



FELSENTHAL AND OVERFLOW NATIONAL WILDLIFE REFUGES TRANSPORTATION STUDY

Existing Conditions Report

Contract No. DTFH71-09-D-00001, Task Order: 11-017

US Department of Transportation, Federal Highway Administration, Eastern Federal Lands Highway Division
in cooperation with US Fish and Wildlife Service and the Felsenthal National Wildlife Refuge



 Kimley-Horn and Associates, Inc.

January 2012

**Felsenthal and Overflow National Wildlife Refuge
Transportation Study**

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1. Introduction

1.1 South Arkansas Refuges Complex

South Arkansas Refuges Complex is a complex of three National Wildlife Refuges (NWRs) in Arkansas. The Felsenthal National Wildlife Refuge is located west of Crossett, Arkansas with approximately 65,000 acres of mainly bottomland hardwood forest. The Overflow National Wildlife Refuge is located between Hamburg, Arkansas and Parkdale, Arkansas with approximately 14,000 acres of mostly bottomland hardwood forest. Pond Creek National Wildlife Refuge is the third National Wildlife Refuge (NWR) in the Complex. Only the Felsenthal and Overflow NWR's are evaluated as part of this project.

The Ouachita and Saline Rivers pass through the Felsenthal NWR and the Refuge has the largest green-tree reservoir in the world. A green-tree reservoir is a bottomland hardwood forest that is carefully flooded during the dormant season of the hardwood forest communities to provide habitat for wintering waterfowl. Felsenthal Refuge is also the location of a number of red cockaded woodpecker nests.

Overflow NWR also has a green-tree reservoir and serves the mallard, wood duck, and other waterfowl in the Mississippi flyway. Overflow NWR also has cropland acreage that is currently farmed.

1.2 USFWS Mission and Goals

The NWR System is administered through the United States Fish and Wildlife Service (USFWS) under the Department of the Interior. The mission of the USFWS is to:

“Work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.”

The goals of the USFWS are aimed at fulfilling this mission. Primary USFWS goals are to:

- Sustain fish and wildlife populations including migratory birds, endangered species, anadromous fish, and marine animals;
- Conserve a network of lands and waters, including the NWR System; and
- Provide Americans opportunity to understand and participate in the conservation and use of fish and wildlife resources.

The USFWS manages refuges across the country. The passage of the NWR System Improvement Act of 1997 defines the mission of the NWR System as:

“...to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”

The goals of the Wildlife Refuge System are to:

- Preserve, restore, and enhance threatened and endangered species in their natural ecosystems.

- Perpetuate the migratory bird resource.
- Preserve a natural diversity and abundance of fish and wildlife ecology.
- Provide the public an understanding and appreciation of fish and wildlife ecology.
- Provide Americans opportunity to understand and participate in the conservation and use of fish and wildlife resources.

The NWR System Improvement Act of 1997 identified six wildlife-dependent recreational uses that are recognized as priority public uses of refuge lands, including:

- Hunting
- Fishing
- Wildlife Observation
- Wildlife Photography
- Environmental Education
- Environmental Interpretation

1.3 Purpose of the Transportation Study

The Transportation Study will evaluate existing conditions and propose short- and long-range transportation solutions that will improve the mobility for visitors and staff to and within the Refuges. The study will document the existing transportation infrastructure within the Refuges and will look at major roads and other regional transportation facilities adjacent to or providing access to the Refuges. This Existing Conditions Report will be incorporated into the Transportation Study for the Felsenthal and Overflow NWRs.

1.4 Study Areas

The Felsenthal and Overflow NWRs boundaries are shown in **Figure 1.1**.

1.4.1 Felsenthal NWR

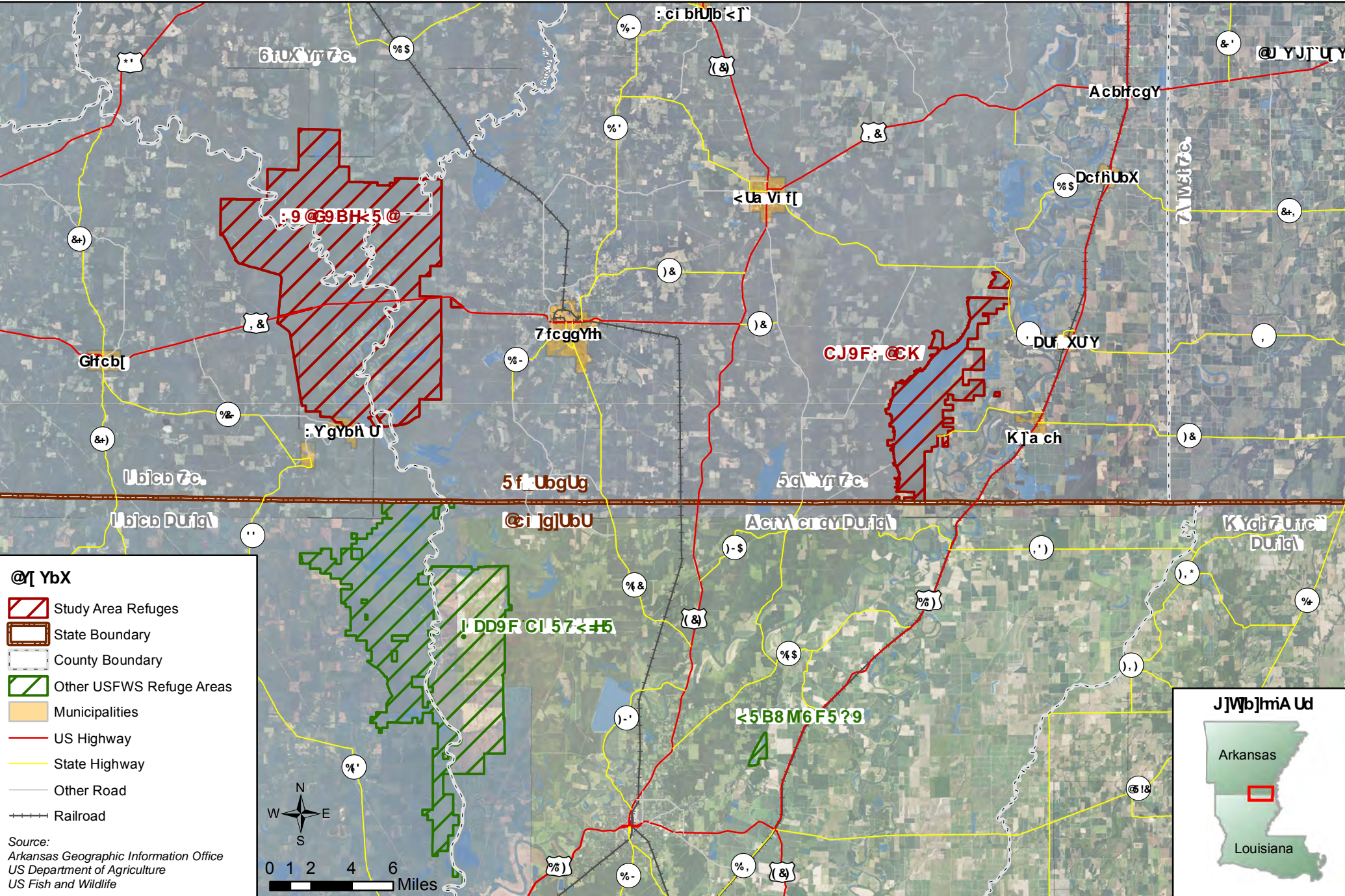
The Felsenthal NWR is located in southern Arkansas in Ashley, Bradley, and Union Counties. The public access area is mainly located in Ashley County; however, some access routes to the Refuge include roadways in Bradley County and Union County. The general transportation study area for the Felsenthal NWR is shown in **Figure 1.2**.

Existing conditions for the Felsenthal NWR are discussed in **Section 2**.

1.4.2 Overflow NWR

The Overflow NWR is located in southern Arkansas in Ashley County. The Overflow NWR transportation study area is shown in **Figure 1.3**.

Existing conditions for the Overflow NWR are discussed in **Section 3**.



Arkansas
Louisiana

Figure 1.1 - Overall Site Location Map

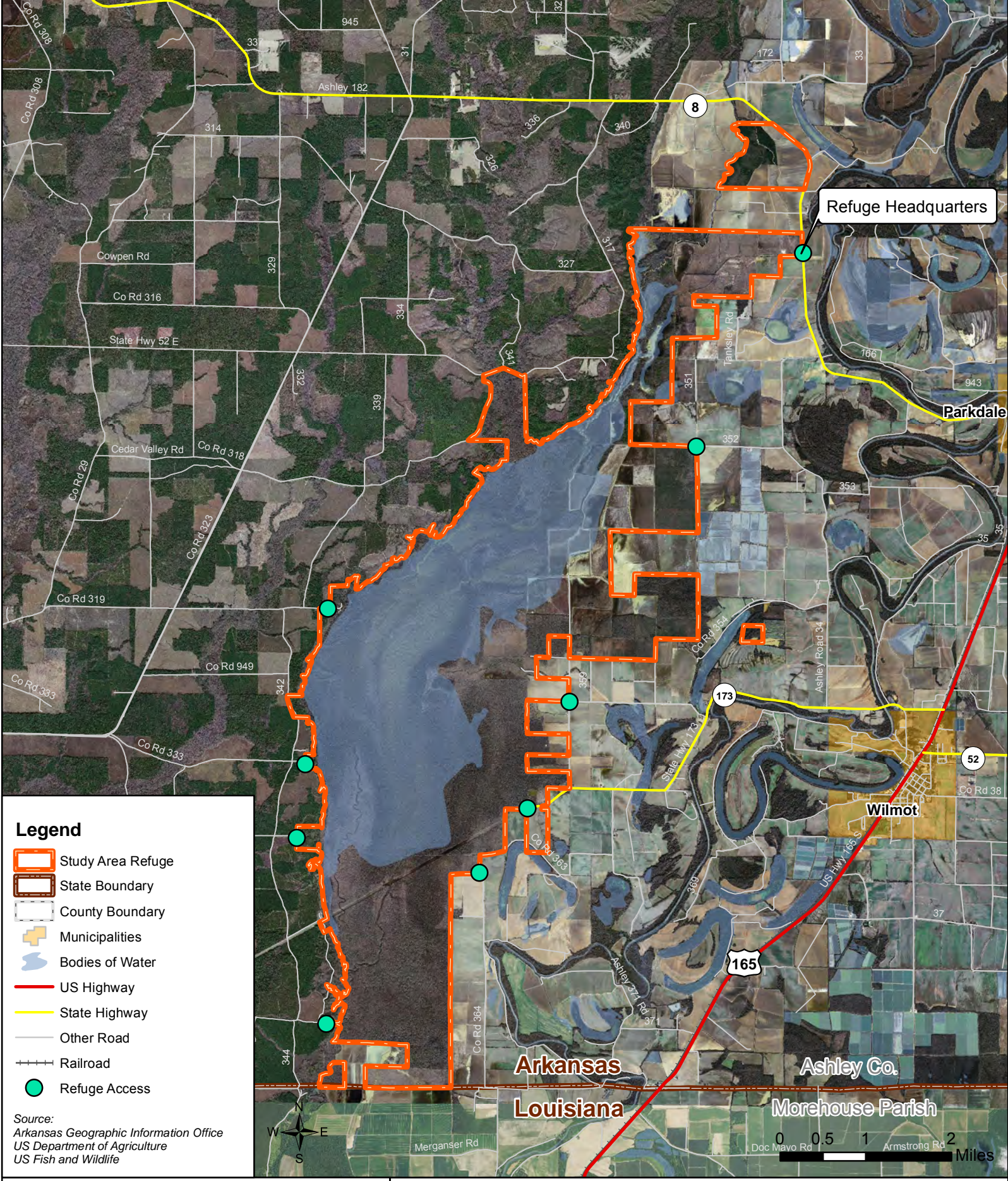


Felsenthal NWR Location Map

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Figure 1.2 - Felsenthal NWR Location Map





Overflow NWR Location Map

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Figure 1.3 - Overflow NWR Location Map



1.5 Study Schedule

The Transportation Study is targeted to take approximately nine months to complete. Milestones during this process include the Existing Conditions Report, Preliminary Candidate Alternatives Report, the Short and Long Range Improvement Plan, and Transportation Study Report. In addition, a Public Involvement Plan has been developed that outlines public outreach activities, including two public information meetings and two public mailings.

