

Engagement Plan / Pre-Discovery Report

Lake Conway – Point Remove Watershed, HUC - 11110203

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

03/05/2015



Project Area Community List

Community Name	CID
<i>Conway County Communities</i>	
Conway County Unincorporated Areas	050426
Menifee, Town of	050266
Morrilton, City of	050044
Oppelo, Town of	050597
Plumerville, City of	050364
<i>Faulkner County Communities</i>	
Conway, City of	050078
Faulkner County Unincorporated Areas	050431
Mayflower, City of	050079
Vilonia, City of	050417
<i>Perry County Communities</i>	
Adona, City of	050376
Bigelow, Town of	050387
Fourche, Town of	050600
Perry County Unincorporated Areas	050165
Perry, Town of	050276
Perryville, City of	050362
<i>Pope County Communities</i>	
Atkins, City of	050304
Hector, Town of	050254
Pottsville, Town of	050277
Pope County Unincorporated Areas	050458
Russellville, City of	050178
<i>Pulaski County Communities</i>	
Pulaski County Unincorporated Areas	050179
<i>Van Buren County Communities</i>	
Van Buren County Unincorporated Areas	050566
<i>Yell County Communities</i>	
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
BFE	base (1-percent-annual-chance) flood elevation
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
CTP	Cooperating Technical Partners
DEM	Digital Elevation Model
DFIRM	Digital Flood Insurance Rate Map
EAP	Emergency Action Plan
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FPA	Floodplain Administrator
FTN	FTN Associates, Ltd. (State Contractor)
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
HEC-RAS	Hydrologic Engineering Center – River Analysis System
H&H	hydrologic and hydraulic
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

Acronyms and Abbreviations (Cont'd)

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
Map Mod	Map Modernization
MAS	Mapping Activity Statement
MAT	Mitigation Assessment Team
MDP	Master Drainage Plan
MXD	Map Exchange Document
NFIP	National Flood Insurance Program
NHD	National Hydrologic Dataset
NRCS	Natural Resources Conservation Service
NVUE	New, Validated, or Updated Engineering
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

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.

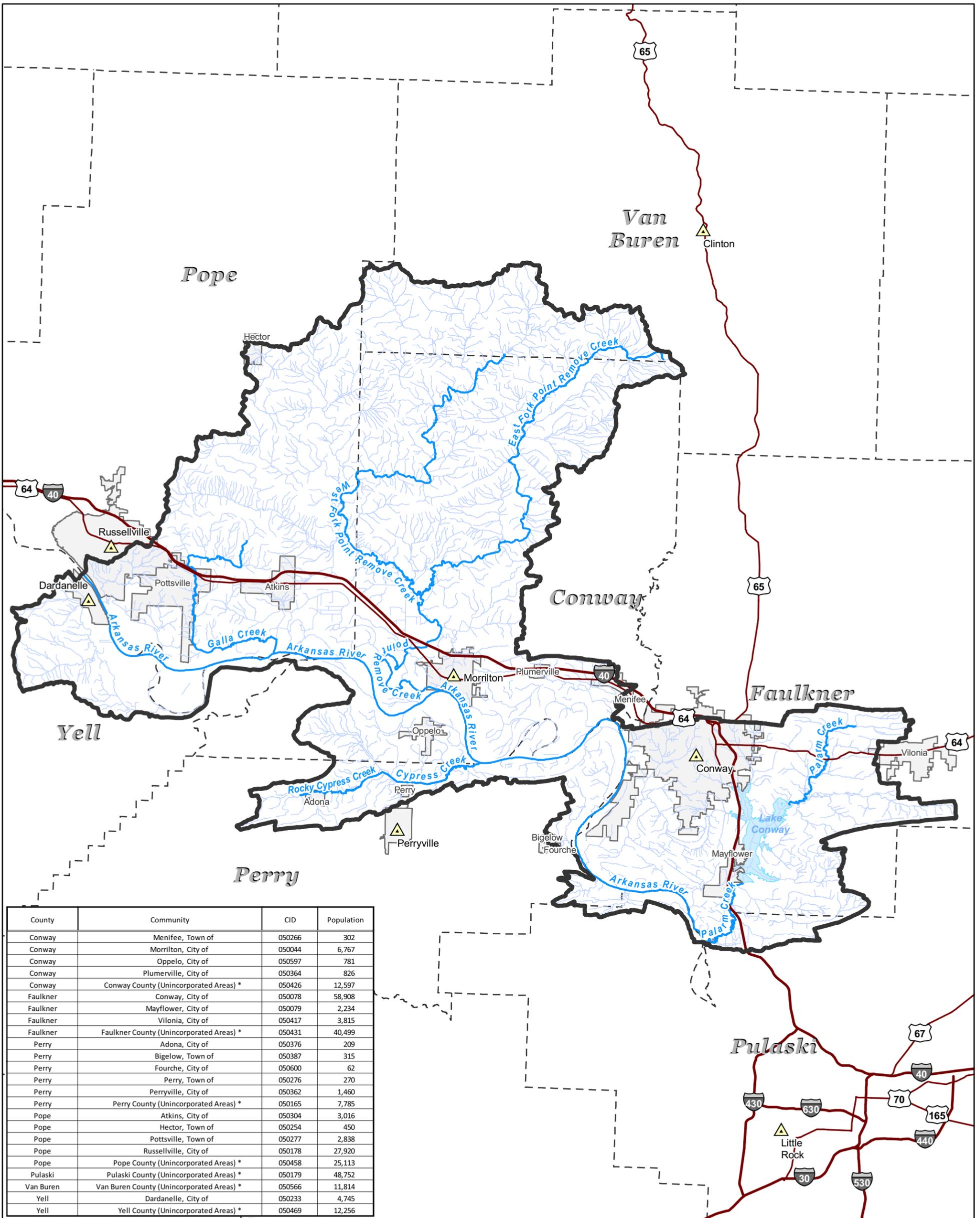
The vision and intent of the Risk MAP program is to, through collaboration with State and Local entities, deliver quality data that increases public awareness and leads to mitigation actions that reduce risk to life and property. To achieve this vision, FEMA has transformed its traditional flood identification 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, Watersheds 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, will hold Discovery Meetings in this watershed. During Discovery, ANRC and FEMA will reach out to local communities to:

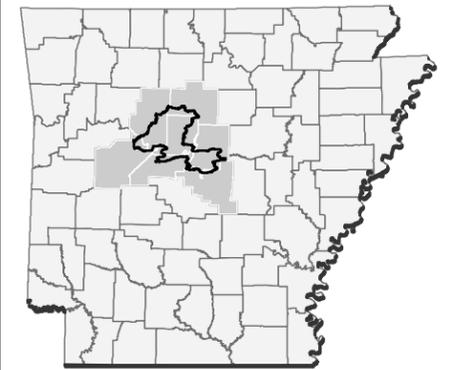
- Gather information about local flood risk and flood hazards;
- Obtain and ultimately review current and historic mitigation plans to understand local mitigation capabilities, hazard risk assessments, and current or future mitigation activities; and
- Include multi-disciplinary staff from within each 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)



- 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

DATE: 2/19/2015

FIGURE 1

The results of the Discovery process will be presented in the final Discovery Report, a watershed scale Discovery Map and the digital data that will be 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 Engagement Plan / Pre-Discovery Report. The digital data submitted with this report contains correspondence, exhibits to be 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 Pre-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.

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 (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 Modernization 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 since it was prepared prior to the Map Mod Program and is therefore 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.

