landuse

The landuse of the Lake Conway - Point Remove Watershed is predominantly rural land that is either forested or pasture. The primary population centers within the watershed, including Russellville, Morrilton, and Conway, occur along the Interstate 40 corridor (I-40). These communities have seen fairly significant increases in development and population over the last 10 years. Along the I-40 corridor are smaller population centers in the communities of Atkins, Pottsville and Mayflower. Outside of the I-40 corridor of the Lake Conway - Point Remove Watershed, the City of Dardanelle is the largest population center. The terrain ranges from steep mountains in the north to flat, low-lying areas along the Arkansas River. Figure 3 identifies the relative percent urban cover for areas within the watershed from 2011, while Figure 4 shows the changes in the landuse that have occurred in the watershed from 2006 - 2011.

PERCENT URBAN COVER (2011)

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

FEMA

0 6 12 Miles

N W E S

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Watershed
- Large Waterbody
- Watershed Boundary

CNMS Validation Status

- Unverified
- Assessed
- Valid

Urban Cover

- 1 - 25%
- 25 - 50%
- 50 - 75%
- 75 - 100%

Project Location

FIGURE 3

DATE: 7/6/2015

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LANDUSE CHANGE (2006 - 2011)

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

FEMA

0 6 12 Miles

N W E S

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Watershed
- Large Waterbody
- Watershed Boundary

CNMS Validation Status

- Unverified
- Assessed
- Valid

Landuse Change (2006 - 2011)

- Least
- Most

Project Location

FIGURE 4

DATE: 3/3/2015

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Insurance Claims

Table 3 lists the number of NFIP insurance claims for the communities that touch the Watershed. Due to limitations on the physical locations of the claims data, the graphical locations were developed using street addresses, where available. All locations reported are approximate and are near and/or within the boundary of the Lake Conway - Point Remove Watershed. Of the insurance claims easily identified within the watershed, the majority occur in the cities of Conway and Mayflower, and the Unincorporated Areas of Faulkner County. The NFIP claims reported are identified either as those within the SFHA or those outside of the SFHA. Claims outside of the SFHA are identified specifically as BCX Claims, which refers to an older Zone naming convention that included Zones B, C, or X, all of which are considered outside of the SFHA. Figure 5 provides a graphical representation of the NFIP insurance claims activity within the Lake Conway - Point Remove Watershed.

In addition to NFIP claims activity, there are several Repetitive Loss (RL) or Severe Repetitive Loss (SRL) properties within the Lake Conway - Point Remove Watershed. The main concentration of these properties is in or around the cities of Conway, Morrilton, and Mayflower, and the Unincorporated Areas of Faulkner County, as shown in Figure 6.

Table 4, Repetitive and Severe Repetitive Loss, summarizes RL and SRL claims by county and community within the Watershed. As noted, these losses are also displayed on Figure 6 and on the Discovery Map, which will be made available at the Discovery meetings and is included in the supplemental digital data to be provided at the conclusion of the Discovery process.

Table 3: Total NFIP Insurance Claims

Total NFIP Insurance Claims by Community *	
Community	**Claims**
Adona, City of	0
Atkins, City of	0
Bigelow, Town of	0
Conway, City of	33
Dardanelle, City of	3
Fourche, City of	0
Hector, Town of	0
Mayflower, City of	52
Menifee, Town of	0
Morrilton, City of	11
Oppelo, City of	0
Perry, Town of	0
Perryville, City of	0
Plumerville, City of	3
Pottsville, Town of	1
Russellville, City of	3
Vilonia, City of	0
Conway County (Unincorporated Areas)	1
Faulkner County (Unincorporated Areas)	69
Perry County (Unincorporated Areas)	1
Pope County (Unincorporated Areas)	1
Pulaski County (Unincorporated Areas)	0
Van Buren County (Unincorporated Areas)	0
Yell County (Unincorporated Areas)	0

*Claims reported are approximate based on limited location information and watershed extents.

Table 4: Repetitive and Severe Repetitive Loss

Repetitive Losses/Severe Repetitive Losses By Community *			
Community	Number of Properties	Total Claims	Average Number of Claims Per Property
Adona, City of	0	0	0
Atkins, City of	0	0	0
Bigelow, Town of	0	0	0
Conway, City of	4	13	3.25
Dardanelle, City of	0	0	0
Fourche, City of	0	0	0
Hector, Town of	0	0	0
Mayflower, City of	6	14	2.33
Menifee, Town of	0	0	0
Morrilton, City of	2	8	4.00
Oppelo, City of	0	0	0
Perry, Town of	0	0	0
Perryville, City of	0	0	0
Plumerville, City of	0	0	0
Pottsville, Town of	0	0	0
Russellville, City of	0	0	0
Vilonia, City of	0	0	0
Conway County (Unincorporated Areas)	0	0	0
Faulkner County (Unincorporated Areas)	8	18	2.25
Perry County (Unincorporated Areas)	0	0	0
Pope County (Unincorporated Areas)	0	0	0
Pulaski County (Unincorporated Areas)	0	0	0
Van Buren County (Unincorporated Areas)	0	0	0
Yell County (Unincorporated Areas)	0	0	0

* Numbers reported are approximate based on limited location information and watershed extents.

CLAIMS ACTIVITY

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

Total NFIP Insurance Claims by Community *

Community	Claims
Adona, City of	0
Atkins, City of	0
Bigelow, Town of	0
Conway, City of	33
Dardanelle, City of	3
Fourche, City of	0
Hector, Town of	0
Mayflower, City of	52
Menifee, Town of	0
Morrilton, City of	11
Oppelo, City of	0
Perry, Town of	0
Perryville, City of	0
Plumerville, City of	3
Pottsville, Town of	1
Russellville, City of	3
Vilonia, City of	0
Conway County (Unincorporated Areas)	1
Faulkner County (Unincorporated Areas)	69
Perry County (Unincorporated Areas)	1
Pope County (Unincorporated Areas)	1
Pulaski County (Unincorporated Areas)	0
Van Buren County (Unincorporated Areas)	0
Yell County (Unincorporated Areas)	0

* Claims reported are approximate, based on limited location information and watershed extents.