The USFWS and Federal Highway Administration (FHWA) will meet three times with a stakeholders group, which includes representatives of the US and State legislators representing the area, the AHTD, the Army Corps of Engineers, Ashley County, Union County, Bradley County, the City of Crossett, the City of Hamburg, the City of Parkdale, the Crossett Chamber of Commerce, and representatives from two major land owners and businesses - Plum Creek Timber Company and Georgia Pacific Corporation.

1.6 Overview of Existing Conditions Report

The purpose of the Existing Conditions Report is to document existing transportation conditions at Felsenthal and Overflow NWRs. This information will be included in the Transportation Study report, which will also identify future transportation needs and potential solutions to meet those needs.

Section 2 of this report describes Felsenthal NWR existing conditions, while **Section 3** describes Overflow NWR existing conditions.

2. Felsenthal NWR Existing Conditions

2.1 Overview

Felsenthal NWR (**Figure 2.1**) is part of the South Arkansas Refuges Complex, and is managed and maintained by the USFWS. It comprises an area of 65,000 acres.



Figure 2.1: Felsenthal NWR Visitors Center/Headquarters Entrance Sign

The Refuge objectives include:

- Provide habitat for migratory waterfowl and other birds
- Provide habitat and protection for endangered species such as the red cockaded woodpecker and threatened species such as the American alligator and the bald eagle
- Provide recreation and environmental education for the public
- Protect cultural resources

2.1.1 Felsenthal NWR History

The Felsenthal NWR was established in 1975 as mitigation for the US Army Corps of Engineers creation of the Ouachita and Black Rivers Navigation Project and Felsenthal Lock and Dam. It is a natural depression area and the Saline and Ouachita Rivers run through the Refuge along with a network of sloughs, bayous, and lakes.

2.1.2 Regional Location

Felsenthal NWR is located in southern Arkansas. US 82 travels east-west through the Refuge. **Figure 1.2** shows the location of the Felsenthal NWR.

In addition to US 82, Ashley, Union, and Bradley County roads and private roads also provide access to the Refuge.

2.1.3 Visitation Summary and Profile

Approximately 400,000 people visited the Refuge last year. Though official counts are not taken, Refuge-wide visitation estimates are based on the number of hunting/fishing permits.

Public use opportunities include hiking, fishing, wildlife observation, photography, hunting (youth and adult hunts), environmental education and interpretation, and camping.

Hunts and fishing seasons and events at the Refuge are shown in **Table 2.1**.

Table 2.1: Hunting and Fishing by time of year at Felsenthal NWR	
Month(s)	Activity
April	Quota adult and youth turkey hunts
June	Youth fishing derby
October to January	Squirrel, rabbit, beaver, nutria, coyote, and feral hog hunting
October to January	Archery deer hunting
November	Quota gun deer hunt
November to January	Quail, raccoon, and opossum hunting
November to January	Waterfowl hunt

2.1.4 Entrances to the Refuge

There are a number of public entrances to the Felsenthal NWR.

Major entrances on US 82 are listed below and noted on the Refuge map shown in **Figure 1.2**.

- Felsenthal Visitors Center/Refuge Complex Offices
- Shallow Lake Road area
- Old Beer Joint area
- Pine Island Access

Other access points are located off of North Road and Jones Lake Road from the west, through New Lock 6 Road to the US Army Corps of Engineers boat ramps south of the Refuge, and via Bradley County Road 53 and Bradley County Road 65 S from the north accessing Eagle Lake, Pereogeethe Lake, and Prairie Island. The Refuge can also be accessed from the north at Charivari Creek, from the east at McIntyre Bay, Goose Lake, and the Ouachita Bridge, and from the west at Locust Ridge.

Most entrances to the Felsenthal NWR are not gated. Paved parking areas exist at some boat ramps and at the Visitors Center. There is an unpaved parking area at the trailheads of the Sand Prairie Trail at the Crossett Campground and off Pine Island Road.

Wayfinding signs for the Refuge are very limited on US 82. Notification for westbound travelers of the Visitors Center location only occurs in the vicinity of the entrance to the Visitors Center.

2.2 Regional Transportation Conditions

This section describes the existing regional transportation infrastructure and traffic conditions.

2.2.1 Regional Roadway Infrastructure

The Felsenthal NWR is located just west of the City of Crossett. The public access areas are served by US 82, North Road (private), Eagle Lake Road, New Lock 6 Road, Bradley County Road 65 S and Bradley County Road 53. US 82 and New Lock 6 Road are paved roadways, and all other access roads are packed dirt with gravel. Based on discussion with stakeholders and Refuge staff, these roadways are considered the transportation network that will be evaluated for this project.

Various other Ashley County, Bradley County, and Union County roads also provide access to the additional access points stated in the previous section.

2.2.1.1 US 82

US 82 is a two-lane road with a posted speed limit of 55 mph and partially paved shoulders (**Figure 2.2**). The volume of truck-traffic on this section of highway is very high and is a significant portion of the traffic on this roadway as it serves timber industry activities. Per Arkansas State Highway and Transportation Department (AHTD) 2010 traffic counts; this roadway has Annual Average Daily Traffic (AADT) volumes of 2,700 vehicles. AHTD counts show that truck traffic makes up approximately 30% of the traffic on US 82.



Figure 2.2: US 82 in the vicinity of the Refuge Visitors Center

The Sufficiency Rating formula is a method of evaluating highway bridge data by calculating several factors (structural adequacy, safety, serviceability, functional obsolescence, and special reductions) to obtain a numeric value that is indicative of the bridge's sufficiency to remain in service and its funding eligibility. The result of the Sufficiency Rating formula is a percentage in which 100 is an entirely sufficient bridge and 0 is an entirely deficient bridge, bridges with sufficiency ratings of lower than 50 qualify for federal funding. Per the AHTD, the sufficiency ratings for the bridges on US 82 in Ashley and Union Counties range from 56 to 84.

2.2.1.2 Jones Lake Road

Jones Lake Road is a packed dirt and gravel road. It is located on the west side of the Refuge and travels from the North Road to Jones Lake.

2.2.1.3 North Road (private)

North Road is a privately owned, packed dirt and gravel road. It travels north-south on the western edge of the Refuge and is shown in **Figure 2.3**.



Figure 2.3: North Road south of US 82

2.2.1.4 New Lock 6 Road (Figure 2.4)

New Lock 6 Road is a paved two-lane roadway that is built on fill. It travels east-west from the Town of Felsenthal to the Felsenthal Lock and Dam and boat ramp at the southern edge of the Refuge.



Figure 2.4: New Lock 6 Road

2.2.1.5 Bradley County Road 65 S

Bradley County Road 65 S is a packed dirt and gravel roadway on the north side of the Refuge. Bradley County Road 65 S provides access to Pereogeethe Lake. **Figure 2.5** shows a timber bridge on the roadway. This bridge is weight limited to 4 tons for trucks with a short wheelbase and 7 tons for trucks with a longer wheelbase (**Figure 2.6**).



Figure 2.5: Timber bridge on Bradley County Road 65 S



Figure 2.6: Truck restrictions on Bradley County Road 65 S Timber Bridge

2.2.1.6 Bradley County Road 53

Bradley County Road 53 is a packed dirt and gravel roadway. It provides access to Eagle Lake on the north side of the Refuge. One of the bridges on this road is being repaired at this time, as illustrated in **Figure 2.7**.



Figure 2.7: Bradley County Road 53

2.2.2 Historic Traffic Volumes

AHTD collected the following historical AADT data on US 82 in the vicinity of the Refuge from 2006 – 2010 as shown in **Table 2.2**.

Location	Year				
	2006	2007	2008	2009	2010
US 82, east of the Felsenthal NWR	2,800	2,900	2,700	2,700	2,700

Source: AHTD data

Traffic growth has remained relatively flat in this area over the past five years.

2.2.3 Area Transportation Mode Split

Mode split analysis identifies the method of travel (automobile, transit, walk or bike) people in a defined geographic area take, expressed as a percentage of trips. As the main public access areas for the Felsenthal NWR are in Ashley, Bradley, and Union Counties, data from the counties was used to determine mode split. Approximately 93% of trips in Ashley County, 84% of trips in Bradley County, and 93% of the trips in Union County were taken by automobile. Analyzing mode split helps determine the transportation demand characteristics of the local community. As the most congested time on roadways often corresponds with the traditional work day, modal split analysis is often conducted based on how people get to work. Journey-to-work data was obtained from the 2005 - 2009 American Community Survey and is summarized for Ashley County, Bradley County, and Union County in **Table 2.3**. The 2005 - 2009 American Community Survey 5-year estimates are based on the average traffic between 2005 - 2009.

Mode	Ashley County	Bradley County	Union County
Automobile	92.65%	83.74%	92.82%
Transit	0.28%	0.09%	0.01%
Walk/Bike	2.46%	11.21%	0.86%
Other	3.27%	3.16%	4.19%
Work at Home	1.34%	1.80%	2.12%

Source: 2005-2009 American Community Survey 5-Year Estimates

2.2.4 Crash Summary

Based on information provided by the AHTD for 2008 - 2010, there were 11 crashes on US 82 in the vicinity of the Refuge. Of these crashes, 55% of the crashes were single vehicle crashes and almost 75% were not located at intersections. **Table 2.4** shows the number of crashes by crash type for this section of US 82.

**Table 2.4: Crashes by Type for US 82 in the Vicinity of the Refuge
2008 - 2010**

Crash Type	Number of Accidents
Single Vehicle	6
Angle	2
Sideswipe	1
Rear-end	1
Head on	1*

**Resulted in a fatality*

Source: AHTD

Based on the latest data from the Fatality Analysis Reporting System, there were two traffic fatalities in the vicinity of the Refuge on US 82, one in 2007 and one in 2008.

2.2.5 Planned Area Transportation Improvement Projects

The AHTD, Districts 2 and 7, do not have any planned improvements identified in the vicinity of the Refuge.

2.3 Refuge Transportation and Infrastructure

This section describes the existing transportation infrastructure within the Felsenthal NWR.