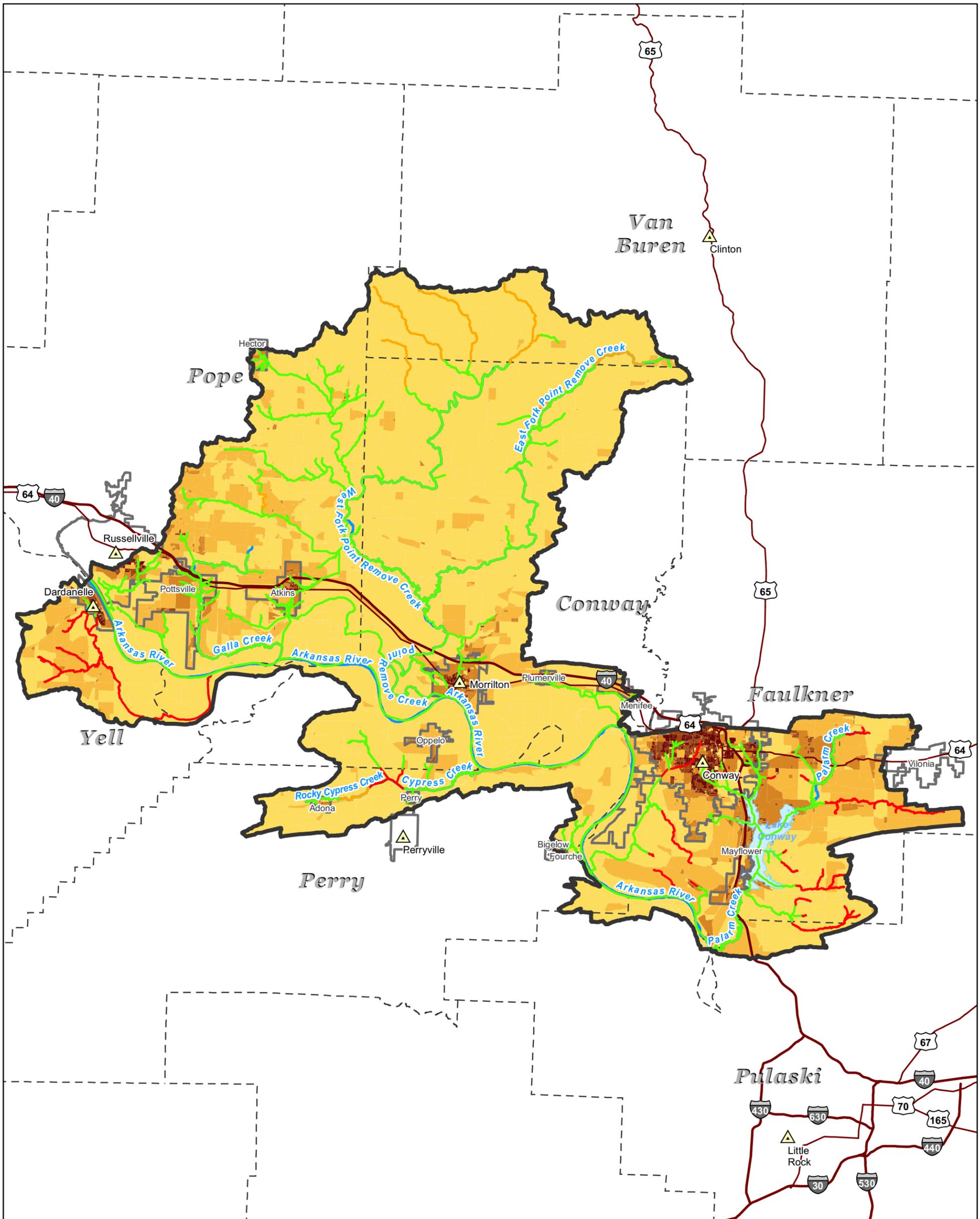
Table 2: Community FIRM Status

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.

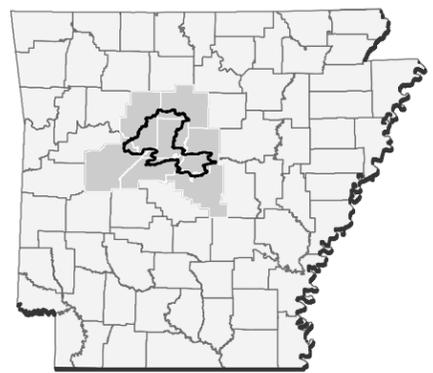
Table 2: Community FIRM Status (Continued)

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	ALL ZONE AE, X; 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)



Project Location

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

- CNMS Validation Status**
- Unverified
 - Assessed
 - Valid

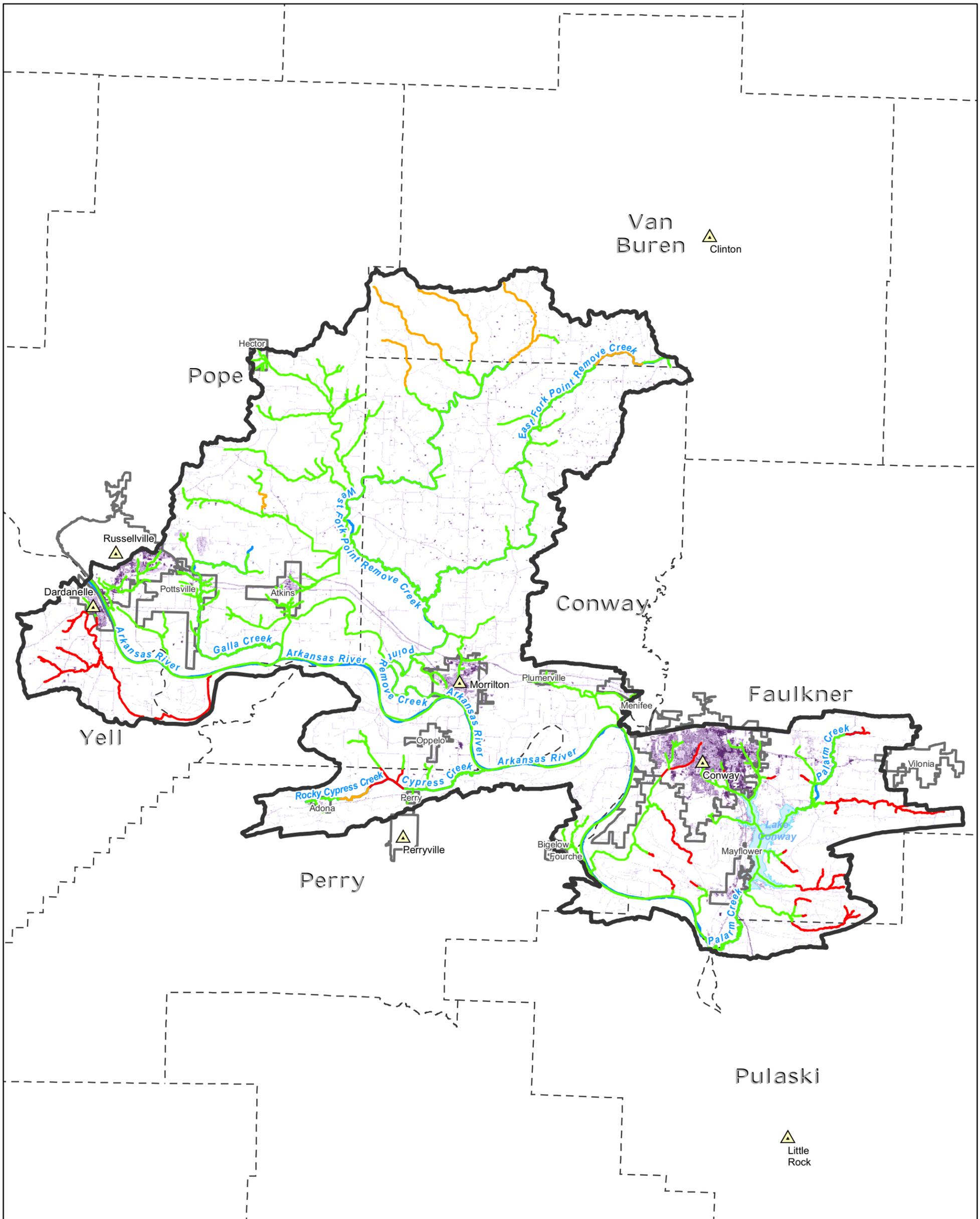
- Population Density - 2010 Census**
Pop. / Sq. Mi.
- 0 - 56
 - 57 - 253
 - 254 - 1,284
 - 1,285 - 3,641
 - 3,642 - 142,200

FIGURE 2

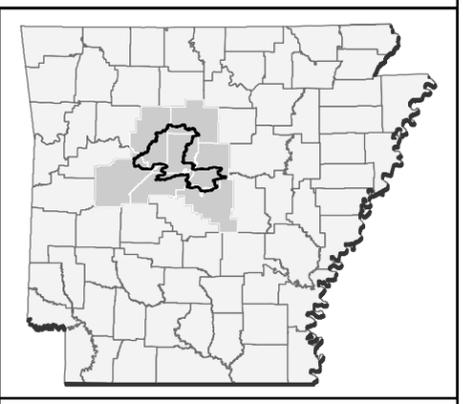
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Landuse

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 percent urban coverage that have occurred in the watershed from 2006 - 2011.