County Seat
Interstate
US Highway
County Boundary
City Limits
Major Reaches of Watershed
Other Waters
Large Waterbody
Watershed Boundary

NFIP Insurance Claims
BCX Claims (Outside SFHA)
Claims (Inside SFHA)

0 6 12 Miles

N W E S

Project Location

FIGURE 5

DATE: 2/9/2015

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Repetitive Losses/Severe Repetitive Losses by Community *			
Community	Number of Properties	Total Claims	Average per Property
Adona, City of	0	0	0
Atkins, City of	0	0	0
Bigelow, Town of	0	0	0
Conway, City of	4	13	3.25
Dardanelle, City of	0	0	0
Fourche, City of	0	0	0
Hector, Town of	0	0	0
Mayflower, City of	6	14	2.33
Menifee, Town of	0	0	0
Morrilton, City of	2	8	4.00
Oppelo, City of	0	0	0
Perry, Town of	0	0	0
Perryville, City of	0	0	0
Plumerville, City of	0	0	0
Pottsville, Town of	0	0	0
Russellville, City of	0	0	0
Vilonia, City of	0	0	0
Conway County (Unincorporated Areas)	0	0	0
Faulkner County (Unincorporated Areas)	8	18	2.25
Perry County (Unincorporated Areas)	0	0	0
Pope County (Unincorporated Areas)	0	0	0
Pulaski County (Unincorporated Areas)	0	0	0
Van Buren County (Unincorporated Areas)	0	0	0
Yell County (Unincorporated Areas)	0	0	0

* Claims reported are approximate, based on limited location information and watershed extents.

REPETITIVE AND SEVERE REPETITIVE LOSS CLAIMS

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

FEMA

0 6 12 Miles

N W E S

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Watershed
- Other Waters
- Large Waterbody
- Watershed Boundary

Repetitive Losses

- Severe Repetitive Loss
- Repetitive Loss

Project Location

FIGURE 6

DATE: 2/9/2015

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Disaster Declarations

The Lake Conway - Point Remove Watershed has had a history of flooding as demonstrated by numerous presidential disaster declarations issued in the past. Table 5, Disaster Declarations in the Watershed, lists disaster declarations for multiple hazards within the watershed.

Table 5: Disaster Declarations in the Watershed

Watershed Counties Declared	Number of Disaster Declarations per Hazard *				
	Flood	Hurricane	Winter Storm (Ice/Snow)	Tornado	Severe Storm
Conway County	3	2	2	1	12
Faulkner County	3	1	3	4	6
Perry County	3	2	4	0	5
Pope County	1	1	2	1	6
Pulaski County	5	1	4	4	9
Van Buren County	2	2	4	1	10
Yell County	3	1	3	1	3

* Time period of 1967 - January 2015

Risk Decile

The Risk Decile is calculated from nine parameters: total population density, historical population growth, predicted population growth, housing units, flood policies, single claims, repetitive losses, repetitive loss properties, and declared disasters. The scale of Risk Decile ranking is 1-10 with 1 being the highest and 10 being the lowest ranking for a portion of the watershed.

Watershed Rankings

For the Discovery process, watersheds 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. Table 6 lists the overall rankings of the Lake Conway - Point Remove Watershed when compared nationally and regionally to other HUC-8 watersheds. Nationally, this HUC's risk decile rating ranks between 0% and 25% of HUC-8s in the United States. This information, along with rankings of smaller HUC-12 subbasins, helps identify stream segments or locations where risk evaluation can be targeted. The combination of factors is important in the selection of a watershed for a Discovery Project.

Table 6: Watershed Risk Factor Rankings

Lake Conway - Point Remove Watershed Risk Factor Rankings			
National Risk Factor Rank:	517	Region 6 Risk Factor Rank:	145
National Risk Decile:	3	Region 6 Risk Decile:	3
Average Annualized Loss:	$7,685,000	Average Annualized Loss:	$7,685,000
National Average Annualized Loss Rank:	N/A	Region 6 Average Annualized Loss Rank:	253
National Overall Rank:	517	Region 6 Overall Rank:	154

Topographic Data

Recent acquisitions of topographic data have been made for the Lake Conway - Point Remove Watershed. This data was obtained by the Natural Resources Conservation Service (NRCS), and it covers the entire watershed. There is suitable topography for the areas where detailed study modeling and floodplain mapping may be pursued.

Coordinated Needs Management Strategy

Significant streams in this watershed include the Arkansas River, Palarm Creek, Point Remove Creek, East Fork Point Remove Creek, West Fork Point Remove Creek, Galla Creek, and Rocky Cypress Creek. In addition to the significant streams, Lake Conway is a significant water feature located on Palarm Creek. The USGS provides a National Hydrologic Dataset (NHD) that can be used to identify stream miles that reflect drainage areas of 1 square mile or greater 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 2,660 miles of streams in the Lake Conway - Point Remove Watershed.

The 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 1 square mile drainage area and that currently have effective SFHAs 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 streams within a watershed, CNMS documents certain other factors, such as physiological, climate, or engineering methods 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 studies which contribute to the New, Validated, or Updated Engineering (NVUE) metric.

The NVUE metric is used as an indicator of the status of studies for FEMA's mapped SFHA Inventory. Those studies categorized as "Unverified" typically indicate that there are some factor(s) of change since the SFHA became effective or may have a deficiency warranting restudy. CNMS stream mileage categorized as "Requires Assessment" indicates further input is needed to determine their validity – often because they represent paper inventory or non-modernized studies. During pre-Discovery of the Lake Conway – Point Remove Watershed no streams were found to be categorized as "Requires Assessment" although that may change once Discovery is completed. 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 7 compares the NHD data to the CNMS data and summarizes the Validated NVUE stream mileage from CNMS for the watershed.

Table 7: NVUE Approximate Stream Mileage in the Watershed

NVUE Validation	Stream Miles
NHD Streams (streams with a drainage area of greater than 1 square mile)	2,660.0
CNMS Streams (streams with effective SFHA)	706.5
Stream Miles not accounted for in CNMS	1953.5
CNMS Valid Zone AE / AH Stream Miles	204.5
CNMS Valid Zone A Stream Miles	374.2
CNMS Unverified Zone AE / AH Stream Miles	5.9
CNMS Unverified Zone A Stream Miles	81.8
CNMS Zone AE / AH Stream Miles Requiring Further Assessment or in the process of being studied	0
CNMS Zone A Stream Miles Requiring Further Assessment	0
All Stream Miles not accounted for in CNMS as there are no effective SFHAs (sum of the below)	40.3 (33.2 – A, 7.1 – AE)
Stream Miles not accounted for in CNMS that would fall in land that *could be* developed	40.3 (33.2 – A, 7.1 – AE)
Stream Miles not accounted for in CNMS that would fall in land that *could not be* developed	0

Within the Lake Conway - Point Remove Watershed, and using these criteria from CNMS, approximately 81.8 miles of Zone A streams and 5.9 miles of Zone AE streams were identified as being "Unverified" and as such are candidates for updated analysis. Streams included in the unverified grouping include portions of Tucker Creek and Park Creek. Additionally, 374.2 miles of Zone A stream miles and 204.5 miles of Zone AE streams in the watershed were characterized as being Valid and included in the NVUE metrics. The unverified Zone A stream miles are characterized as unverified due to the absence of hydraulic model data or other analysis known to support the mapping.

Figure 7, Risk, Needs, and Topographic Data, provides a snapshot of CNMS factors or needs 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 Lake Conway - Point Remove Watershed for a Discovery Project.