2.3.1 Refuge Roads

Roadways within the Refuge are maintained by the Refuge and are mainly packed dirt with gravel. However, the roadway and parking lot serving the Visitors Center/Complex Headquarters/Woodland Wildlife Trail is paved.

There are also a number of ATV trails in the Refuge.

2.3.1.1 Woodland Wildlife Trail

The Woodland Wildlife Trail is a 0.43 mile wheelchair accessible trail adjacent to the Visitors Center as shown in **Figure 2.8**.



Figure 2.8: Woodland Wildlife Trail Trailhead

2.3.1.2 Sand Prairie Trail

The Sand Prairie Trail (**Figure 2.9**) is a native trail that is 2.78 miles long. It can be accessed from Pine Island Road or through the Crossett Campground.



Figure 2.9: Sand Prairie Trail Trailhead at the Crossett Campground

2.3.1.3 Water Transportation Access

There are six boat ramp locations located on the Refuge and accessed off of Refuge roads, Pine Island, Deep Slough, Old Beer Joint (**Figure 2.10**), Shallow Lake, Jones Lake, Pereogeethe Lake, and Eagle Lake. Other boat ramp locations that provide access to the Refuge from off-Refuge sites include the Felsenthal Lock and Dam (**Figure 2.11**), Grand Marias Recreation Site and at the Port of Crossett (**Figure 2.12**). These latter locations provide access to the Refuge but are not maintained by the Felsenthal NWR.



Figure 2.10: Old Beer Joint Boat Ramp



Figure 2.11: Felsenthal Lock and Dam Boat Ramp



Figure 2.12: Port of Crossett Boat Ramp

2.3.2 Refuge Visitor Center and Office

The Visitors Center and Refuge Headquarters office is located on the eastern edge of the Refuge on US 82 and is shown in **Figure 2.13**. The Visitors Center includes hands-on, interactive exhibits showing various areas of the Refuge and features cultural and historical information. The Refuge Complex headquarters are also within the Visitors Center building. The parking area at the Visitors Center has 39 parking spaces (two of which are handicapped). As stated previously, the Woodland Wildlife Trail is adjacent to the Visitors Center.



Figure 2.13: Felsenthal NWR Visitors Center

2.4 Transportation Issues

Based on information collected during the site visit, the review of the existing conditions information, the review of previous studies and discussions with stakeholders, there are some transportation issues and opportunities to be studied further.

2.4.1 Turn lane improvements at Visitors Center Entrance on US 82

The westbound left-turn lane into the Visitors Center is shown in **Figure 2.14**. Based on field observations and comments from stakeholders, there is concern that the current length of the turn lane storage and taper is too short, given the roadway's existing speed and vehicle volumes. As measured in the field, the storage length is 100 feet with a taper length of 150 feet.

The potential for increasing the lengths of the turn lane and taper will be reviewed during the Transportation Study based on the speed and traffic volume on US 82. The results will be reviewed and coordinated with the AHTD for a formal review.

Also, the potential for adding an eastbound right-turn lane will be reviewed as there are safety concerns from stakeholders regarding eastbound vehicles entering the Visitors Center. The through traffic on US 82 travels at a high rate of speed and closes in quickly on the vehicles turning into the Refuge, potentially resulting in rear-end collisions.



Figure 2.14: Left-Turn lane into Visitors Center

2.4.2 Large number of trucks on US 82 (Figure 2.15)

It was noted during the field observation visits that there is much higher than average truck traffic on US 82. As stated previously, trucks comprise 30% of the traffic volume on US 82 based on AHTD data. This truck traffic is also traveling at high speeds since the speed limit is posted at 55 mph. This issue will be reviewed further during the Transportation Study.



Figure 2.15: Example of Truck traffic on US 82

2.4.3 Sight Distance at Refuge exits on US 82

The sight distance measured in the field looking to the west as vehicles exit the Visitors Center entrance measured to be approximately 325 feet due to the vertical curve in the roadway. This sight distance from the driveway is shown in **Figure 2.16**.



Figure 2.16: Sight Distance for US 82 (Westbound)

This will be studied further in the Transportation Study and the distance will be compared to recommended site distance for these conditions.

2.4.4 Speeding on US 82

It was noted by the stakeholders that there is concerns that traffic on US 82 is traveling higher than the posted speed. Based on discussions with the AHTD, a speed study can be requested for this area.

2.4.5 Signage Improvements

There is very limited directional signage for the Refuge on the surrounding roadways. On US 82, there is one directional sign to the Visitors Center and signs at the Refuge boundary. There is very limited signage in Crossett or other surrounding areas identifying how to get to the Refuge or the distance to the Refuge. This will be reviewed with the AHTD and County representatives during the study.

The Refuge has recently implemented a highway advisory radio broadcast to notify the public of information about the Refuge. These broadcasts can include safety notifications and information, such as the prescribed burning that occurs within the Refuge, and directional and general information about Refuge events. Signs with the information on the highway advisory radio are located within the Refuge. There are no signs on the adjacent public roadways identifying this highway advisory station. This will be reviewed during the study with the AHTD.

2.4.6 Trail Enhancements

Currently, there is no formal trail map for the Refuge. The development of this map and the addition of new walking/biking trail routes will be considered to enhance the visitors' experience.

As part of the trail map development, the development of an auto-tour in the Refuge route will also be considered.

2.4.7 Siltation and Slip areas at Boat Ramps

One item noted by the stakeholders was the siltation at boat ramps, as it is sometimes troublesome to get the boat from the ramp to the channel. It was also noted that there is no location for a boater to moor his boat after putting it into the water. The potential of adding a slip at various locations such as Crossett Harbor was suggested.

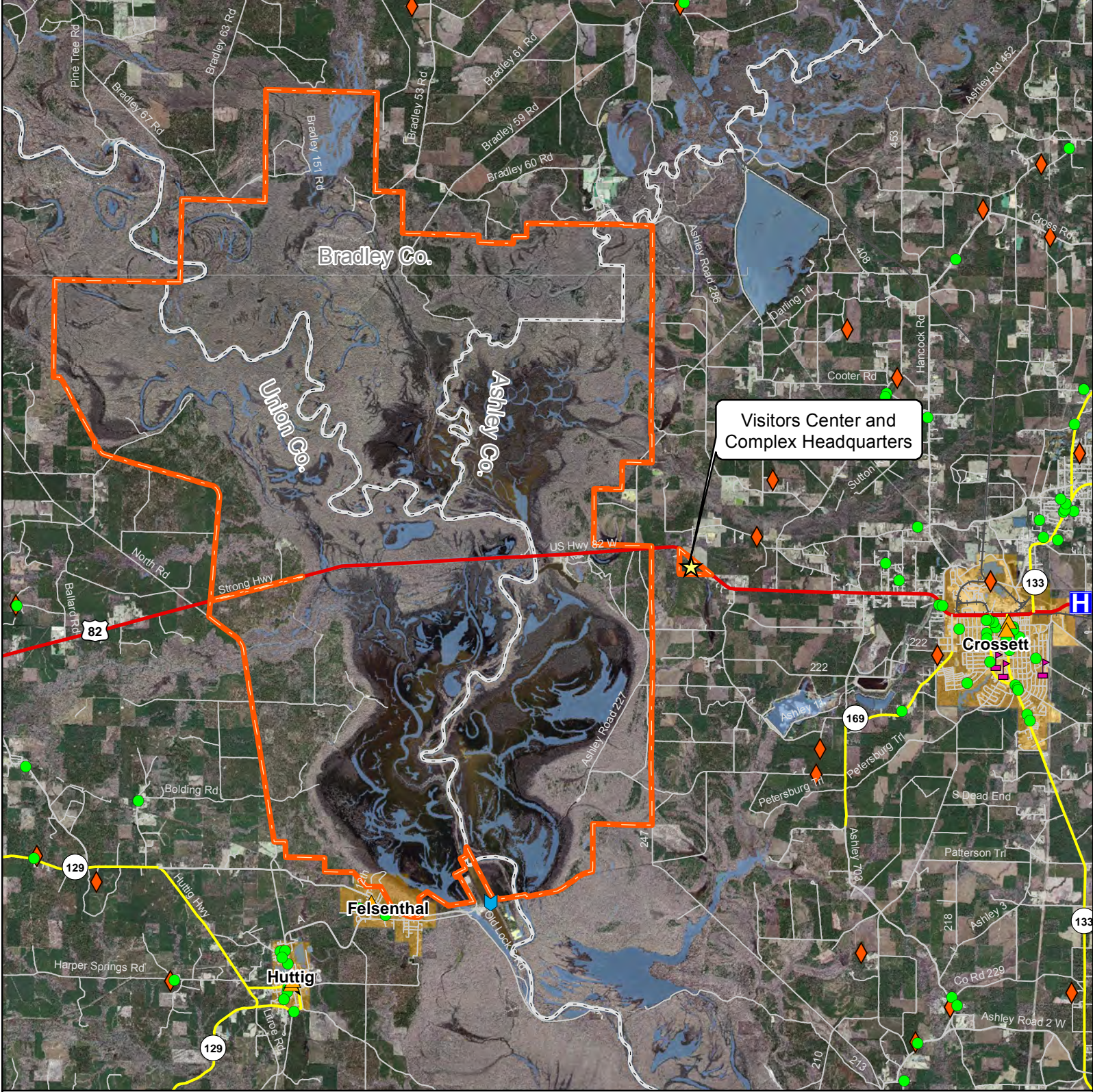
2.4.8 Determine Formal Access Points to the Refuge

Some of the Refuge access points are via private roads. If these private roadways fall into disrepair or if a bridge fails, access to the Refuge in that area is compromised. A recommended process will be outlined in the Transportation Study, beginning with identifying the critical Refuge access points, then coordination with the private land owners as an opportunity to develop a formal agreement to maintain access to key Refuge entrances.

2.5 Other Considerations

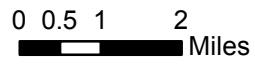
2.5.1 Community Features

Based on a review of the area for parks, schools, places of worship, cemeteries, and civic buildings in the study area, it was found that there are no major community facilities in the immediate vicinity of the Felsenthal NWR. Crossett, Arkansas has elementary, middle, and high schools; civic buildings; and places of worship within approximately five and ten miles of the Refuge. Smaller cities and towns have civic facilities and places of worship in the vicinity of the Refuge boundary. **Figure 2.17** shows the approximate locations of these features.



Legend

- | | | | |
|-----------------------|---------------|------------------|-----------------|
| USFWS Refuge Boundary | US Highway | Cemetery | School |
| State Boundary | State Highway | Place of Worship | Law Enforcement |
| County Boundary | Other Road | Dam with Lock | Hospital |
| Municipalities | Railroad | Civic Building | |
| Bodies of Water | | | |



Source:
Arkansas Geographic Information Office
US Department of Agriculture
US Fish and Wildlife



Felsenthal NWR Community Resources

**Felsenthal and Overflow National Wildlife Refuges
Transportation Study
Contract No.: DTFH71-09-D-00001**

Figure 2.17 - Felsenthal NWR Community Resources

2.5.2 Demographic Profile of Study Area

Felsenthal NWR is located in three counties in southeast Arkansas: Ashley County, Bradley County, and Union County. All three counties containing the Refuge have experienced a decline in population over the past decade of almost 10%. In addition, the nearby municipalities of Crossett and Strong, Arkansas saw a reduction in population between 2000 and 2010 of approximately 10% and 14%, respectively.