PERCENT URBAN COVER (2011)
 LAKE CONWAY-POINT REMOVE WATERSHED
 (HUC 11110203)



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

- CNMS Validation Status**
- Unverified
 - Assessed
 - Valid

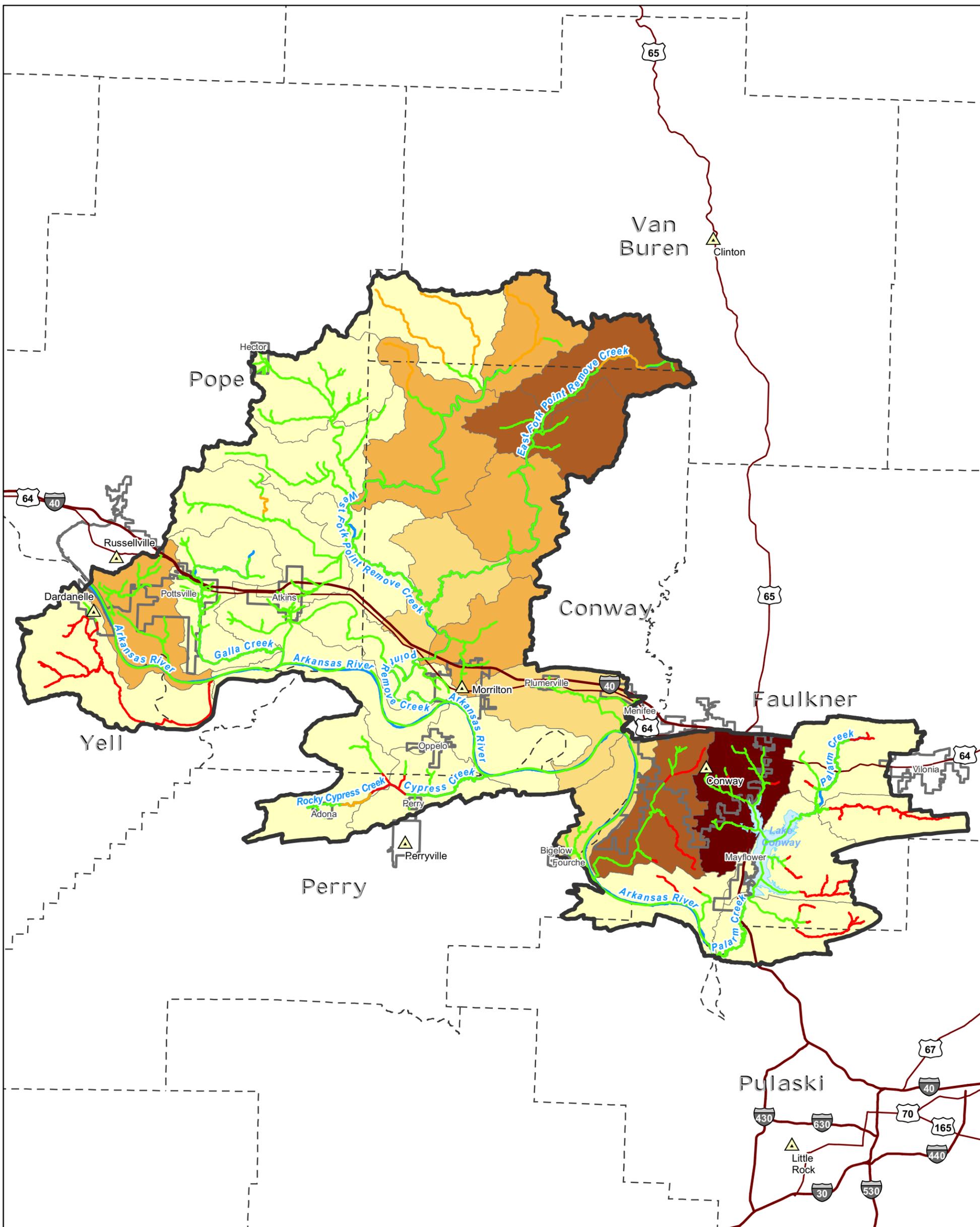
- Urban Cover**
- 1 - 25%
 - 25 - 50%
 - 50 - 75%
 - 75 - 100%

Project Location

FIGURE 3

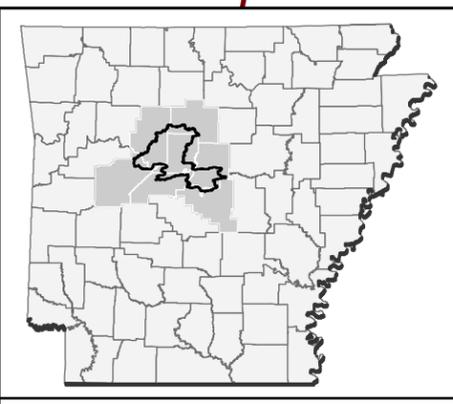
DATE: 2/25/2015

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**LANDUSE CHANGE
(2006 - 2011)**
LAKE CONWAY-POINT REMOVE WATERSHED
(HUC 11110203)

- | | | | |
|--|--|---|--|
| <ul style="list-style-type: none"> County Seat Interstate US Highway County Boundary City Limits | <ul style="list-style-type: none"> Major Reaches of Watershed Large Waterbody Watershed Boundary | <p>CNMS Validation Status</p> <ul style="list-style-type: none"> Unverified Assessed Valid | <p>Landuse Change (2006 - 2011)</p> <ul style="list-style-type: none"> Least Most |
|--|--|---|--|



Project Location

FIGURE 4

DATE: 3/3/2015

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Insurance Claims

Table 3, Total NFIP Insurance Claims, 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 or Severe Repetitive Loss within the Watershed, 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