RISK, NEEDS, AND TOPOGRAPHIC DATA

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

FEMA

tn Associates Ltd

N W E S

0 6 12 Miles

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Watershed
- Large Waterbody
- Watershed Boundary
- LiDAR available

CNMS Validation Status

- Unverified
- Assessed
- Valid

Density Risk Decile

- High
- Low

Project Location

FIGURE 7

DATE: 2/25/2015

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Congressional Representation

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. Not only will their understanding enable them to communicate effectively about the study details and process, it allows for greater collaboration and coordination. Within the Lake Conway - Point Remove Watershed, there are two U.S. Senators, three members from the U.S. House of Representatives, six State Senators, and fourteen (14) members of the State House of Representatives.

Table 8 and Table 9 provide a tabular summary of the U.S. and State Congressionals for the Lake Conway - Point Remove Watershed as of February 2015, while Figures 8 - 10 provide a graphical summary of the U.S. and State Congressional district boundaries across the watershed.

In the past, U.S. Congressionals from Arkansas have either co-sponsored legislation to suspend FIRMs for Levee Maintenance or been a vocal opposition to FEMA's levee policies.

Currently, Senator Boozman serves on the Committee on Appropriations and the Committee on Environment and Public Works in the US Senate and Representative Womack serves on the Committee on Appropriations in the House of Representatives. These committees influence funding and project priorities within FEMA.

The U.S. Congressionals were provided the opportunity to participate in a Pre-Discovery Webinar that included a high level briefing on the Discovery process and activities in Arkansas hosted by the AR CTP Team. This briefing took place on March 11, 2015 at 2:00 pm and participants included representatives from the offices of Senator Tom Cotton, Representative Steve Womack, and Representative French Hill.

Table 8: U.S. Congressionals (as of June 1, 2015)

U.S. Senators			
Name	**Address**	**Phone**	**Email**
John Boozman (R)	1401 W. Capitol Ave., Plaza F Little Rock, AR 72201	(501) 372-7153	www.boozman.senate.gov/public/index.cfm/e-mail-me
Tom Cotton (R)	11809 Hinson Road Suite 100 Little Rock, AR 72212	(870) 864-8582	www.cotton.senate.gov/content/contact-tom
U.S. Representatives			
Name	**Address**	**Phone**	**Email**
Steve Womack (R) District 3	3333 Pinnacle Hills, Suite 120 Rogers, Arkansas 72758	(479) 464-0446	http://womack.house.gov/contact/
French Hill (R) District 2	1501 N. University Ave., Suite 150 Little Rock, AR 72207	(501) 324-5941	https://hill.house.gov/contact/email
Bruce Westerman (R) District 4	101 Reserve St., Suite 200 Hot Springs, AR 71901	(501) 609-9796	https://westerman.house.gov/contact

Table 9: State Congressionals (as of June 1, 2015)

State Senators [1]				
District	**Name**	**Address**	**Phone**	**Email**
6	Gary Stubblefield (R)	2542 Skeets Road Branch, AR 72928	(479) 635-4314	gary.stubblefield@senate.ar.gov
15	David J. Sanders (R)	Room 320 State Capitol Little Rock, AR 72201	(501) 682-6107	davidjamessanders@gmail.com
16	Greg Standridge (R)	P.O. Box 1284 Russellville, AR 72811	(479) 968-1562	Greg.standridge@senate.ar.gov
29	Eddie Joe Williams (R)	401 Cobblestone Drive Cabot, AR 72023	(501) 286-9366	EddieJoe.Williams@senate.ar.gov
32	David Johnson (D)	Room 320, State Capitol Little Rock, AR 72201	(501) 682-6107	David.Johnson@senate.ar.gov
35	Jason Rapert (R)	P. O. Box 10388 Conway, AR 72034	(501) 336-0918	Jason.Rapert@senate.ar.gov
State Representatives [1]				
District	**Name**	**Address**	**Phone**	**Email**
31	Andy Davis (R)	P. O. Box 30248 Little Rock, AR 72260	(501) 837-5109	andy.davis@arkansashouse.org
35	Clarke Tucker (D)	111 Center Street, Suite 1900 Little Rock, AR 72201	(501) 379-1767	clarke.tucker@arkansashouse.org
39	Mark Lowery (R)	229 Summit Valley Circle Maumelle, AR 72113	(501) 837-5221	markdlowery@mac.com
40	Douglas House (R)	8923 Bridge Creek Road North Little Rock, AR 72120	(501) 590-1055	housedouglas@gmail.com
44	Joe Farrer (R)	199 Lewisburg Road Austin, AR 72007	(501) 743-6855	jfarrer@suddenlink.net
65	Rick Beck (R)	1091 Dutton Mountain Road Center Ridge, AR 72027	(501) 912-1441	rick.beck@arkansashouse.org
66	Josh Miller (R)	P. O. Box 814 Heber Springs, AR 72543	(501) 365-3599	josh.miller@arkansashouse.org
67	Stephen Meeks (R)	552 Highway 225 E Greenbrier, AR 72058	(501) 314-9250	Stephen.Meeks@arkansashouse.org
68	Trevor Drown (R)	P.O. Box 1182 Dover, AR 72837	(479) 857-2498	trevor.drown@arkansashouse.org
70	David Meeks (R)	813 Oak St, Suite 10-A, PMB301 Conway, AR 72032	(501) 277-9340	David.Meeks@arkansashouse.org
71	Kenneth Henderson (R)	311 Hickory Hills Drive Russellville, AR 72802	(479) 970-4850	ken4arkansas@gmail.com
72	Stephen Magie (D)	P. O. Box 1506 Conway, AR 72033	(501) 327-4444	stephen.magie@arkansashouse.org
73	Mary Bentley (R)	142 Shady Lane Perryville, AR 72126	(501) 333-2297	mary.bentley@arkansashouse.org
83	David L. Branscum (R)	P. O. Box 370 Marshall, AR 72650	(870) 448-2408	davidlbranscum@hotmail.com

[1] State Congressionals listed in numerical order by District Served.