The Refuge is not immune to the impacts a declining population has on a community and could result in decreased user demand at the Refuge and impact the overall economic vitality of the region. Analyzing the transportation network in and around the Refuge ensures that the USFWS can provide acceptable levels of mobility, operation, and safety.

Table 2.5 shows the population figures in the counties and cities in proximity to the Refuge.

Table 2.5: Population for Counties and Cities near Felsenthal NWR				
Location	2000	2010	Total Change	Percent Change
Arkansas	2,673,400	2,915,918	242,518	9.1%
Ashley County	24,209	21,853	-2,356	-9.7%
City of Crossett	6,097	5,507	-590	-9.7%
Bradley County	12,600	11,508	-1,092	-8.7%
Union County	45,629	41,639	-3,990	-8.7%
City of Strong	651	558	-93	-14.3%

Source: 2010 US Census

2.5.3 Environmental Justice Impacts

According to the U.S. Environmental Protection Agency (EPA):

“Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.”

For this plan, poverty level, income, and race in counties and municipalities in proximity to the Refuge were analyzed.

Poverty

The percentage of individuals living below the national poverty level is 13.5%. Arkansas has a higher than normal percentages of individuals living below the poverty level at 17.7%. The three Arkansas counties containing Felsenthal NWR are all greater than the national average, with all of the counties exceeding 20%. Municipalities located near the Refuge are also experiencing higher than normal poverty levels, when compared with national averages.

Table 2.6 shows the percentage of individuals living below the poverty level in the counties and municipalities in proximity to the Refuge.

Table 2.6: Poverty Levels for Counties and Cities near Felsenthal NWR			
Location	Population	Population with income in the past 12 months below poverty level	Percent Below Poverty Level
United States	293,507,923	39,537,240	13.5%
Arkansas	2,755,680	488,788	17.7%
Ashley County	21,637	4,393	20.3%
City of Crossett	4,872	1,310	26.9%
Bradley County	11,856	4,140	34.9%
Union County	42,226	8,714	20.6%
City of Strong	249	48	19.3%

Source: 2005-2009 American Community Survey 5-year estimates

Detailed information on poverty level can be found in the **Appendix**.

Income

Median household income in Arkansas (\$38,542) is below the national median household income of \$51,425 based on 2005 – 2009 American Community Survey 5-year Estimates. **Table 2.7** shows the median household income in the study area and within select municipalities relative to the national median. Additional detailed information on income can be found in the **Appendix**.

Table 2.7: Median Household Income for Counties and Cities near Felsenthal NWR	
	Median Household Income
United States	\$51,425
Arkansas	\$38,542
Ashley County	\$33,007
City of Crossett	\$25,889
Bradley County	\$26,207
Union County	\$35,732
City of Strong	\$26,250

Source: 2005-2009 American Community Survey 5-year estimates

Race

Whites comprise approximately 65% of the population in the three counties containing the Refuge. Blacks or African Americans comprise approximately 12%. The state average of Blacks or African Americans is 15% and the nation average is 12.6%. No other race categories make up a significant percentage of the population in the study area.

Table 2.8 shows the numbers of individuals by race in the study area and within select municipalities relative to national and state values. Detailed information on race is also included in the **Appendix**.

Table 2.8: Individuals by Race for Counties and Cities near Felsenthal NWR							
Location	United States	Arkansas	Ashley County	City of Crossett	Bradley County	Union County	City of Strong
Total	308,745,538	2,915,918	21,853	5,507	11,508	41,639	558
White Alone	223,553,265	2,245,229	15,143	3,025	6,934	26,276	176
Black or African American Alone	38,929,319	449,895	5,640	2,326	3,173	13,721	339
American Indian and Alaska Native Alone	2,932,248	22,248	70	8	56	143	1
Asian Alone	14,674,252	36,102	40	26	27	207	1
Native Hawaiian and Other Pacific Islander Alone	540,013	5,863	3	0	1	14	0
Some Other Race Alone	19,107,368	99,571	709	63	1,162	756	30
Two or More Races	9,009,073	57,010	248	59	155	522	11

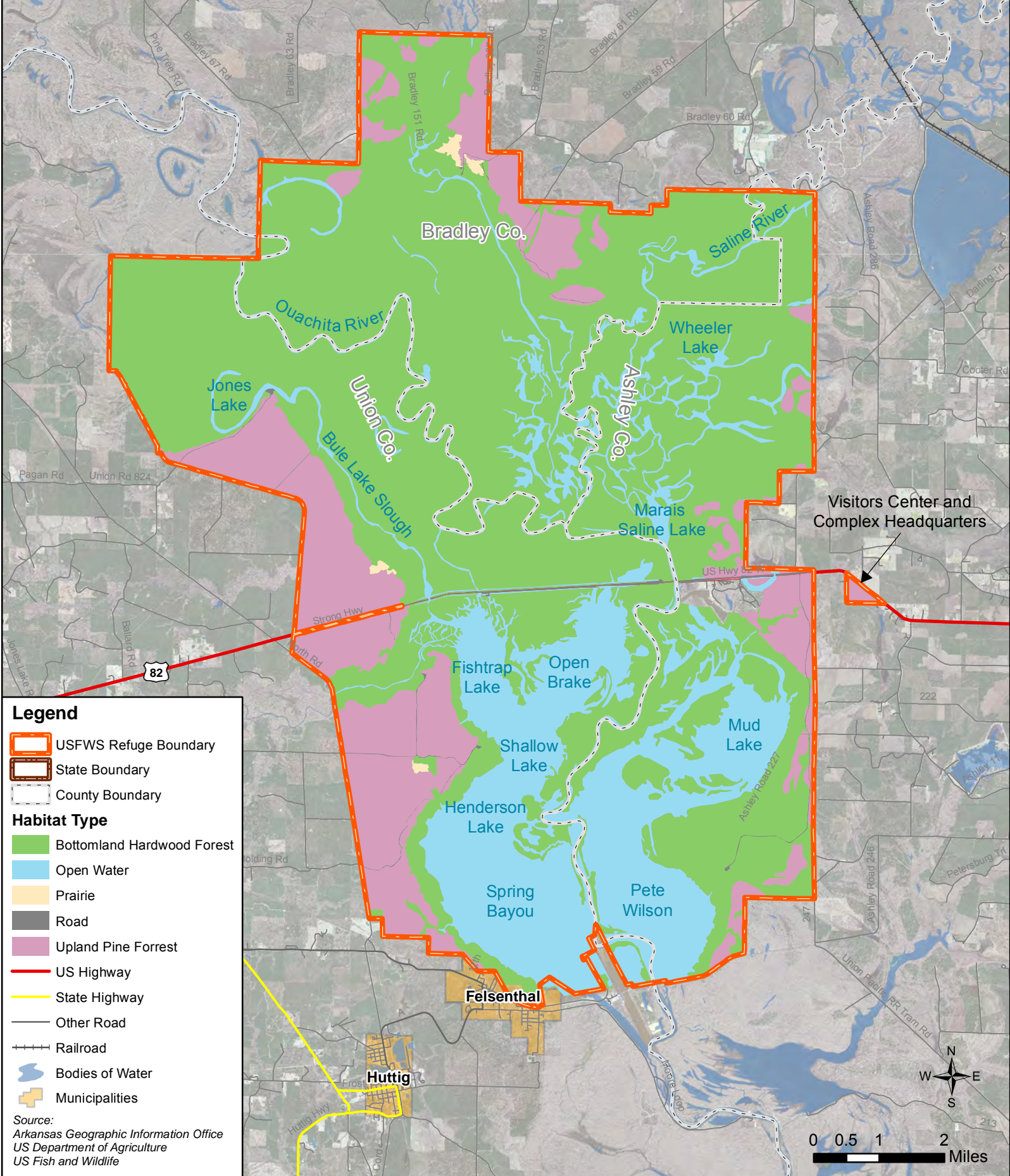
Source: 2010 US Census

2.5.4 Air Quality

The Felsenthal NWR is located in three counties, Ashley County, Bradley County, and Union County. All three of these counties are currently in attainment for all of the National Ambient Air Quality Standards (NAAQS) criteria pollutants.

2.5.5 Habitat

The Felsenthal NWR is comprised of a variety of habitats including bottomland hardwood forest, prairie, upland pine forest, and open water. As stated previously, this is a natural depression with a multitude of rivers, creeks, sloughs, bayous, swamps, etc. During winter (from November to late spring), up to 21,000 acres of the bottomland hardwood forest can be flooded, making the location attractive to wintering waterfowl. **Table 2.9** shows the breakdown of habitat type and **Figure 2.18** illustrates the locations of the various habitats.



Legend

- USFWS Refuge Boundary
- State Boundary
- County Boundary

Habitat Type

- Bottomland Hardwood Forest
- Open Water
- Prairie
- Road
- Upland Pine Forrest
- US Highway
- State Highway
- Other Road
- Railroad
- Bodies of Water
- Municipalities

Source:
 Arkansas Geographic Information Office
 US Department of Agriculture
 US Fish and Wildlife

Felsenthal NWR Habitat Type

**Felsenthal and Overflow National Wildlife Refuges
 Transportation Study
 Contract No.: DTFH71-09-D-00001**

Figure 2.18 - Felsenthal NWR Habitat Type



Table 2.9: Habitat Type at Felsenthal NWR		
Habitat Type	Acres	
	Subcategory	Subcategory Acreage
Permanent Water		15,000
Forestland		49,383
	Pine	9,490
	Pine-Hardwood	705
	Bottomland Hardwood	39,000
	Upland Hardwood	188
Open Fields, Prairies, and Nonproductive Areas		617
	Total	65,000

Source: Felsenthal and Overflow National Wildlife Refuges Comprehensive Conservation Plan, 2010

As discussed in the Felsenthal and Overflow National Wildlife Refuges Comprehensive Conservation Plan, 2010 (CCP), flooding is the Refuge’s means of managing water levels and is called green-tree reservoir management. Felsenthal NWR has the largest green-tree reservoir in the world with the ability to flood approximately 36,000 acres each winter. Tree species in the green-tree reservoir area are primarily overcup oak-water hickory but also includes nuttall oak, willow oak, and/or sweetgum.

Forestland is also actively managed through prescribed burning, thinning, regeneration, and stand improvement to enhance and maintain optimum habitat conditions for many birds, waterfowl, and resident wildlife. The Timber-Wildlife Management Plan (1995) dictates that sound silviculture practices be performed to provide a diversity of habitat. In upland areas, the timber is managed for the endangered red cockaded woodpecker, and artificial nests are placed in mature pines to supplement the other cavities.

The current wildlife list for the Felsenthal NWR contains at least 200 species of birds (100 species that nest), 40 species of mammals, 70 species of reptiles and amphibians, and 90 fish species. Over 300,000 waterfowl have been found in the Refuge in a given year. Felsenthal NWR has the only population of the endangered red cockaded woodpeckers on NWRs in the state. Trees that host colonies (**Figure 2.19**) are marked with white bands within the Refuge. Felsenthal NWR also hosts bald eagles during the winter.