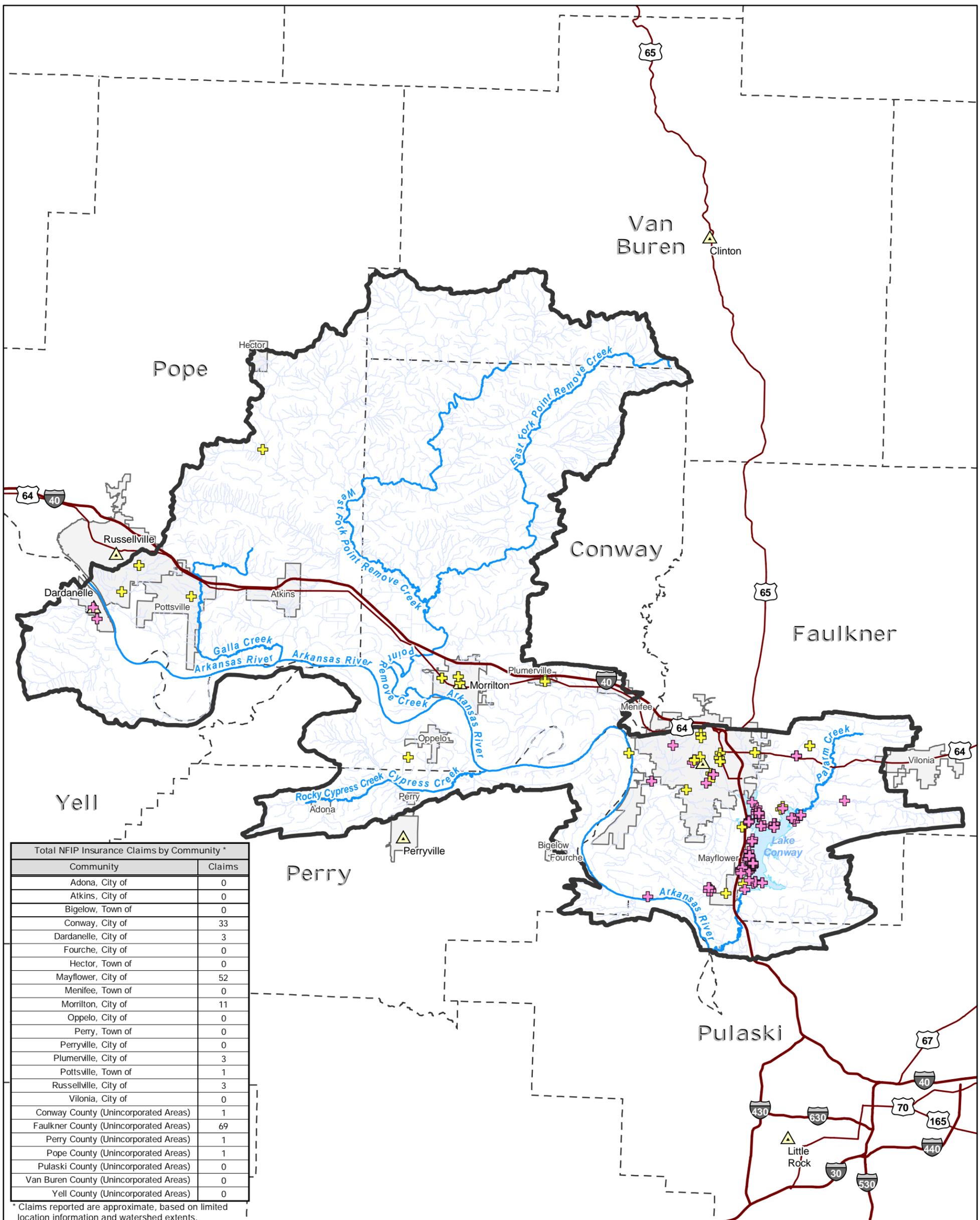
Total NFIP Insurance Claims by Community *	
Community	Claims
Adona, City of	0
Atkins, City of	0
Bigelow, Town of	0
Conway, City of	33
Dardanelle, City of	3
Fourche, City of	0
Hector, Town of	0
Mayflower, City of	52
Menifee, Town of	0
Morrilton, City of	11
Oppelo, City of	0
Perry, Town of	0
Perryville, 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 or Severe Repetitive Loss within the Watershed

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

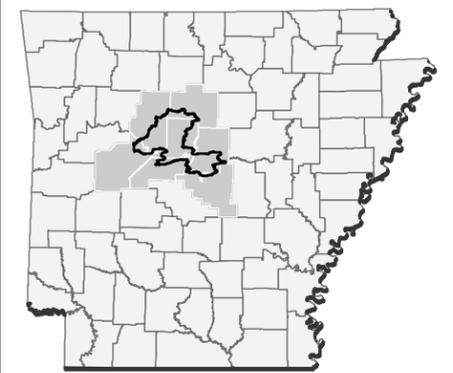
LAKE CONWAY-POINT REMOVE WATERSHED
(HUC 11110203)



0 6 12 Miles

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

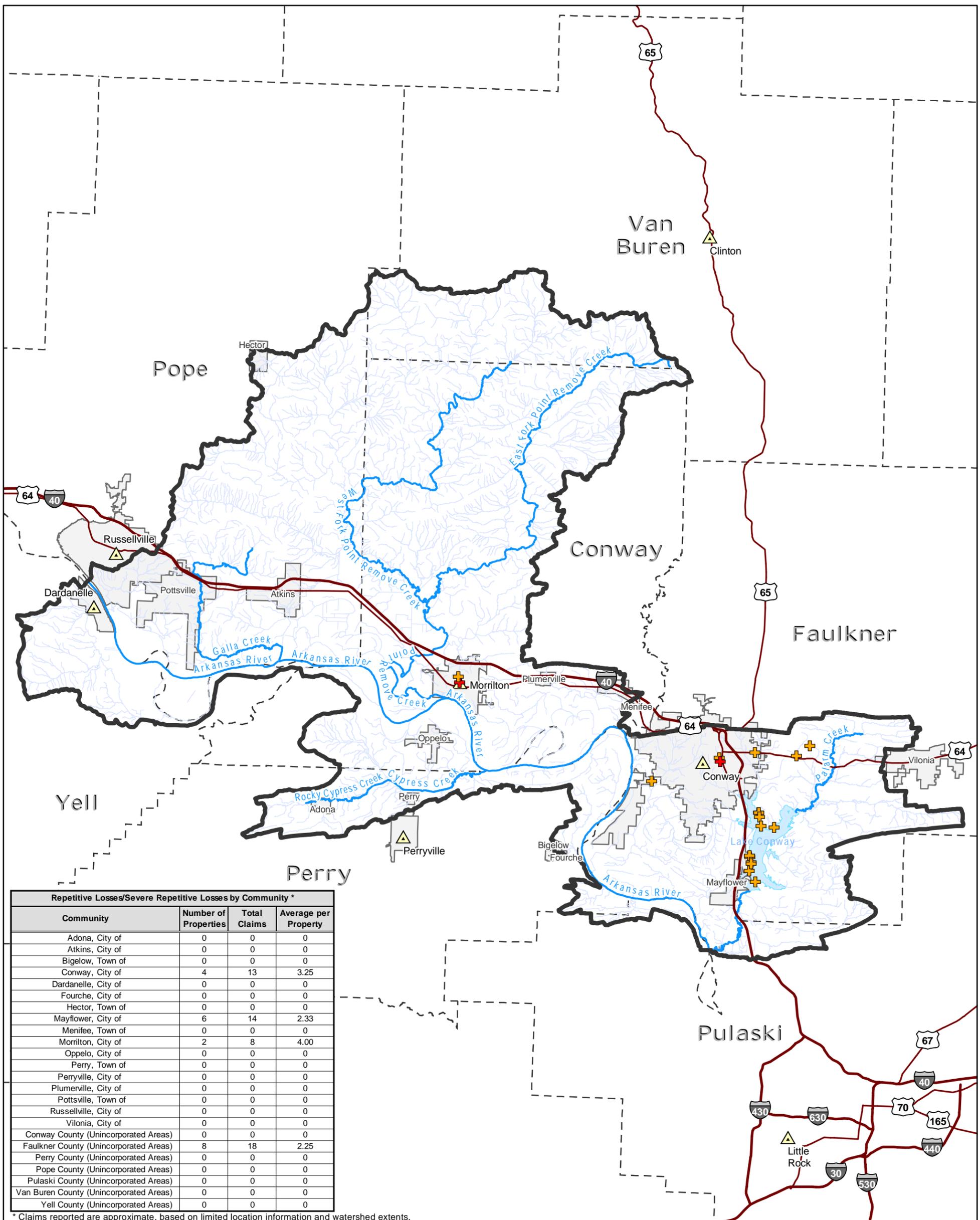
- NFIP Insurance Claims
- BCX Claims (Outside SFHA)
- Claims (Inside SFHA)



Project Location

FIGURE 5

DATE: 2/9/2015



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)

- 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

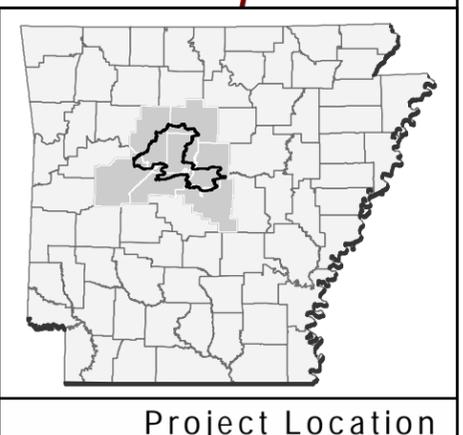


FIGURE 6

DATE: 2/9/2015

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 Selection 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 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 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 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.