District 4

District 1

District 3

Van Buren

Clinton

Hector

Pope

East Fork Point Remove Creek

West Fork Point Remove Creek

Point Remove Creek

Galla Creek

Arkansas River

Russellville

Dardanelle

Pottsville

Atkins

Morrilton

Plumerville

Conway

Faulkner

Menifee

Oppelo

Rocky Cypress Creek

Cypress Creek

Perry

Adona

Perryville

Yell

Bigelow

Fourche

Mayflower

Lake Conway

Palarm Creek

Vilonia

Pulaski

Little Rock

District 4

District 2

Perry

U.S. Congressional Representation

U.S. House of Representatives
- District 2: French Hill (R)
- District 3: Steve Womack (R)
- District 4: Bruce Westerman (R)

U.S. Senate
- John Boozman (R)
- Tom Cotton (R)

U.S. CONGRESSIONAL DISTRICTS

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

FEMA

0 6 12 Miles

N W E S

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Lake Conway-Point Remove
- Other Waters
- Large Waterbody
- Lake Conway-Point Remove HUC 8 Watershed
- Congressional District Boundaries

Project Location

FIGURE 8

DATE: 1/9/2015

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ARKANSAS HOUSE OF REPRESENTATIVES DISTRICTS

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

State Representatives
District 31: Andy Davis (R)
District 35: Clarke Tucker (D)
District 39: Mark Lowery (R)
District 40: Douglas House (R)
District 44: Joe Farrer (R)
District 65: Rick Beck (R)
District 66: Josh Miller (R)
District 67: Stephen Meeks (R)
District 68: Trevor Drown (R)
District 70: David Meeks (R)
District 71: Kenneth Henderson (R)
District 72: Stephen Magie (D)
District 73: Mary Bentley (R)
District 83: David L. Branscum (R)

Van Buren
Pope
Conway
Faulkner
Yell
Perry
Pulaski

Hector
Russellville
Dardanelle
Pottsville
Atkins
Clinton
Morrilton
Plumerville
Menifee
Oppelo
Adona
Perry
Perryville
Conway
Vilonia
Bigelow
Fourche
Mayflower
Lake Conway
Little Rock

West Fork Point Remove Creek
East Fork Point Remove Creek
Galla Creek
Arkansas River
Point Remove Creek
Rocky Cypress Creek
Cypress Creek
Palarm Creek

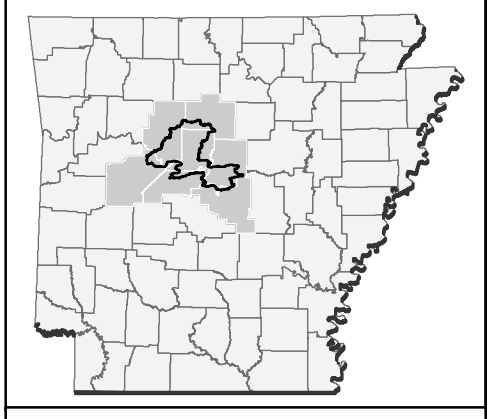
64 40 65 67 430 630 70 165 440 30 530

FEMA

N W E S

0 6 12 Miles

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Lake Conway-Point Remove
- Other Waters
- Large Waterbody
- Lake Conway-Point Remove HUC 8 Watershed
- Arkansas House District Boundaries



Project Location

FIGURE 9

DATE: 7/6/2015

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Van Buren
Pope
Conway
Faulkner
Yell
Perry
Pulaski
Hector
Clinton
Russellville
Dardanelle
Pottsville
Atkins
Morrilton
Plumerville
Menifee
Oppelo
Conway
Vilonia
Adona
Perryville
Bigelow
Fourche
Mayflower
Little Rock
Galla Creek
Arkansas River
Point Remove Creek
West Fork Point Remove Creek
East Fork Point Remove Creek
Rocky Cypress Creek
Cypress Creek
Palarm Creek
Lake Conway
6
16
64
40
65
15
35
29
32
67
70
165
430
630
440
30
530

State Senators	
District 6:	Gary Stubblefield (R)
District 15:	David J. Sanders (R)
District 16:	Greg Standridge (R)
District 29:	Eddie Joe Williams (R)
District 32:	David Johnson (D)
District 35:	Jason Rapert (R)

ARKANSAS SENATE DISTRICTS

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

FEMA

N W E S

0 6 12 Miles

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Lake Conway-Point Remove
- Other Waters
- Large Waterbody
- Lake Conway-Point Remove HUC 8 Watershed
- Arkansas Senate District Boundaries

Project Location

FIGURE 10

DATE: 6/24/2015

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II. Discovery Efforts

i. Engagement / Pre-Discovery Report

Pre-Discovery Community Engagement

The CTP Project Team identified in Table 10 below, was in contact with watershed stakeholders via letters, email, and phone calls before the Discovery meetings to request local participation. In addition to assisting in scheduling the meetings, 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 the Lake Conway - Point Remove Watershed. 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.

Table 10: CTP Lake Conway - Point Remove Watershed Project Team

Name	Organization	Project Role
Michael Borengasser	ANRC	CTP Coordinator / Project Manager / State NFIP Coordinator
John Bourdeau	FEMA Region 6	Project Monitor – FEMA Region 6
Lacye Blake	Arkansas Department of Emergency Management (ADEM)	State Hazard Mitigation Officer
Linda Johnson	FTN	CTP Contractor / Program Manager
MaryBeth Breed	FTN	CTP Contractor / Project Manager
Lee Beshoner	FTN	CTP Contractor / Technical Manager

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

- Gathered information about local flood risk and flood hazards,
- 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 Density of Parcels Potentially at Risk in the Watershed,
- Mapped Urban Change from 2006 – 2011, and
- Mapped Population Density in the Watershed.

The information gathered before, during and after the Discovery meeting will be used to determine which areas of the watershed may require further study through a Risk MAP project. Discovery will also include discussions with other state and federal agencies about potential partnership opportunities, as well as enlisting their help in identifying flood risk throughout the watershed.

The State CTP's and FEMA's activity with the communities in the Lake Conway - Point Remove Watershed is summarized in Table 11, History of Engagement and Table 12, Hazard Mitigation Plan Status.

Table 11: History of Engagement

Community Name	Type of Engagement	Date	Agency	Comments
Conway County and Incorporated Areas	Map Mod	July 2011	FEMA	
Faulkner County and Incorporated Areas	Map Mod (partial)	December 2006	FEMA	Considered "non-modernized" FIRMs
Perry County and Incorporated Areas	Map Mod (partial)	June 2000	FEMA	Considered "non-modernized" FIRMs
Pope County and Incorporated Areas	Map Mod	March 2010	FEMA	
Conway, Faulkner, Perry, Pope, Van Buren, and Yell Counties	LIDAR	March 2011	NRCS	Topography newer than effective FIRM; LIDAR collection included the Lake Conway – Point Remove Watershed and may not include all parts of the counties listed
Pulaski County and Incorporated Areas	Map Mod	July 2015	FEMA	Arkansas River SFHA part of Seclusion Process / rest of the county & communities updated from Map Mod
Pulaski County	LIDAR	2010 -2011	PAGIS / FEMA	Topography newer than FIRM
Yell County and Incorporated Areas	Map Mod (partial)	March 2002	FEMA	Considered "non-modernized" FIRMs

Table 12: Hazard Mitigation Plan Status (as of June 2015)

Community Name	Hazard Mitigation Plan Name	Plan Status	Plan Expires
Conway County	Conway County Hazard Mitigation Plan	Update in Progress	12/1/2013
Faulkner County	Hazard Mitigation Plan Faulkner County	Update in Progress	4/29/2014
Perry County	Perry County, Arkansas Natural Hazard Mitigation Plan	Expired / Application at FEMA	10/15/2014
Pope County	Pope County, Arkansas Hazard Mitigation Plan	Current	05/20/2020
Pulaski County (Cities of Little Rock & North Little Rock)	Hazard Mitigation Plan Pulaski County, Arkansas	Current	11/11/2019
Van Buren County	NA	Update in Progress	
Yell County	Unknown	Current	9/22/2019
State of Arkansas	State of Arkansas All-Hazards Mitigation Plan	Current	09/04/2016

The CTP Project Team encourages the counties and communities to be diligent in the process of updating their Hazard Mitigation Plans (HMPs) if they are not already under development. Representative(s) from ADEM are available to discuss grant opportunities and/or general assistance that may be available for their HMPs.