Figure 2.19: Red Cockaded Woodpeckers Marked Trees

Twenty-four of the 30 threatened and endangered species in Arkansas can be found at Felsenthal NWR, most of which are aquatic species. The red cockaded woodpecker, bald eagles, alligator snapping turtles, Rafinesque’s big-eared bat, southeastern myotis bat are known to be located on the Refuge. The potential for pondberry (an endangered plant) exists but has not been documented on the Refuge. Similarly, the pink mucket mussel has been found in the vicinity of the Refuge but not within the Refuge Boundary. There have also been coordinated black bear management efforts throughout the years at the Refuge.

2.5.6 Floodplains and Wetlands

As discussed in the habitat section of the report, most of the Refuge is considered wetlands.

2.5.7 Cultural Resources

The Felsenthal NWR is located in an area where Caddo Indian activity dates back 5,000 years ago. This was also an area where farming settlements existed from 900 – 1600 AD. On the Refuge, there are remains of seasonal fishing camps, temple mounds with ceremonial plaza and Indian villages. Before the Civil War, agriculture was the primary land use for this area. The war curbed large-scale agricultural development and larger plantations were sold off in pieces after the war. Timber then became a main industry in the area. This area also experienced an “oil boom” in the 1920s, which resulted in high bromine concentrations, which has now helped Arkansas, be the largest producer of bromine in the world. The Visitors Center at the Refuge showcases the history of this area.

3. Overflow NWR Existing Conditions

3.1 Overview

Overflow NWR (**Figure 3.1**) is part of the South Arkansas Refuges Complex, and is managed and maintained by the USFWS. It comprises an area of approximately 14,000 acres in Ashley County, Arkansas.



Figure 3.1: Overflow NWR Entrance Sign

The Refuge objectives are:

- Provide diversity of habitat types for migratory waterfowl and other birds
- Provide habitat and protection for threatened bald eagle
- Provide opportunities for environmental and ecological research
- Provide a variety of recreational opportunities consistent with primary wildlife objectives
- Expand the public's understanding of and appreciation for the environmental with special emphasis on natural resources

3.1.1 Overflow NWR History

Established in 1980, to protect one of the remaining bottomland hardwood forests, Overflow NWR provides unique opportunities for visitors. There are a number of sloughs and creeks within the Refuge.

3.1.2 Regional Location

Overflow NWR is located in Ashley County, Arkansas, five miles west of Wilmot, Arkansas. The Refuge can be accessed via SR 173 and SR 8. **Figure 1.3** shows the location of the Overflow NWR.

3.1.3 Visitation Summary and Profile

Approximately 15,000 people visit the Overflow NWR annually. Though official counts are not taken Refuge-wide, visitation estimates are based on the number of hunting permits issued.

Public use opportunities include trails, wildlife observation, photography and hunting.

Annual scheduled hunting seasons at the Refuge are shown in **Table 3.1**.

Table 3.1: Hunting by time of year at Overflow NWR	
Month(s)	Activity
October	Muzzleloader deer hunting
October to January	Archery deer hunting
October to January	Rabbit/Squirrel hunting
November to January	Waterfowl hunting

3.1.4 Entrances to the Refuge

The primary public use opportunity in the Refuge is waterfowl hunting. Visitors also visit for wildlife observation and photography. Fishing is currently prohibited as studies have shown that the fish population is contaminated with agricultural and industrial chemicals.

Parking areas are located off SR 8, SR 173, Ashley County Road 34, and five unpaved roads on the west side of the Refuge. However, it should be noted that not all access points are accessible at this time due to the conditions of the private roads.

Wayfinding is very limited around the Refuge. Directional signing was observed in Hamburg, as shown in **Figure 3.2**. Additional wayfinding signs were also located along SR 8 in the vicinity of the entrance to the Overflow NWR headquarters, as shown in **Figure 3.3**.



Figure 3.2: Directional sign for Refuge in Hamburg



Figure 3.3: Direction sign for Refuge Headquarters

3.2 Regional Transportation Conditions

This section describes the existing regional transportation infrastructure and traffic conditions.

3.2.1 Regional Roadway Infrastructure

Overflow NWR is located west of Wilmot, Arkansas and has public access points on SR 8, SR 173 and Ashley County Road 34, along with five unpaved roadways. These roadways define the transportation network that will be reviewed for this project.

3.2.1.1 SR 8

SR 8 is a two-lane roadway with a posted speed of 55 mph. The Refuge is located on SR 8 between Hamburg and Parkdale, Arkansas. Per AHTD 2010 traffic counts, this roadway carries 580 Annual Average Daily Traffic (AADT) just west of Parkdale in the vicinity of the Refuge.

As stated previously, the Sufficiency Rating formula is a method of evaluating highway bridge data by calculating several factors to obtain a numeric value that is indicative of the bridge's sufficiency to remain in service and its funding eligibility. The result of the Sufficiency Rating formula is a percentage in which 100 is an entirely sufficient bridge and 0 is an entirely deficient bridge, bridges with sufficiency ratings of lower than 50 qualify for federal funding. Per the AHTD, the sufficiency ratings for the bridges on SR 8 in Ashley County in the vicinity of the Refuge are both approximately 73.

3.2.1.2 SR 173

SR 173 is a two-lane roadway with a posted speed limit of 55 mph. The Refuge is located on SR 173 west of Wilmot. Per AHTD 2010 traffic counts; this roadway carries 50 AADT just east of the Refuge.

Per the AHTD, the sufficiency rating for the bridge on SR 173 in Ashley County in the vicinity of the Refuge is approximately 84.

3.2.1.3 Ashley County Road 34

Ashley County Road 34 (**Figure 3.4**) is a two-lane roadway with a posted speed limit is 45 mph. This roadway connects SR 8 and SR 173 on the eastern side of the Refuge.



Figure 3.4: Ashley County Road 34

3.2.2 Historic Traffic Volumes

Arkansas State Highway and Transportation collected the following historical data on SR 8 and SR 173 in the vicinity of the Refuge from 2006 – 2010 as shown in **Table 3.2**.

Table 3.2: Historic Traffic Volumes on SR 8 and SR 173					
Location	Year				
	2006	2007	2008	2009	2010
SR 8, west of Parkdale	640	610	610	520	580
SR 173, east of the Overflow NWR	40	40	60	50	50

Source: AHTD

Traffic growth has remained relatively flat in this area over the past five years.

3.2.3 Area Transportation Mode Split

Mode split analysis identifies the transportation method (automobile, transit, walk or bike) people in a defined geographic area use, expressed as a percentage of trips. Approximately 93% of trips in Ashley County were taken by automobile. Analyzing mode split helps determine the transportation demand characteristics of the local community. As the most congested time on roadways often corresponds with the traditional work day, modal split analysis is often conducted based on how people get to work. Journey-to-work data was obtained from the *2005 - 2009 American Community Survey* and compiled for Ashley County is summarized in **Table 3.3**. The *2005 - 2009 American Community Survey 5-year estimates* are based on the average of travel between 2005 - 2009.

Mode	Ashley County
Automobile	92.65%
Transit	0.28%
Walk/Bike	2.46%
Other	3.27%
Work at Home	1.34%

Source: 2005-2009 American Community Survey 5-Year Estimates

3.2.4 Crash Summary

Based on information provided by the AHTD from 2008 - 2010, there were 13 crashes on SR 8 in the vicinity of the Refuge. Of these crashes, 54% of the crashes were single vehicle crashes. **Table 3.4** shows the number of crashes by crash type for this section of SR 8.

Crash Type	Number of Accidents
Single Vehicle	7*
Rear-End	2
Head On	2
Angle	2

Source: AHTD

*One accident resulted in a fatality

There were no reported crashes from 2008 – 2010 in the vicinity of the Refuge on SR 173 based on AHTD data.

Based on the latest data from the Fatality Analysis Reporting System and AHTD data, there was one fatality in 2009 on Ashley County Road 364 on the southeast side of the Refuge and one fatality on SR 8 in the vicinity of the Refuge in 2008.

3.2.5 Planned Area Transportation Improvement Projects

The AHTD, District 2, does not have any planned improvements identified in the vicinity of the Refuge.

3.3 Refuge Transportation and Infrastructure

This section describes the existing transportation infrastructure within the Overflow NWR.

3.3.1 Refuge Roads

Roadways within the Refuge and maintained by the Refuge are mainly packed dirt with gravel, and the parking areas are packed dirt with gravel. There are no formal walking/biking trails in the Refuge.

There are also a number of ATV trails in the Refuge.

3.3.2 Water Transportation Access

Boat landings occur throughout the Refuge with most being in the southern area of the Refuge.

3.4 Transportation Issues

Based on observations during the site visit, review of the existing conditions information, review of existing reports, and discussions with stakeholders, there are some transportation issues/opportunities to be studied further.

3.4.1 Determine Formal Access Points to the Refuge

Many of the Refuge access points are via private roads. If these private roadways fall into disrepair or if a bridge fails, access to the Refuge in that area is compromised. A recommended process will be outlined in the Transportation Study, beginning with identifying the critical Refuge access points, then coordination with the private land owners as an opportunity to develop a formal agreement to maintain access to key Refuge entrances.

3.4.2 Enhance Visitor Experience

There is currently no formal education program for visitors or a formal trail map for the Refuge. The addition of the walking/biking trail routes could be created to enhance the visitors' experience.

As part of the trail map development, the development of an auto-tour route should also be considered.