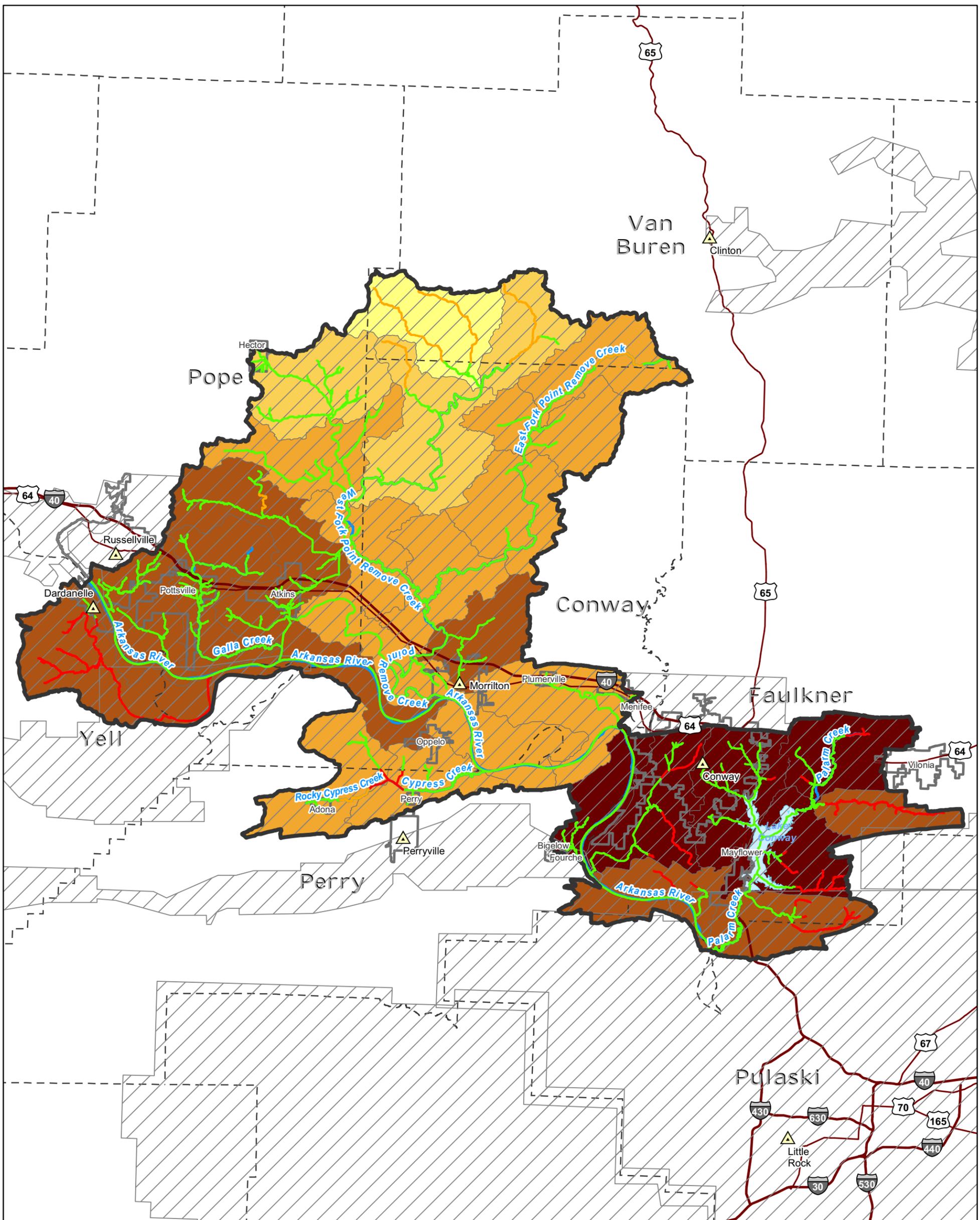
Table 7, NVUE Approximate Stream Mileage in the Watershed, compares the NHD data to the CNMS data and summarizes the Validated NVUE stream mileage from CNMS for the watershed.

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 <i>could be</i> developed	40.3 (33.2 – A, 7.1 – AE)
Stream Miles not accounted for in CNMS that would fall in land that <i>could not be</i> developed	0

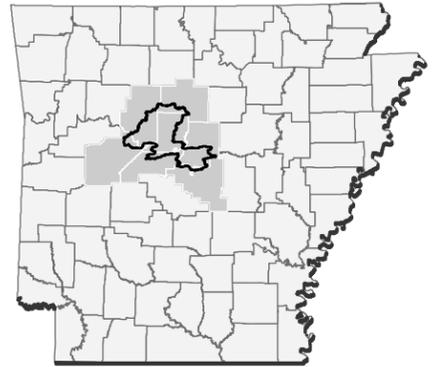
Within the Lake Conway - Point Remove Watershed, and using these criteria from CNMS, approximately 81.8 miles of Zone A streams and 5.9 miles of Zone AE streams were identified as being “Unverified” and as such are candidates for updated analysis. Streams included in the unverified grouping include portions 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 in the Watershed, 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)



- 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
 - 8
 - 7
 - 6
 - Low

FIGURE 7

Project Location

DATE: 2/25/2015

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 will be provided the opportunity to participate in a Pre-Discovery Webinar that will provide a high level briefing on the Discovery process and activities in Arkansas. This briefing is scheduled for March 11, 2015 at 2:00 pm.