Figure 11 displays the locations and types of mitigation grant activity in the Lake Conway - Point Remove Watershed. Proposed mitigation activities and potential property acquisitions were identified during Discovery through input from the CAPDD. In addition, a Community Development Block Grant (CDBG) Disaster Grant Project was awarded and completed in Mayflower mitigating damages resulting from 2008 flooding. There may be additional grants being pursued at both the state and local level within the watershed that have not been identified. The bulk of the grants Information available to date indicate Safe Rooms are the only FEMA sponsored grant activities within the watershed. An additional mitigation project funded with a Disaster Recovery Grant through the Arkansas Economic Development Council, led by Conway County, enabled some critical levee improvements to be made on the Point Remove Levee in Conway County near I-40. Additional improvements are needed and have been identified in the Discovery findings.

GRANT ACTIVITY

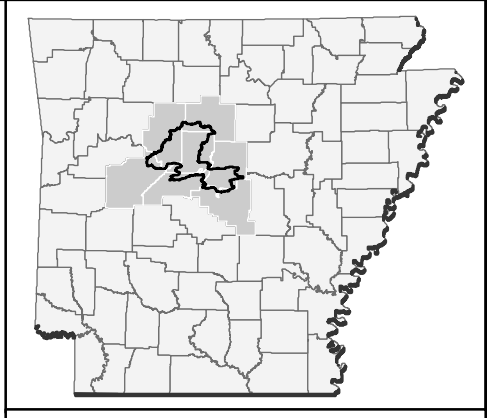
LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

FEMA

0 6 12 Miles

N W E S

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Watershed
- Other Waters
- Large Waterbody
- Watershed Boundary
- HMGP Grants (Safe Rooms)
- Mitigation Grants
- Property Acquisition
- Public Assistance Grants



Project Location

FIGURE 11

DATE: 7/6/2015

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ii. Pre-Discovery Data Collection

For the Lake Conway - Point Remove Watershed's Engagement / Pre-Discovery Report and Map, multiple datasets were used. The following tabular summary of the data collected is presented in Table 13 in order to document the data used and its sources. All data collected and used during the Discovery activities will be provided to the communities at the Discovery project close-out.

Table 13: Data Collection for the Watershed

Data Types / Description	Deliverable/Product	Source
Average Annualized Loss (AAL) Data	Discovery Map Geodatabase	FEMA
State, County, and Community Boundaries	Discovery Map Geodatabase	AHTD / AGIO
US and State Congressional Staff and Boundaries	Discovery Map Geodatabase and Supporting Documents	State of Arkansas / personal communications / AGIO
Effective Flooding (National Flood Hazard Layer, effective geo-referenced non-modernized panels)	Discovery Map Geodatabase and supporting digital dataset	FEMA / ANRC
Topographic Data boundaries (available and in progress)	Discovery Map Geodatabase and supporting digital dataset	FEMA / NRCS
Wildlife Management Area boundaries	Discovery Map Geodatabase	AGFC / US Forest Service / US Fish and Wildlife Service
Watersheds (HUC-8 & -12)	Discovery Map Geodatabase	USGS NHD
Census Blocks	Discovery Map Geodatabase	US Census Bureau
Claims / Loss Data	Discovery Map Geodatabase	FEMA
Contacts	Spreadsheet / Supporting Documents	Local Web Sites / State of Arkansas / ANRC / FEMA / personal communications
Community Rating System (CRS)	Discovery Report	FEMA's "Community Rating System Communities and Their Classes"
CNMS Data	Discovery Map Geodatabase	FEMA / AR CTP
Levees	Discovery Map Geodatabase	USACE / FEMA
Dams	Discovery Map Geodatabase	ANRC / AGIO / USACE
Grant Locations	Discovery Map Geodatabase, Supporting Documents	FEMA / ADEM / local planning & development districts
Letters of Map Change (LOMC)	Discovery Map Geodatabase	FEMA
Stream Gages	Discovery Map Geodatabase	USGS
Structures / Bridges	Discovery Map Geodatabase	FEMA / US Census Bureau / AHTD / AGIO

Table 13: Data Collection for the Watershed (continued)

Data Types / Description	Deliverable/Product	Source
Transportation Lines	Discovery Map Geodatabase	AHTD
Disaster Declarations	Supporting Documents	FEMA / ADEM
HMPs and Mitigation Activities	Supporting Documents (copies of HMPs not included)	FEMA / ADEM / ANRC / AR CTP
Imagery	Supporting Documents	AGIO

iii. Discovery Meeting

As part of the process for the Lake Conway - Point Remove Watershed, Discovery meetings were held at strategic locations in the Watershed on March 31 and April 1, 2015. Meeting times and locations are shown in Table 14. Each meeting was customized to suit the stakeholders present and to allow interaction of the CTP and Project Team with the Discovery meeting attendees. The Discovery meetings are intended to provide the opportunity to learn about the Risk MAP Program, and discuss and document any concerns and mitigation interests for the Lake Conway - Point Remove Watershed.

Table 14: Project Discovery Meeting Times and Locations

Meeting	Date and Time	Location
1	Tuesday March 31, 2015 1:30 – 3:30 PM	Faulkner County Emergency Management Office 57 Acklin Gap Road Conway, AR 72032
2	Wednesday April 1, 2015 9:00 – 11:00 AM	Morrilton Chamber of Commerce 115 E Broadway Street Morrilton, AR 72110
3	Wednesday April 1, 2015 1:30 – 3:30 PM	Dardanelle Community Center 2011 State Highway 22 West Dardanelle, AR 72834

The Discovery Meetings were led by Mike Borengasser, ANRC CTP Coordinator, as well as various other Discovery Meeting personnel from ADEM and FTN. The Discovery Meetings included a brief introduction to the Risk MAP program and the initial results of the Discovery Activities. Community representatives and stakeholders were given the opportunity to collectively talk with the Hazard Mitigation Team (ADEM) and the Risk Identification Team (ANRC / FTN) to review past projects, discuss current projects, and evaluate project opportunities that are specific to mitigation actions. First Order Approximation (FOA) analysis and mapping was prepared for the watershed and was discussed and provided to the communities. Important items for discussion may have including some or all of the following at the respective meeting venues:

- Community Benefits and Grant Opportunities – Floodplain-related grants; risk, needs, and topographic availability; RL/SRL properties; Letters of map change (LOMCs); landuse changes over the last 5 years; and single claims.
- Mitigation Planning and Mitigation Activities – Mitigation plans, understanding Risk MAP and determining risk.
- NFIP Information – Effective FIRMs, Flood Insurance Study (FIS), and LOMCs.
- Risk Identification and Communication – 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.
- First Order Approximation – Analysis and data review, usage, and applicability.