3.5 Other Considerations

3.5.1 Community Features

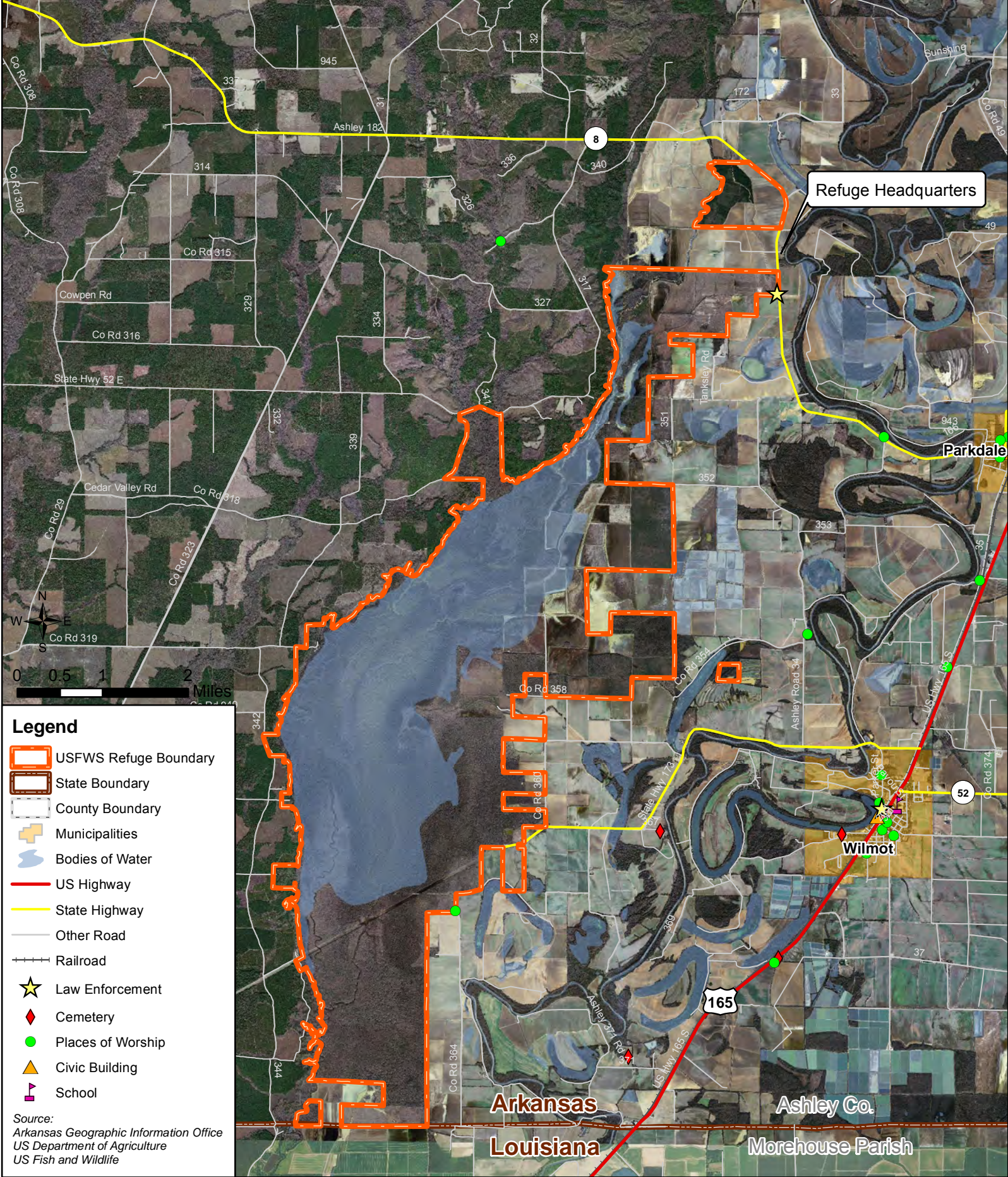
A review of parks, schools, places of worship, cemeteries, and civic buildings immediately around the study area for the Overflow NWR was performed. The closest schools to this area are in Hamburg or Wilmont, Arkansas. Civic buildings for the Cities of Parkdale and Wilmot are both within approximately five miles from the Refuge. Civic buildings in the city of Hamburg are approximately 15 miles from the Refuge. **Figure 3.5** shows the approximate locations of these community features.

3.5.2 Demographic Profile of Study Area

Overflow NWR is located in Ashley County, Arkansas. Ashley County has experienced a decline of growth over the past decade with a reduction of almost 10%. In addition, the nearby municipalities of Hamburg, Parkdale, and Wilmot saw reductions in population between 2000 and 2010 of approximately 6%, 27%, and 30%, respectively.

The Refuge is not immune to the impacts a declining population has on a community and could result in decreased user demand at the Refuge and impact the overall economic vitality of the region. Analyzing the transportation network in and around the Refuge ensures that the USFWS can provide acceptable levels of mobility, operation, and safety.

Table 3.5 shows the population figures in the counties and cities in proximity to the Refuge.



Overflow NWR Community Resources

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Figure 3.5 - Overflow NWR Community Resources



Table 3.5: Population for Counties and Cities near Overflow NWR

Location	2000	2010	Total Change	Percent Change
Arkansas	2,673,400	2,915,918	242,518	9.1%
Ashley County	24,209	21,853	-2,356	-9.7%
City of Hamburg	3,039	2,857	-182	-6.0%
City of Parkdale	377	277	-100	-26.5%
City of Wilmot	786	550	-236	-30.0%

Source: 2010 US Census

3.5.3 Environmental Justice Impacts

According to the U.S. Environmental Protection Agency (EPA):

“Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.”

For this plan, poverty level, income, and race in counties and municipalities in proximity to the Refuge were analyzed.

Poverty

The percentage of individuals below the poverty level at the national level is 13.5%. Arkansas’ poverty level is higher than national levels of percent of individuals below the poverty level at 17.7%. The poverty level for Ashley County is greater than the national average at 20.3%, Hamburg, the largest municipality in close proximity to the Refuge, also has a high percentage below the poverty level at almost 30%.

Table 3.6 shows the percentage individuals below the poverty level in Ashley County and the City of Hamburg.

Table 3.6: Poverty Level for Counties and Cities near Overflow NWR

Location	Population	Population with income in the past 12 months below poverty level	Percent Below Poverty Level
United States	293,507,923	39,537,240	13.5%
Arkansas	2,755,680	488,788	17.7%
Ashley County	21,637	4,393	20.3%
City of Hamburg	2,734	808	29.6%

Source: 2005-2009 American Community Survey 5-year estimates

Detailed information on poverty level can be found in the **Appendix**.

Income

Median household income in Arkansas (\$38,542) is below the national median household income of \$51,425 based on US Census data. **Table 3.6** shows the median household income in the study area and within select municipalities relative to the national median. Additional detailed information on income can be found in the **Appendix**.

Table 3.6: Median Household Income for Counties and Cities near Overflow NWR	
	Median Household Income
United States	\$51,425
Arkansas	\$38,542
Ashley County	\$33,007
City of Hamburg	\$30,469

Source: 2005-2009 American Community Survey 5-year estimates

Race

Whites comprise the majority of the population in Ashley County at approximately 69%. Blacks or African Americans comprise approximately 26%. The state average of Blacks or African Americans is 15% and the nation average is 12.6%. Although not the majority, Blacks or African Americans comprise a significant portion of the population. No other race categories make up a significant percentage of the population in the study area.

Table 3.7 shows the numbers of individuals by race in Ashley County and the City of Hamburg relative to national and state values. Detailed information on race is also included in the **Appendix**.

Table 3.7: Individuals by Race for Counties and Cities near Overflow NWR				
Location	United States	Arkansas	Ashley County	City of Hamburg
Total	308,745,538	2,915,918	21,853	2,857
White Alone	223,553,265	2,245,229	15,143	1,664
Black or African American Alone	38,929,319	449,895	5,640	859
American Indian and Alaska Native Alone	2,932,248	22,248	70	20
Asian Alone	14,674,252	36,102	40	4
Native Hawaiian and Other Pacific Islander Alone	540,013	5,863	3	1
Some Other Race Alone	19,107,368	99,571	709	273
Two or More Races	9,009,073	57,010	248	36

Source: 2010 US Census

3.5.4 Air Quality

The Overflow NWR is located in Ashley County. The county is currently in attainment for all of the National Ambient Air Quality Standards (NAAQS) criteria pollutants.

3.5.5 Habitat

The Overflow NWR is comprised primarily of a bottomland hardwood forest with a portion of the Refuge having been previously converted to cropland. **Table 3.8** shows the habitat types and their acreages. **Figure 3.6** shows these habitat types.

Habitat Types	Acres
Cropland/Moist Soil Rotation	600
Cropland only	245
Grassland Management	35
Moist Soil only	520
Reforested	2,020
Marsh	50
CRP Pine	179
Beaver Ponds & Scrub/Shrub Wetlands	1,500
Bottomland Hardwood Forest	8,625
Upland Hardwood/Pine	175
Administrative	24
Total	13,973

Source: CCP, 2010

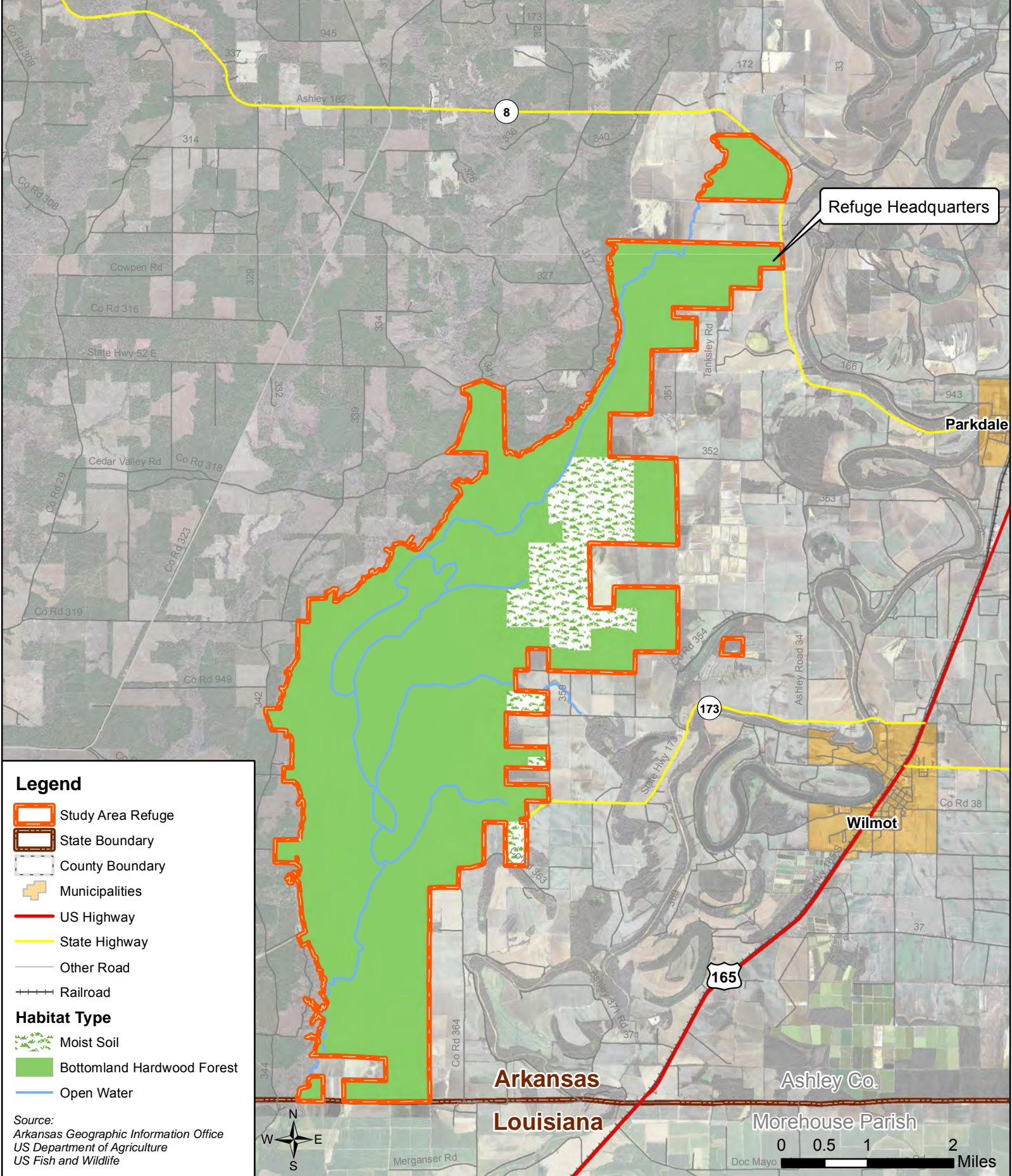
Based on the CCP, 4,000 acres of the bottomland hardwood forest can be flooded annually as the green-tree reservoir, similar to the Felsenthal NWR.