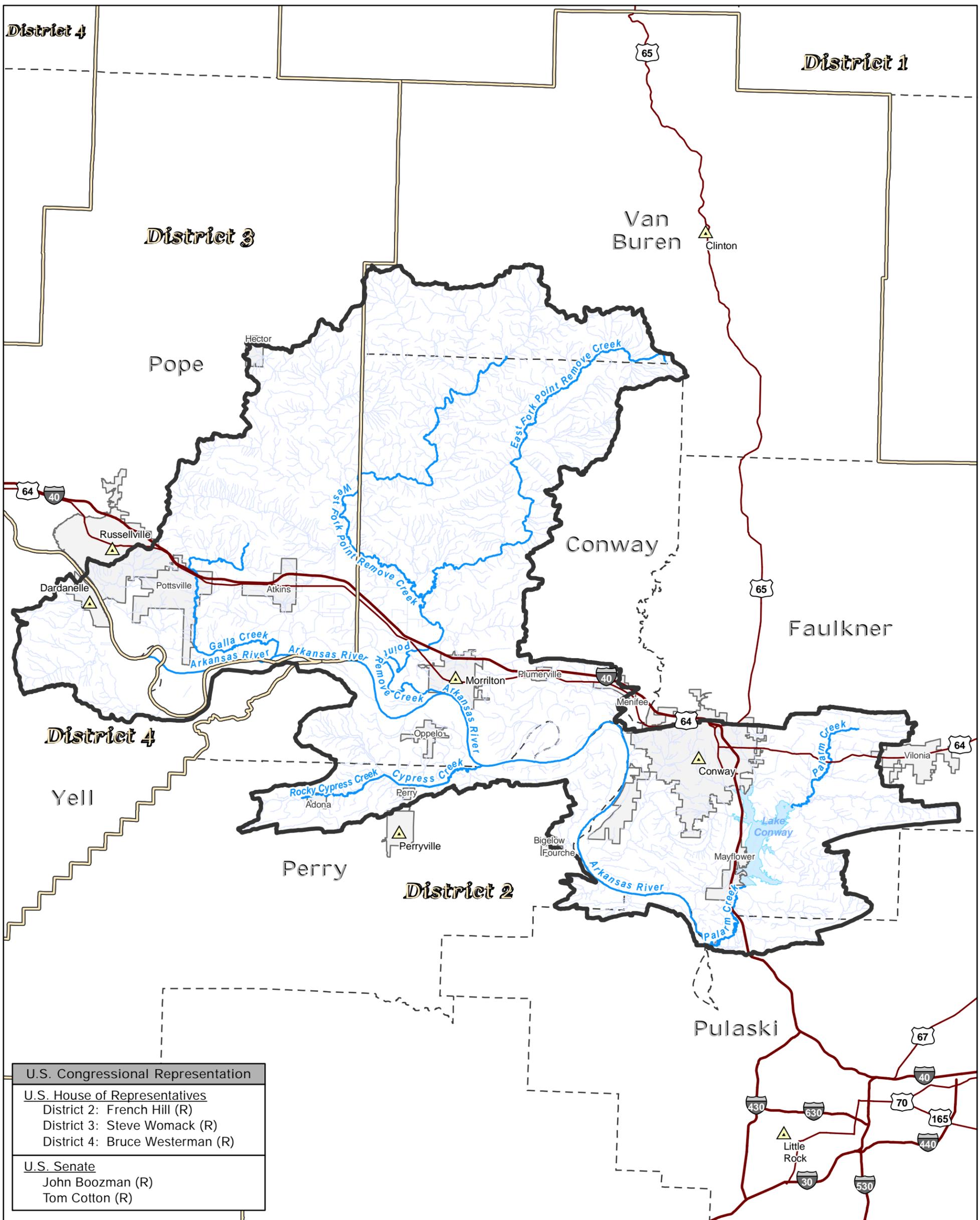
Table 8: U.S. Congressionals (as of February 2015)

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 February, 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	CURRENTLY OPEN / Greg Standbridge (R) will run unopposed in special election 04/12/15			
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	marklowery@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

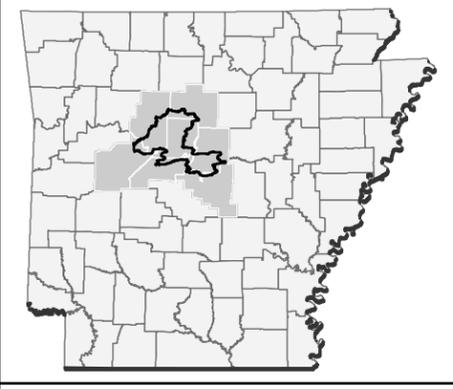
¹ State Congressionals listed in numerical order by District Served.



U.S. Congressional Representation	
<u>U.S. House of Representatives</u>	
District 2:	French Hill (R)
District 3:	Steve Womack (R)
District 4:	Bruce Westerman (R)
<u>U.S. Senate</u>	
	John Boozman (R)
	Tom Cotton (R)

U.S. CONGRESSIONAL DISTRICTS
 LAKE CONWAY-POINT REMOVE WATERSHED
 (HUC 11110203)

0 6 12 Miles



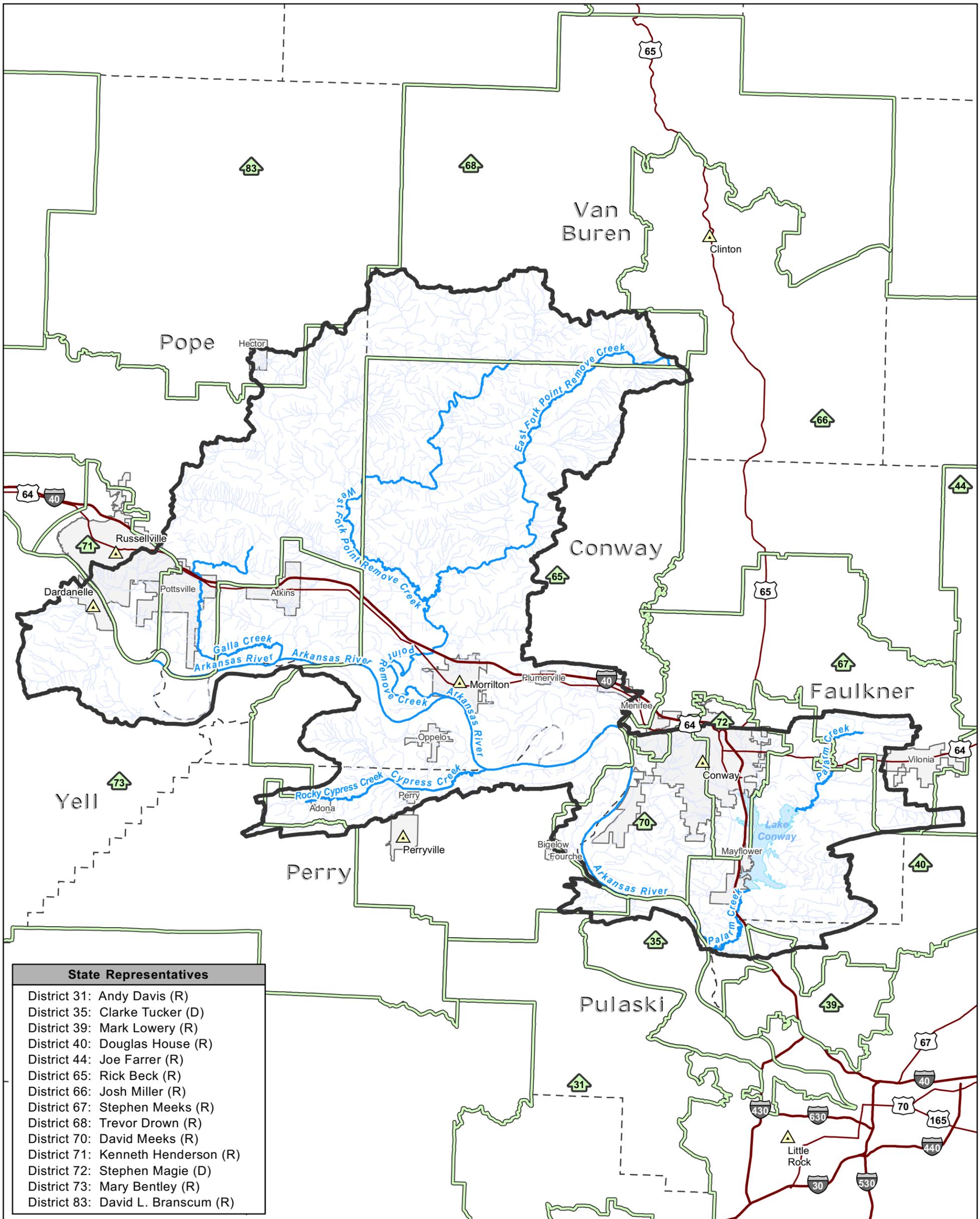
- County Seat
- Interstate
- US Highway
- County Boundary
- City Limits
- Major Reaches of Lake Conway-Point Remove
- Other Waters
- Large Waterbody
- Lake Conway-Point Remove HUC 8 Watershed
- Congressional District Boundaries