During Discovery, community representatives and stakeholders are encouraged to actively contribute information about concerns in the Watershed by identifying relevant locations on the large watershed map and then providing a short explanation on the comment form. Discovery allows attendees and the project team to work together to listen, discuss, and document any notable items for the watershed. Members of the Project Team (ANRC, ADEM, and FTN) indicated their availability to answer questions and engage the attendees after the Discovery meeting. During each Discovery Meeting, the Project Team members requested that attendees provide any additional information within 30 days of the meeting. Follow-up correspondence was distributed by the Project Team in early May which requested information and input from the communities on or before May 31, 2015.

Prior to the Discovery Meetings the Lake Conway - Point Remove Watershed Engagement Plan / Pre-Discovery Report were distributed in hard copy to the community CEO's and were made available to download at http://www.riskmap6.com/ and http://www.floodplain.ar.gov. The Final Lake Conway - Point Remove Watershed Discovery Report will also be distributed in the same fashion and will replace the Engagement Plan / Pre-Discovery Report on the above noted websites.

Additional copies of the Lake Conway - Point Remove Watershed Discovery Report will be made available at the Discovery Close-out Meeting that will be held on / before September 30, 2015. The Discovery Close-out Meeting is intended to present all of the findings from the Discovery process in the Lake Conway – Point Remove Watershed to the stakeholders and discuss future project opportunities.

iv. Discovery Implementation

The communities / organizations represented at the Discovery Meetings are included in Table 15 and the communities NOT represented at the Discovery Meetings are included in Table 16.

Table 15: Communities and Organizations Represented at the Discovery Meetings

Community/Organization Represented		
City of Dardanelle, Yell County	Pulaski County	Lake Conway Home Owners Association
City of Morrilton, Conway County	Yell County	US Fish & Wildlife Service
City of Vilonia, Faulkner County	NRCS	Yell County Wildlife Federation
Town of Menifee, Conway County	AGFC	Congressman Steve Womack's Office
Conway County	ADEM	Congressman French Hill's Office
Faulkner County	ANRC	Congressman Bruce Westerman's Office
Perry County	FTN	Central Arkansas Planning and Development District (CAPDD)
Pope County		

Table 16: Communities Not Represented at the Discovery Meetings

Community Not Represented	
City of Oppelo, Conway County	Town of Perry, Perry County
City of Plumerville, Conway County	City of Perryville, Perry County
City of Conway, Faulkner County	City of Atkins, Pope County
City of Mayflower, Faulkner County	Town of Hector, Pope County
City of Adona, Perry County	Town of Pottsville, Pope County
Town of Bigelow, Perry County	City of Russellville, Pope County
City of Fourche, Perry County	Van Buren County

v. Data Gathering Overview

Information about the Lake Conway - Point Remove Watershed was gathered prior to the Discovery Meetings and is documented in the preceding Table 13 Data Collection for the Watershed. The data collected in pre-discovery was obtained from FEMA or other public and/or national datasets.

Table 17 was completed following the Discovery Meeting as part of the Final Lake Conway - Point Remove Watershed Discovery Report and summarizes the documentation collected at, and after, the Discovery Meeting specific to a flooding source and/or community area.

Table 17: Data Collection Summary - During and After Discovery Meeting

Information Provided By	Flooding Source	Discovery Workshop Comment Summary
Lake Conway Homeowners Association / AGFC	Lake Conway	Lake Conway Watershed Modeling reports, Lake Conway Feasibility Study proposal, AGFC meeting minutes specific to the Lake Conway dam evaluation
City of Dardanelle / Yell County Wildlife Federation	Arkansas River	Various documents including a disputed Proposed Levee and Intermodal Project findings from the USACE, Disputed Environmental Impact Statement and concerns about a lack of review and evaluation by FEMA on the impacts of projects of this magnitude to the designated floodplain.
CAPDD	Various	Multiple drainage improvement projects under consideration for grant opportunities for the Cities of Conway, Mayflower, Greenbrier, and Faulkner County. Not all of the projects are included in the Lake Conway – Point Remove Watershed.
WAPDD	Point Remove Creek	A grant project that addressed a small part of the levee improvements needed on the West Fork Point Remove Levee.
Conway County	Various	Provided input on concerns with Watershed Improvement District dams and de-accredited levees in the county.
Town of Menifee	None	Completed the Risk MAP survey indicating no flooding or flood map issues at this time.
Perry County	None	Completed the Risk MAP survey indicating no flooding or flood map issues at this time.

At the conclusion of the Discovery process all supporting information, data and files for the Final Discovery Report will be provided digitally in a directory structure comparable to the example provided below.

11110203\Lake Conway - Point Remove Watershed Discovery

\General

- Discovery Metadata – XML
- Project Narrative - PDF

\Correspondence

\Project_Discovery_Initiation

- Pre-Discovery Newsletter
- Engagement / Pre-Discovery Report – Word/PDF

\Discovery_Meeting (to be completed after the Discovery Meeting)

- Meeting Invitations – Word/PDF
- Meeting Attendance Records – PDF
- Risk MAP Action Survey
- Other

\Post_Discovery (to be completed after the Discovery Meeting)

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

\Spatial_Files

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

\Supplemental_Data

- All other data collected during Discovery
    - Congressional Briefing

III. Watershed Findings

The NFIP claims reported have been identified as either within the SFHA or those outside of the SFHA, which are identified specifically as BCX Claims, claims that occur outside of the SFHA in Zones B, C, or X. In addition, there are also several locations of RL/SRL within the Lake Conway-Point Remove Watershed. Claims activity is generally concentrated in the population centers of Conway, Russellville, and Mayflower. Figures 5 and 6 show the claims activity and the RL/SRL claims respectively.

Letters of Map Amendment (LOMA), Letters of Map Revisions (LOMRs), and Conditional LOMRs (CLOMR), referred to collectively as Letters of Map Change (LOMCs), are also distributed throughout the watershed, and again are concentrated in the same areas where claims have occurred. LOMCs are often an indicator that the SFHA mapping needs to be reviewed for accuracy. Please refer to Figure 12 for the location of these LOMCs.