The bottomland hardwood forest mainly contains willow oak and overcup oak. Other trees include hickory, elm, green ash, bald cypress and tupelo gum.

The cropland has 600 acres in moist soil rotation and 250 acres is used for crops such as rice, corn, soybeans and sometimes winter wheat and milo.

The current wildlife list for the Overflow NWR contains at least 200 species of birds (100 species that nest), 40 species of mammals, 70 species of reptiles and amphibians, and 90 fish species. Over 300,000 waterfowl have been found in the Refuge in a given year. Overflow NWR also hosts bald eagles during the winter.

Twenty-four of the 30 threatened and endangered species in Arkansas can be found at Overflow NWR, most of which are aquatic species. The least tern, bald eagles, alligator snapping turtles, Rafinesque's big-eared bat, southeastern myotis bat are known to be located on the Refuge. The potential for pondberry (an endangered plant) exists but has not been documented on the Refuge. Similarly, the pink mucket mussel has been found in the vicinity of the Refuge but not within the Refuge Boundary. There have also been coordinated black bear management efforts throughout the years at the Refuge.



Legend

- Study Area Refuge
- State Boundary
- County Boundary
- Municipalities
- US Highway
- State Highway
- Other Road
- Railroad
- Habitat Type**
- Moist Soil
- Bottomland Hardwood Forest
- Open Water

Source:
 Arkansas Geographic Information Office
 US Department of Agriculture
 US Fish and Wildlife



Overflow NWR Habitat Type

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Figure 3.6 - Overflow NWR Habitat Type

3.5.6 Floodplains and Wetlands

As discussed in the habitat section of the report, most of the Refuge is considered wetlands.

3.5.7 Cultural Resources

Similar to the area around the Felsenthal NWR, the Overflow NWR is located in an area where Caddo Indian activity dates back 5,000 years ago. This was also an area where farming settlements existed from 900 – 1600 AD. In the 1800s this land was acquired as part of the Louisiana Purchase and the Indians were eventually moved. Before the Civil War, agriculture was the primary land use for this area. The war curbed large-scale agricultural development and larger plantations were sold off in pieces after the war. Timber became a main industry in the area. For over 100 years, the land in and around the Refuge has been farmed which resulted in a nearly complete loss of wetlands and associated wetlands.

4. Conclusion

The information from this Existing Conditions report will be used in the Transportation Study to develop short-, medium-, and long-term recommendations.

References

Felsenthal NWR and Overflow NWR Visitation Data

Felsenthal and Overflow National Wildlife Refuge Comprehensive Conservation Plan, October 2010

Felsenthal and Overflow National Wildlife Refuges Fact Sheets and Maps

2005 – 2009 American Community Survey 5-year Estimates

2000 Census

2010 Census

Discussion with FHWA staff

Discussion with USFWS staff

Discussion with stakeholders

Site Visit

Area traffic counts, truck percentage data, bridge sufficiency data, planned improvements data, and crash data from AHTD

APPENDIX

Supporting Data Tables



U.S. Census Bureau

American FactFinder

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[C17002. RATIO OF INCOME TO POVERTY LEVEL IN THE PAST 12 MONTHS - Universe: POPULATION FOR WHOM POVERTY STATUS IS DETERMINED](#)

Data Set: [2005-2009 American Community Survey 5-Year Estimates](#)

Survey: American Community Survey

NOTE. Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the [official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties](#).

For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

	United States		Arkansas		Louisiana		Ashley County, Arkansas		Bradley County, Arkansas	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	293,507,923	+/-15,551	2,755,680	+/-1,171	4,285,810	+/-1,068	21,637	+/-848	11,856	+/-173
Under .50	17,124,388	+/-123,530	194,770	+/-5,149	336,474	+/-8,572	1,485	+/-442	1,720	+/-746
.50 to .99	22,412,852	+/-139,923	294,018	+/-6,457	453,160	+/-7,946	2,908	+/-616	2,420	+/-835
1.00 to 1.24	12,916,533	+/-69,974	166,180	+/-5,030	228,620	+/-6,442	1,369	+/-420	849	+/-254
1.25 to 1.49	13,265,892	+/-65,424	163,597	+/-4,598	224,763	+/-6,510	1,354	+/-419	1,006	+/-366
1.50 to 1.84	18,480,297	+/-75,034	219,694	+/-6,052	291,882	+/-6,174	2,388	+/-479	827	+/-327
1.85 to 1.99	7,985,406	+/-41,799	94,379	+/-3,738	123,882	+/-4,748	1,129	+/-475	287	+/-150
2.00 and over	201,322,555	+/-432,726	1,623,042	+/-10,757	2,627,029	+/-13,056	11,004	+/-790	4,747	+/-1,189

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see [Accuracy of the Data](#)). The effect of nonsampling error is not represented in these tables.

While the 2005-2009 American Community Survey (ACS) data generally reflect the November 2008 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

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2. An "-" entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An "-" following a median estimate means the median falls in the lowest interval of an open-ended distribution.
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5. An "*" entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An "*****" entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

[B19013. MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS \(IN 2009 INFLATION-ADJUSTED DOLLARS\) - Universe: HOUSEHOLDS](#)

Data Set: [2005-2009 American Community Survey 5-Year Estimates](#)

Survey: American Community Survey

NOTE. Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the [official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties](#).

For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

	United States		Arkansas		Louisiana		Ashley County, Arkansas		Bradley County, Arkansas	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Median household income in the past 12 months (in 2009 inflation-adjusted dollars)	51,425	+/-83	38,542	+/-288	42,167	+/-259	33,007	+/-2,200	26,207	+/-3,273

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see [Accuracy of](#)

[the Data](#)). The effect of nonsampling error is not represented in these tables.

While the 2005-2009 American Community Survey (ACS) data generally reflect the November 2008 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

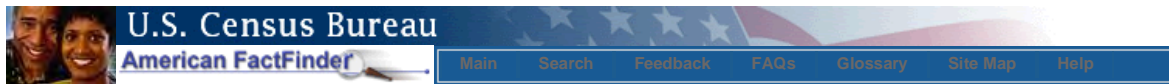
Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

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6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

Standard Error/Variance documentation for this dataset:

[Accuracy of the Data](#)



[C17002. RATIO OF INCOME TO POVERTY LEVEL IN THE PAST 12 MONTHS - Universe: POPULATION FOR WHOM POVERTY STATUS IS DETERMINED](#)

Data Set: [2005-2009 American Community Survey 5-Year Estimates](#)

Survey: American Community Survey

NOTE: Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the [official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties](#).

For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

	Union County, Arkansas		Morehouse Parish, Louisiana		Union Parish, Louisiana		Crossett city, Arkansas		Hamburg city, Arkansas	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	42,226	+/-538	27,856	+/-296	22,393	+/-243	4,872	+/-846	2,734	+/-20
Under .50	4,226	+/-820	4,176	+/-792	2,250	+/-517	263	+/-192	162	+/-128
.50 to .99	4,488	+/-731	3,693	+/-729	2,635	+/-729	1,047	+/-398	646	+/-251
1.00 to 1.24	2,973	+/-615	1,176	+/-333	1,181	+/-328	233	+/-172	151	+/-99
1.25 to 1.49	2,164	+/-492	1,574	+/-355	1,172	+/-393	224	+/-177	141	+/-129
1.50 to 1.84	3,786	+/-659	2,835	+/-669	1,331	+/-402	567	+/-283	337	+/-166
1.85 to 1.99	803	+/-275	838	+/-415	1,115	+/-447	57	+/-78	80	+/-82
2.00 and over	23,786	+/-1,100	13,564	+/-792	12,709	+/-858	2,481	+/-608	1,217	+/-195

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see [Accuracy of the Data](#)). The effect of nonsampling error is not represented in these tables.

While the 2005-2009 American Community Survey (ACS) data generally reflect the November 2008 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

1. An "" entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
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6. An "" entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

[B19013. MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS \(IN 2009 INFLATION-ADJUSTED DOLLARS\) - Universe: HOUSEHOLDS](#)

Data Set: [2005-2009 American Community Survey 5-Year Estimates](#)

Survey: American Community Survey

NOTE: Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the [official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties](#).

For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

	Union County, Arkansas		Morehouse Parish, Louisiana		Union Parish, Louisiana		Crossett city, Arkansas		Hamburg city, Arkansas	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Median household income in the past 12 months (in 2009 inflation-adjusted dollars)	35,732	+/-2,238	31,264	+/-1,696	35,788	+/-2,923	25,889	+/-4,641	30,469	+/-6,718

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see [Accuracy of the Data](#)). The effect of nonsampling error is not represented in these tables.

While the 2005-2009 American Community Survey (ACS) data generally reflect the November 2008 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

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Standard Error/Variance documentation for this dataset:

[Accuracy of the Data](#)



C17002. RATIO OF INCOME TO POVERTY LEVEL IN THE PAST 12 MONTHS - Universe:
POPULATION FOR WHOM POVERTY STATUS IS DETERMINED

Data Set: [2005-2009 American Community Survey 5-Year Estimates](#)

Survey: American Community Survey

NOTE: Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the [official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties](#).

For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

Strong city, Arkansas		
	Estimate	Margin of Error
Total:	249	+/-92
Under .50	24	+/-26
.50 to .99	24	+/-27
1.00 to 1.24	15	+/-28
1.25 to 1.49	34	+/-31
1.50 to 1.84	52	+/-54
1.85 to 1.99	0	+/-119
2.00 and over	100	+/-51

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see [Accuracy of the Data](#)). The effect of nonsampling error is not represented in these tables.

While the 2005-2009 American Community Survey (ACS) data generally reflect the November 2008 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

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B19013. MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2009 INFLATION-ADJUSTED DOLLARS) - Universe: HOUSEHOLDS

Data Set: [2005-2009 American Community Survey 5-Year Estimates](#)

Survey: American Community Survey

NOTE: Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the [official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties](#).

For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

Strong city, Arkansas		
	Estimate	Margin of Error
Median household income in the past 12 months (in 2009 inflation-adjusted dollars)	26,250	+/-8,278

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see [Accuracy of the Data](#)). The effect of nonsampling error is not represented in these tables.