Project Location

FIGURE 8

DATE: 1/9/2015

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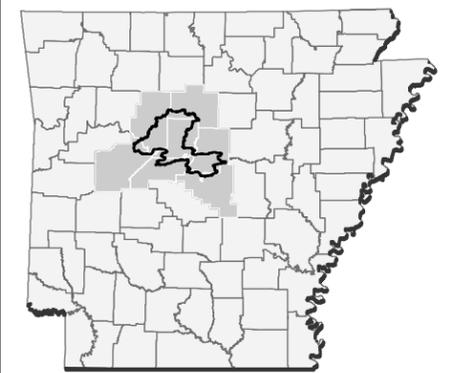


State Representatives	
District 31:	Andy Davis (R)
District 35:	Clarke Tucker (D)
District 39:	Mark Lowery (R)
District 40:	Douglas House (R)
District 44:	Joe Farrer (R)
District 65:	Rick Beck (R)
District 66:	Josh Miller (R)
District 67:	Stephen Meeks (R)
District 68:	Trevor Drown (R)
District 70:	David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

STATE HOUSE OF REPRESENTATIVES MAP
 LAKE CONWAY-POINT REMOVE WATERSHED
 (HUC 11110203)



FEMA



- 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: 2/25/2015

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State Senators	
District 6:	Gary Stubblefield (R)
District 15:	David J. Sanders (R)
District 16:	OPEN Until 04/12/2015
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)



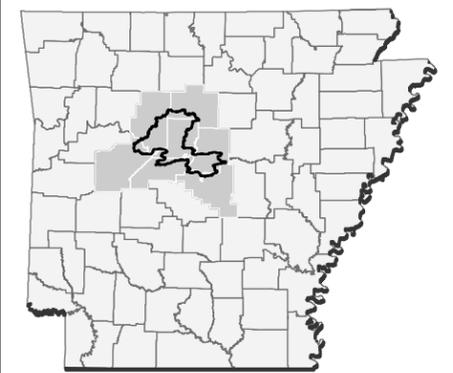
FEMA



tn Associates Ltd



- 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: 2/25/2015

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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	State of Arkansas / ANRC	CTP Coordinator / Project Manager / State NFIP Coordinator
John Bourdeau	FEMA Region 6	Project Monitor – FEMA Region 6
Lacye Blake	State of Arkansas / 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

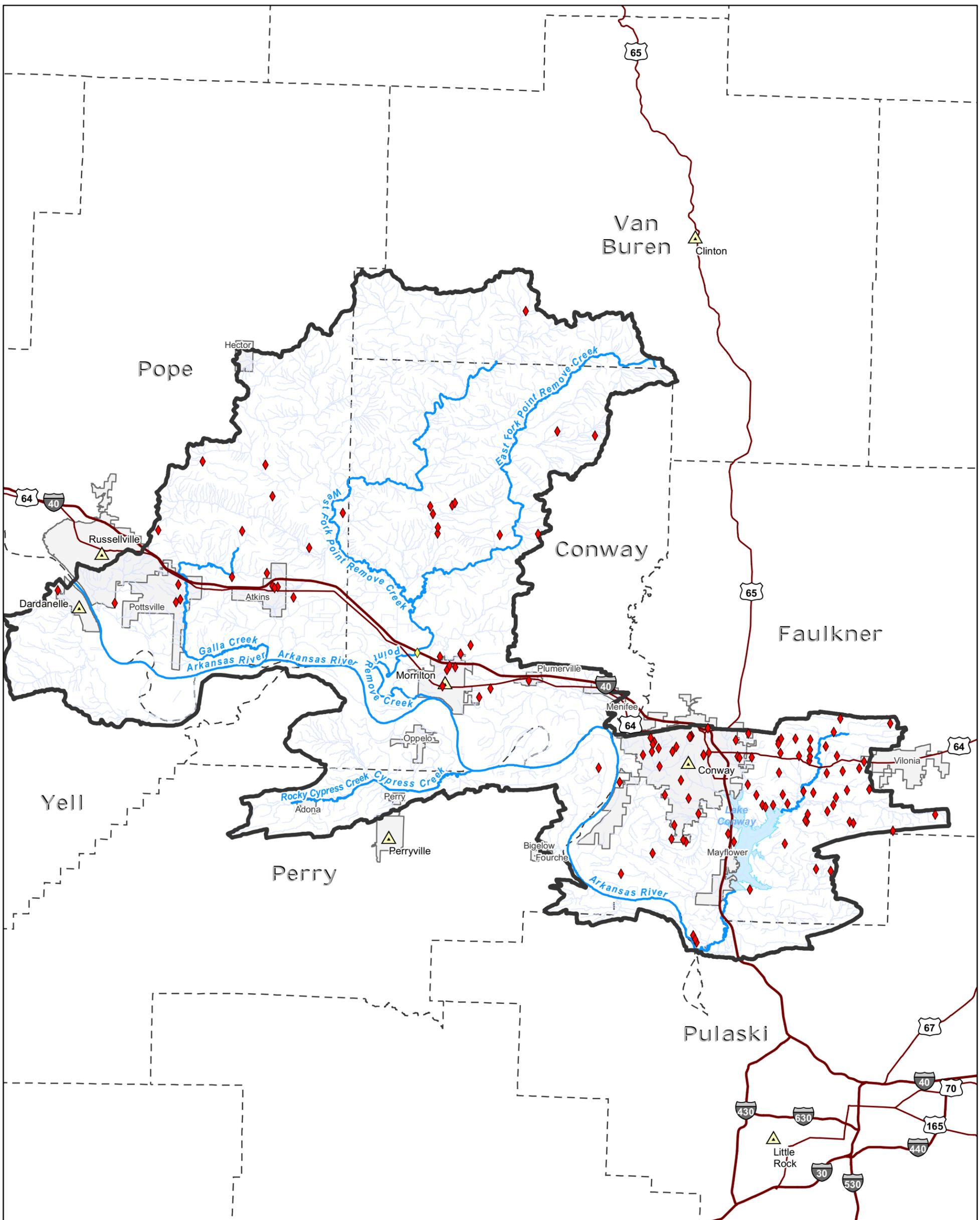
Community Name	Type of Engagement	Date	Agency	Comments
Conway County and Incorporated Areas	Map Modernization	July 2011	FEMA	
Faulkner County and Incorporated Areas	Map Modernization (partial)	December 2006	FEMA	Considered “non-modernized” FIRMs
Perry County and Incorporated Areas	Map Modernization (partial)	June 2000	FEMA	Considered “non-modernized” FIRMs
Pope County and Incorporated Areas	Map Modernization	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 Modernization	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 Modernization (partial)	March 2002	FEMA	Considered “non-modernized” FIRMs

Table 12: Hazard Mitigation Plan Status (as of January 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	Update in Progress	12/1/2013
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.

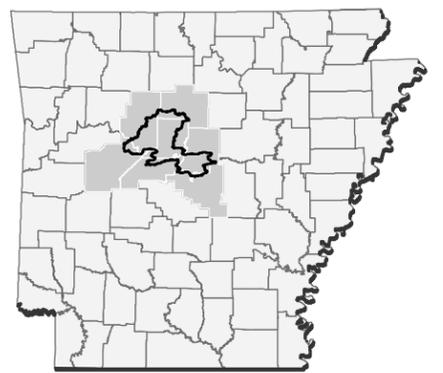
Figure 11 displays the locations and types of mitigation grant activity in the Lake Conway - Point Remove Watershed. Additional mitigation activities will be identified during Discovery that may or may not have been completed through a grant process. There may be additional grants being pursued at both the state and local level within the watershed that have not been identified. Information available to date indicates grants for 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, lead 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 will be discussed during the Discovery process.