LETTER OF MAP CHANGE (LOMC) ACTIVITY

LAKE CONWAY-POINT REMOVE WATERSHED (HUC 11110203)

FEMA

0 6 12 Miles

N W E S

- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches
- Other Waters
- Large Waterbody
- Watershed Boundary
- Letter of Map Amendment (LOMA)
- Letter of Map Revision (LOMR)
- LOMR - Fill (LOMR-F)
- LOMR - Floodway (LOMR-FW)

CNMS Validation Status

- Unverified
- Assessed
- Valid

Project Location

FIGURE 12

DATE: 2/25/2015

S:\projects\03015-0005-011\gis\doc\map\Discovery_Maps\LkConway-PtRemove_Discovery_Figure_12.mxd

i. CNMS Analysis

A CNMS analysis was performed in preparation for the Discovery Meeting. Table 18 shows the detailed study streams in the Lake Conway - Point Remove Watershed 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 (C) elements fail, or if four or more of the ten (10) secondary (S) elements fail during stream reach level validation. The "unverified" status may also have been identified as a community identified need during the Scoping Process that was not able to be addressed during Map Mod or that was identified during the Map Modernization Project.

Table 18: "Unverified" Detailed Streams per CNMS Analysis

Stream Name	City and/or County	Validation Status	Failed CNMS Elements
Tucker Creek	City of Conway, Faulkner County	Unverified	C6 and S6

*Community request during Map Mod

Table 19 provides a description of the validation elements that failed as identified in the CNMS database.

Table 19: CNMS Category Descriptions

Element Name	Element Description	Issue being identified by the Element
C6	Hydraulic structures added or removed (1 to 5)	Structures present and do not appear to be reflected in the FIS / FIRMs / hydraulic model
S6	Topographic data	New topographic data is available throughout the Lake Conway - Point Remove Watershed. Some of the effective FIRMs may not reflect this newer topographic data.

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 the Lake Conway – Point Remove Watershed are recommended. Both FEMA and their CTP Partner, ANRC, look to promote mitigation action within the watershed. After internal and partner review of the communities within the watershed, the following are overarching opportunities have been identified to promote community action within the watershed.

Table 20 lists some potential needs in the Watershed and actions that could be taken under each of the 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 – discuss potential opportunities specific to property acquisition

Table 20: Potential Watershed Activities

Risk Identification and Communication
• City of Dardanelle and the Yell County Wildlife Federation have indicated concerns about the potential impacts to the base flood elevation of the Arkansas River in the event that development occurred in association with a proposed Arkansas River intermodal facility. Has FEMA had an opportunity to review and comment on the results of both independent and federally funding hydrologic and hydraulic analyses that seem to indicate no significant impact from proposed development? The City of Dardanelle and Yell County Wildlife Federation disagree with the findings and believe that the City as well as other private and public properties will be adversely impacted. Is there a place in the Risk MAP program to address their interests? • Faulkner County, including the incorporated communities, would benefit from an updated Flood Insurance Study using new LIDAR elevation data, once the entire county has been acquired, and providing model backed Zone A's. Faulkner County was an early Map Mod Project (December, 2006). The county has experienced rapid growth in the last 10 years. • Lake Conway: Properties that surround Lake Conway have been impacted by flooding, some of which may be a function of the Lake's outlet structure. Lake Conway is an AGFC property. The outlet structure requires operation and there is currently a proposed feasibility study pending funding to proceed. The Lake Conway Home Owners Association and the AGFC would like to move forward with the feasibility study to evaluate an alternative outlet structure that would not require human operation, would reduce risk to AGFC staff, and would mitigate flooding of the properties surrounding the lake. Both the Home Owners Association and AGFC expressed interest in pursuing grant opportunities to perform the feasibility study intended to confirm the constructability of the alternative outlet structure and downstream impacts. In 2013 the feasibility study was estimated to cost $70,000. This study might also be considered as part of a Faulkner County FIS update project. • The City of Russellville in working with the USACE on a 205 study on Prairie Creek. The project details were not provided during Discovery.

Table 20: Potential Watershed Activities (cont'd)
Risk Identification and Communication
• The City of Conway is working with CAPDD to acquire a grant to alleviate frequent downtown flooding by constructing a detention pond to divert and detain local runoff. Conway is located in Faulkner County and would benefit from an FIS update. • The City of Mayflower is working with CAPDD to acquire a grant to consider raising Paradise Road over Lake Conway. Paradise Road when overtopped by flooding cuts off access to a residential area. Mayflower is located in Faulkner County and would benefit from an FIS update. • The City of Greenbrier has identified several locations where drainage improvements would likely alleviate areas of chronic flooding. Greenbrier is working the CAPDD for grant opportunities. Greenbrier is located in Faulkner County and would benefit from an FIS update. Greenbrier is located in the Cadron Watershed. • The City of Mayflower has identified two areas west of Interstate 40 and south of Highway 89 (Poplar Street and Cross Street) where drainage improvements would likely alleviate flooding of area homes and business. Mayflower is working with CAPDD to identify grant opportunities. • The City of Vilonia has identified areas along North Fork Cypress Bayou and Middle Fork Cypress Bayou where homes have experienced some flooding and roads are routinely overtopped. Vilonia is located in Faulkner County and would benefit from an FIS update. Vilonia is located in the both the Lake Conway – Point Remove and Cadron Watersheds. • Conway County is interested in finding ways to evaluate watershed improvement dams constructed in the 1960's and 1970's to confirm structural integrity and identify any risks downstream. • The City of Wooster through the Faulkner County HMP indicated a need to mitigate Highway 25 being flooding from Greenbrier Creek and its tributaries through drainage and/or bridge improvements. • The scoping component of the Map Mod Project in Pope County in 2007 identified Galla Creek in the Town of Pottsville and White Oak Creek in the City of Atkins as community requested FIS updates, however, during Discovery these creeks were not identified and therefore are not included as an action request in this report. • The scoping component of the Map Mod Project in Conway County 2007 identified Cherokee Creek as community requested FIS update, however, during Discovery this creek was not identified and therefore is not included as an action request in this report.
NFIP Community Actions
• The City of Russellville is pursuing participation in CRS program
Mitigation Planning and Mitigation Actions
• Conway County is updating their HMP • Faulkner County is updating their HMP • Perry County is updating their HMP • Van Buren County is developing their first HMP • Pope County's HMP was approved May 20, 2015 • Pulaski County and Yell County HMPs are current

Table 20: Potential Watershed Activities (cont'd)
Community Benefits and Grant Opportunities
• City of Vilonia: Flooding occurs in residences along North Fork Cypress Bayou that might be considered for mitigation whether specifically at the individual homes or evaluating road crossings as a means to reduce the flooding in the area north of Hwy 64B. Church Street is also impacted by the Middle Fork Cypress Bayou. • Lake Conway: CAPDD has been working with the communities of Mayflower, Conway, and Faulkner County and has identified 24 property owners who are considering flood mitigation actions by way of acquisition, relocation, or elevation.

Table 21 provides specific evaluation guidelines for streams or areas that could benefit from additional study that were identified during Discovery. Any FEMA-based metrics that would be met if the need or issue was addressed is identified, 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 included. Some needs/actions may be listed that were not raised by any specific community but were identified as general improvements that could be made in the Lake Conway – Point Remove Watershed to meet general FEMA regional goals based on the information gathered during Pre-Discovery and Discovery.

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 21.

- **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.
- **AOMI_ID** – The Area of Mitigation Interest (AOMI) shapefile prepared for the Lake Conway Point Remove Watershed provides the spatial location of the information collected and is provided in the Lake Conway Point Remove Flood Risk Database developed in association with the Discovery Report.

Table 21: Metrics and Rankings of Needs

Priority	Description of Need Evaluation Guide **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**	**Impacts From Any Current Map Actions**	**FEMA Metric or Community Benefit**	**Evaluation**
1.	Faulkner County (AOMI_ID: 5)	FIS update with new LIDAR elevation data and providing model backed Zone A's. To date LIDAR elevation coverage does not include the north half of Faulkner County.		Quality mapping; approximately 315 NVUE stream miles added	High
2.	Lake Conway Dam, Faulkner County (AOMI_ID: 3)	Flooding of homes around Lake Conway has occurred repeatedly. The current outlet structure requires an operator to adjust gates in order to release heavy rains. An uncontrolled spillway could prove to alleviate frequency of flooding and need for an operator.	The Lake Conway Home Owners Association and the Arkansas Game and Fish Commission have expressed interest in grant opportunities to move the evaluation and feasibility of a redesigned dam forward.	Reduce flooding along the Lake. Eliminate need for operation at the dam during conditions that can be unsafe at times, and to consider impacts downstream.	High
3.	Vilonia, Faulkner County (AOMI_ID: 2 & 4)	Flooding along North Fork Cypress Creek north of Hwy 64B affects several residences and causes road closures / South Church Street experiences shallow flooding from the Middle Fork Cypress Creek.		Mitigation activities / grants might be considered if homeowners are interested which could reduce flood losses / An updated FIS will improve the quality of the flood maps	Medium
4.	City of Conway, Faulkner County (AOMI_ID: 24)	Design downtown detention to alleviate frequent flooding of businesses.	The City is working with CAPDD to acquire grant funding to pursue design and construction.	Reduce flood losses	Community Action / High

Table 21: Metrics and Rankings of Needs (Cont'd)

	Location of Need / Project	Details	Impacts From Any Current Map Actions	FEMA Metric or Community Benefit	Evaluation
5.	City of Mayflower, Faulkner County (AOMI_ID: 25)	Paradise Road is overtopped during significant rain events cutting off access to a residential neighborhood.	The City is working with CAPDD to acquire grant funding for raising the road and reducing or eliminating the road closures.	Reduce the risk to property owners during flooding events; improvements could be reflected in updated SFHA boundaries, NVUE stream mileage; quality maps.	Community Action / High
6.	City of Mayflower, Faulkner County (AOMI_ID: 30 – 31)	Repeated flooding has been identified on Cross Street and Poplar Street in Mayflower where drainage improvements are needed to reduce the frequency of localized flooding to residential areas.	The City is working with CAPDD to acquire grant funding for drainage improvements to reduce flooding during frequent events.	Reduce the risk of flooding to property owners; improvements could be reflected in updated NVUE stream mileage. An updated Faulkner County FIS will improve the quality of the flood maps.	Community Action / High
7.	Conway County, AR (AOMI_ID: 6 – 10)	Arkansas River Levees have been de-accredited and/or are in need of improvements to become compliant. Levees include West Conway County Levee, Willow Bend South Levee, Conway County Levee District #6 Levee, East Conway County Levee, and West Point Remove Levee. A comprehensive list of levee repairs was not available for inclusion here.	Conway County has received a grant and was able to address some levee deficiencies on the Point Remove Levee; however there is more that needs to be done.	Arkansas River and Point Remove River Levees in Conway County should be considered candidates for LAMP projects.	High

Table 21: Metrics and Rankings of Needs (Cont'd)					
	Location of Need / Project	**Details**	**Impacts From Any Current Map Actions**	**FEMA Metric or Community Benefit**	**Evaluation**
8.	Conway County, AR (AOMI_ID: 11 – 23, 32 - 40)	NRCS Dams: Many of the dams in the County are reaching the extent of their lifespan, may be in need of improvements / rehabilitation and ownership identification is difficult. Implement development of EAPs as needed.		Conway County dams should be evaluating for safety and inundation maps and emergency action plans should be developed wherever possible.	Medium
9.	City of Greenbrier, Faulkner County (AOMI_ID: 27 – 29)	Chronic flooding has been identified along Greenbrier Creek and tributaries that could be alleviated with drainage improvements. The City of Greenbrier is located in the Cadron Watershed.	The City is working with CAPDD to acquire grant funding for drainage improvements to reduce flooding during frequent events.	Reduce the risk of flooding to property owners; improvements could be reflected in updated NVUE stream mileage. An updated Faulkner County FIS will improve the quality of the flood maps.	Community Action / High
10.	City of Wooster , Faulkner County (AOMI_ID: 41-42)	Flooding along Hwy 25 in several locations may require structure improvements in cooperation with the AHTD.		Reduce risk of flooding and decrease occurrences of road closings. An updated Faulkner County FIS will improve the quality of the flood maps.	Community Action / High

Table 21: Metrics and Rankings of Needs (Cont'd)

	Location of Need / Project	Details	Impacts From Any Current Map Actions	FEMA Metric or Community Benefit	Evaluation
11.	Arkansas River at Dardanelle, Yell County (AOMI_ID: 1)	Community and stakeholder concerns about the base flood elevation (BFE) of the Arkansas River at Dardanelle and the impact to the BFE in the event of development in/around Russellville.	Community efforts have not proven effective. The stakeholders are concerned that FEMA has not provided support or expertise to a proposed river project with regard to the impact to the BFE.	Quality mapping	Medium

i. Project Prioritization

During the Discovery process, flood risk projects are intended to be initiated and cataloged at the HUC-8 level. 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 will be cataloged in the Coordinated Needs Management Strategy Database (CNMS).

Once the entire HUC-8 has been evaluated, FEMA Region 6, using input and recommendation from the Lake Conway - Point Remove Watershed Project Team and specifically the ANRC, who is the CTP of FEMA, will select the project tasks necessary to respond to the identified levels of risk and need. The CTP and the Region are 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.

As a result of the Discovery process projects will be identified as being high priority projects for consideration in the FY15 (2015-2016) FEMA grant cycle based on current / planned community projects and cost-sharing capabilities.