GRANT ACTIVITY

LAKE CONWAY-POINT REMOVE WATERSHED
(HUC 11110203)

0 6 12 Miles



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

Project Location

FIGURE 11

DATE: 2/25/2015

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 (EAP status requested)	Discovery Map Geodatabase	USACE / ANRC
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
Hazard Mitigation Plans and Mitigation Activities	Supporting Documents (copies of HMPs not included)	FEMA / ADEM / AR CTP
Imagery	Supporting Documents	AGIO

iii. Discovery Meeting

As part of the process for the Lake Conway - Point Remove Watershed, Discovery meetings will be 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 will be 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 will be led by Mike Borengasser, ANRC CTP Coordinator, as well as various other Discovery Meeting personnel from ADEM and FTN. The Discovery Meetings will include a brief introduction to the Risk MAP program and the initial results of the Discovery Activities. Community representatives and stakeholders will have 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. Important items for discussion may include some or all of the following:

- Community Benefits and Grant Opportunities – 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.
- Mitigation Planning and Mitigation Activities – Mitigation plans, understanding Risk MAP and determining risk.
- NFIP Information – Effective FIRMs, 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.

During Discovery, community representatives and stakeholders will be 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 will allow 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) will note their availability to answer questions and engage the attendees after the Discovery meeting. During each Discovery Meeting, the Project Team members will request that attendees provide any additional information within 30 days of the meeting.

Prior to the Discovery Meetings the Lake Conway - Point Remove Watershed Engagement Plan / Pre-Discovery Report will be distributed in hard copy to the community CEO's and will be available to download at <http://www.riskmap6.com/> and <http://www.floodplain.ar.gov>.

Additional copies will be made available at the Discovery meeting along with several large-format watershed maps to be used for discussion and identifying areas of concern in the Watershed.

Information collected from the communities will be compiled into a final Discovery Report.

iv. Discovery Implementation (TO BE COMPLETED POST-DISCOVERY)

The communities / organizations represented at the Discovery Meetings are included in Table 15.

Table 15: Communities and Organizations Represented at the Discovery Meetings

Community/Organization Represented	Community/Organization Represented

The communities NOT represented at the Discovery Meetings are included in Table 16.

Table 16: Communities Not Represented at the Discovery Meetings

Community Not Represented	Community Not Represented

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 will be completed following the Discovery Meeting as part of the final Lake Conway - Point Remove Watershed Discovery Report and will summarize the comments collected at 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

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
- Discovery Newsletter

\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)

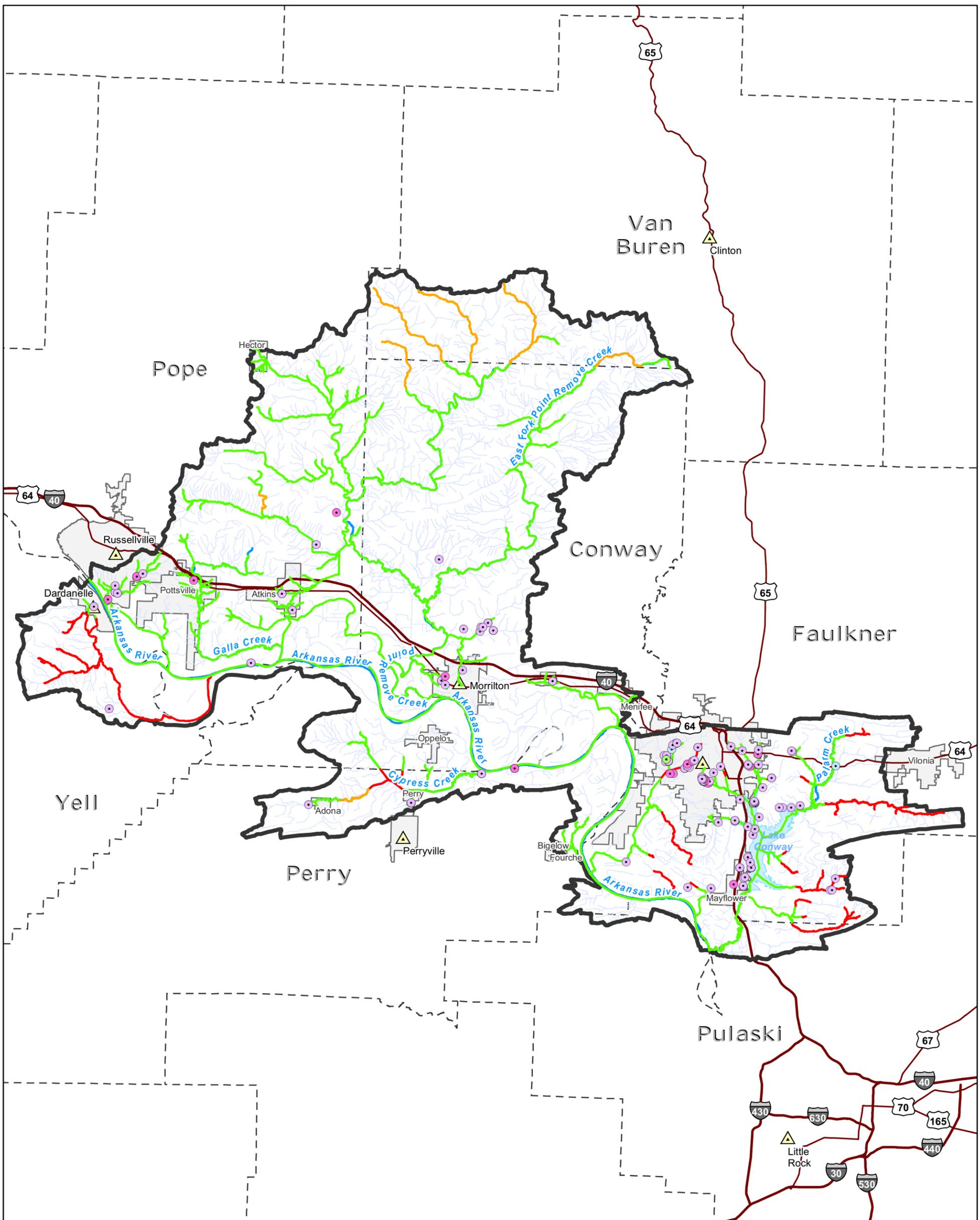
\Supplemental_Data

- 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 and Revisions are also distributed throughout the watershed, and again are concentrated in the same areas where claims have occurred. Please refer to Figure 12 for the location of these Letters of Map Change (LOMC).

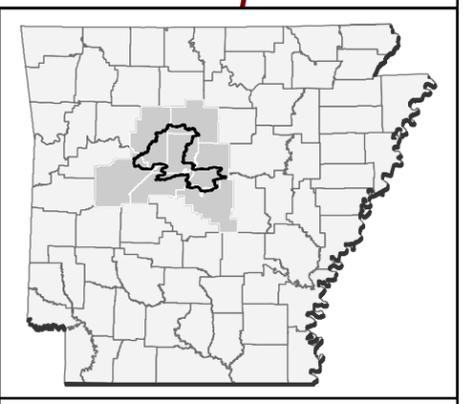


LETTER OF MAP CHANGE (LOMC) ACTIVITY
 LAKE CONWAY-POINT REMOVE WATERSHED
 (HUC 11110203)

0 6 12 Miles

- 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
- CNMS Validation Status: Assessed
- CNMS Validation Status: Valid



Project Location

FIGURE 12

DATE: 2/25/2015

S:\projects\03015-0005-011\gis\docmap\Discovery_Maps\LkConway-PIRemove_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 Modernization 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 Modernization

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 (TO BE COMPLETED POST-DISCOVERY)

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 (TO BE COMPLETED POST-DISCOVERY)

Risk Identification and Communication
•
NFIP Community Actions
•
Mitigation Planning and Mitigation Actions
•
Community Benefits and Grant Opportunities
•

Table 21 provides specific evaluation guidelines for streams or areas that could benefit from additional study that have been identified during Discovery. Any FEMA-based metrics that would be met if the need or issue was addressed will be 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 will be 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 will be 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.

Table 21: Metrics and Rankings of Needs (TO BE COMPLETED POST-DISCOVERY)

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.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					

i. Project Prioritization (TO BE COMPLETED POST-DISCOVERY)

During the Discovery process, flood risk projects are intended to be initiated and cataloged at a 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.