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Standard Error/Variance documentation for this dataset:

[Accuracy of the Data](#)



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**B17001. POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE - Universe:
POPULATION FOR WHOM POVERTY STATUS IS DETERMINED**

Data Set: [2005-2009 American Community Survey 5-Year Estimates](#)

Survey: American Community Survey

NOTE. Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the [official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.](#)

For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

	United States		Arkansas		Louisiana		Ashley County, Arkansas		Bradley County, Arkansas	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	293,507,923	+/-15,551	2,755,680	+/-1,171	4,285,810	+/-1,068	21,637	+/-848	11,856	+/-173
Income in the past 12 months below poverty level:	39,537,240	+/-250,842	488,788	+/-8,350	789,634	+/-11,838	4,393	+/-686	4,140	+/-1,382
Male:	17,404,017	+/-121,411	212,199	+/-4,366	327,541	+/-6,258	1,865	+/-403	2,209	+/-878
Under 5 years	2,246,058	+/-24,934	28,959	+/-1,303	45,760	+/-1,684	179	+/-96	217	+/-73
5 years	387,217	+/-5,900	4,968	+/-464	8,672	+/-782	0	+/-119	85	+/-68
6 to 11 years	2,180,473	+/-22,990	29,527	+/-1,235	47,762	+/-1,914	242	+/-92	196	+/-73
12 to 14 years	1,021,800	+/-11,500	12,266	+/-718	21,441	+/-1,201	144	+/-76	36	+/-37
15 years	360,373	+/-5,273	4,080	+/-482	7,045	+/-542	18	+/-24	11	+/-13
16 and 17 years	671,257	+/-7,114	7,701	+/-646	13,953	+/-974	74	+/-51	20	+/-25
18 to 24 years	2,636,966	+/-17,239	28,796	+/-1,388	49,916	+/-2,132	307	+/-202	278	+/-204
25 to 34 years	2,052,232	+/-15,047	25,636	+/-1,453	30,968	+/-1,350	162	+/-107	543	+/-357
35 to 44 years	1,784,478	+/-16,228	21,192	+/-1,129	26,897	+/-1,312	198	+/-89	426	+/-237
45 to 54 years	1,721,899	+/-13,923	20,081	+/-928	31,194	+/-1,365	264	+/-83	189	+/-152
55 to 64 years	1,221,965	+/-11,321	15,425	+/-732	23,413	+/-1,037	184	+/-80	142	+/-160
65 to 74 years	603,536	+/-5,225	7,100	+/-536	11,603	+/-674	28	+/-21	35	+/-31
75 years and over	515,763	+/-5,002	6,468	+/-450	8,917	+/-562	65	+/-51	31	+/-28
Female:	22,133,223	+/-133,914	276,589	+/-4,960	462,093	+/-6,792	2,528	+/-375	1,931	+/-546
Under 5 years	2,172,424	+/-23,155	28,519	+/-1,203	45,210	+/-1,629	223	+/-50	238	+/-103
5 years	373,941	+/-5,320	4,804	+/-521	9,062	+/-775	98	+/-83	0	+/-119
6 to 11 years	2,111,885	+/-23,991	28,114	+/-1,348	46,104	+/-1,846	267	+/-106	170	+/-105
12 to 14 years	992,831	+/-11,853	12,187	+/-661	22,271	+/-1,035	61	+/-50	77	+/-65
15 years	348,452	+/-4,741	3,954	+/-383	7,374	+/-675	70	+/-60	8	+/-9
16 and 17 years	691,091	+/-7,805	9,393	+/-658	13,928	+/-744	82	+/-46	71	+/-71
18 to 24 years	3,415,171	+/-16,005	38,090	+/-1,573	73,487	+/-2,164	393	+/-151	193	+/-79
25 to 34 years	3,231,361	+/-23,404	41,804	+/-1,487	65,256	+/-1,844	327	+/-101	300	+/-112
35 to 44 years	2,566,593	+/-22,348	28,721	+/-1,289	49,844	+/-1,677	274	+/-93	109	+/-73
45 to 54 years	2,137,461	+/-17,274	26,521	+/-1,160	45,491	+/-1,674	340	+/-98	298	+/-236
55 to 64 years	1,636,813	+/-11,738	20,480	+/-848	35,067	+/-1,193	153	+/-63	159	+/-168
65 to 74 years	1,056,243	+/-5,863	14,051	+/-653	22,738	+/-902	76	+/-44	146	+/-139
75 years and over	1,398,957	+/-8,675	19,951	+/-892	26,261	+/-1,019	164	+/-92	162	+/-61
Income in the past 12 months at or above poverty level:	253,970,683	+/-261,705	2,266,892	+/-8,577	3,496,176	+/-11,825	17,244	+/-944	7,716	+/-1,413
Male:	126,523,466	+/-128,282	1,130,260	+/-4,859	1,740,692	+/-6,279	8,759	+/-462	3,810	+/-867
Under 5 years	8,253,489	+/-25,433	70,809	+/-1,257	110,579	+/-1,767	489	+/-96	244	+/-47
5 years	1,588,955	+/-9,989	14,510	+/-886	20,604	+/-1,162	97	+/-55	48	+/-36
6 to 11 years	9,875,803	+/-25,283	87,092	+/-1,743	134,427	+/-2,221	722	+/-157	260	+/-85
12 to 14 years	5,256,613	+/-16,438	43,470	+/-1,284	72,458	+/-1,864	405	+/-96	145	+/-65
15 years	1,816,107	+/-8,125	16,233	+/-697	25,443	+/-952	110	+/-40	65	+/-38
16 and 17 years	3,662,772	+/-9,661	32,854	+/-898	52,598	+/-1,268	346	+/-57	166	+/-83
18 to 24 years	11,056,411	+/-16,708	93,393	+/-1,420	175,074	+/-1,836	557	+/-133	79	+/-145
25 to 34 years	17,783,656	+/-17,579	155,796	+/-1,556	241,724	+/-1,931	1,163	+/-229	381	+/-201
35 to 44 years	19,063,617	+/-18,299	159,522	+/-1,327	247,660	+/-1,435	1,224	+/-145	525	+/-235
45 to 54 years	19,398,444	+/-17,680	168,549	+/-1,146	267,544	+/-1,522	1,322	+/-96	634	+/-189
55 to 64 years	14,317,270	+/-12,617	137,782	+/-934	199,349	+/-1,085	1,181	+/-80	527	+/-161
65 to 74 years	8,281,353	+/-5,744	88,502	+/-673	114,938	+/-743	875	+/-60	420	+/-56
75 years and over	6,168,976	+/-5,516	61,748	+/-569	78,294	+/-753	268	+/-232	316	+/-45
Female:	127,447,217	+/-138,354	1,136,632	+/-5,097	1,755,484	+/-6,984	8,485	+/-578	3,906	+/-592
Under 5 years	7,865,763	+/-24,309	66,677	+/-1,302	103,710	+/-1,689	478	+/-87	116	+/-69
5 years	1,528,879	+/-9,646	13,078	+/-752	22,510	+/-1,030	57	+/-57	37	+/-37
6 to 11 years	9,393,512	+/-28,618	82,586	+/-1,460	125,382	+/-2,043	599	+/-131	355	+/-87
12 to 14 years	4,984,504	+/-16,497	42,246	+/-1,197	68,178	+/-1,650	369	+/-124	118	+/-60
15 years	1,725,768	+/-6,885	14,640	+/-650	23,399	+/-1,120	231	+/-92	48	+/-28
16 and 17 years	3,454,552	+/-9,703	30,143	+/-787	50,059	+/-1,010	211	+/-66	80	+/-40
18 to 24 years	9,743,603	+/-14,342	82,318	+/-1,556	147,752	+/-2,121	470	+/-140	148	+/-69
25 to 34 years	16,553,243	+/-24,998	144,801	+/-1,507	227,471	+/-2,153	1,030	+/-122	401	+/-59

35 to 44 years	18,694,939	+/-24,385	159,504	+/-1,397	249,472	+/-1,762	1,253	+/-118	631	+/-109
45 to 54 years	19,940,647	+/-19,795	173,827	+/-1,129	279,997	+/-1,757	1,189	+/-98	586	+/-220
55 to 64 years	15,171,205	+/-12,953	145,674	+/-976	211,249	+/-1,259	1,299	+/-63	582	+/-112
65 to 74 years	9,396,764	+/-6,856	96,842	+/-859	131,553	+/-1,000	634	+/-231	343	+/-209
75 years and over	8,993,838	+/-10,446	84,296	+/-931	114,752	+/-1,143	665	+/-145	461	+/-107

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see [Accuracy of the Data](#)). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

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Standard Error/Variance documentation for this dataset:

[Accuracy of the Data](#)



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B17001. POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE - Universe:
POPULATION FOR WHOM POVERTY STATUS IS DETERMINED

Data Set: [2005-2009 American Community Survey 5-Year Estimates](#)

Survey: American Community Survey

NOTE: Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the [official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties](#).

For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

	Union County, Arkansas		Morehouse Parish, Louisiana		Union Parish, Louisiana		Crossett city, Arkansas		Hamburg city, Arkansas	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	42,226	+/-538	27,856	+/-296	22,393	+/-243	4,872	+/-846	2,734	+/-20
Income in the past 12 months below poverty level:	8,714	+/-755	7,869	+/-813	4,885	+/-744	1,310	+/-413	808	+/-268
Male:	3,730	+/-403	3,364	+/-399	2,102	+/-404	504	+/-258	366	+/-168
Under 5 years	467	+/-133	323	+/-130	335	+/-122	64	+/-79	6	+/-12
5 years	167	+/-80	89	+/-60	6	+/-9	0	+/-119	0	+/-119
6 to 11 years	555	+/-125	596	+/-138	369	+/-148	44	+/-42	62	+/-63
12 to 14 years	304	+/-124	302	+/-100	219	+/-105	71	+/-56	58	+/-62
15 years	72	+/-47	114	+/-76	134	+/-92	11	+/-20	7	+/-12
16 and 17 years	156	+/-83	103	+/-53	110	+/-93	5	+/-9	8	+/-13
18 to 24 years	587	+/-164	333	+/-143	139	+/-106	205	+/-184	27	+/-30
25 to 34 years	263	+/-117	427	+/-140	188	+/-95	10	+/-16	62	+/-72
35 to 44 years	350	+/-138	350	+/-155	142	+/-99	15	+/-25	14	+/-16
45 to 54 years	414	+/-116	270	+/-97	162	+/-89	58	+/-42	104	+/-81
55 to 64 years	234	+/-111	186	+/-80	158	+/-86	13	+/-20	10	+/-17
65 to 74 years	73	+/-41	98	+/-49	50	+/-37	0	+/-119	5	+/-8
75 years and over	88	+/-49	173	+/-53	90	+/-44	8	+/-17	3	+/-7
Female:	4,984	+/-488	4,505	+/-517	2,783	+/-417	806	+/-234	442	+/-163
Under 5 years	553	+/-106	534	+/-99	184	+/-68	110	+/-78	49	+/-52
5 years	60	+/-74	20	+/-31	111	+/-83	0	+/-119	16	+/-26
6 to 11 years	285	+/-116	512	+/-138	87	+/-80	66	+/-57	53	+/-46
12 to 14 years	272	+/-115	251	+/-96	236	+/-124	11	+/-18	24	+/-36
15 years	38	+/-43	65	+/-47	20	+/-24	23	+/-30	0	+/-119
16 and 17 years	189	+/-73	192	+/-83	111	+/-70	24	+/-33	0	+/-119
18 to 24 years	901	+/-122	280	+/-103	239	+/-116	227	+/-122	79	+/-87
25 to 34 years	438	+/-136	725	+/-159	457	+/-133	92	+/-66	50	+/-43
35 to 44 years	522	+/-122	388	+/-109	348	+/-143	55	+/-43	25	+/-30
45 to 54 years	612	+/-157	468	+/-128	239	+/-105	84	+/-65	82	+/-62
55 to 64 years	525	+/-109	382	+/-107	236	+/-76	29	+/-30	30	+/-22
65 to 74 years	178	+/-64	272	+/-87	203	+/-59	26	+/-29	9	+/-9
75 years and over	411	+/-109	416	+/-93	312	+/-114	59	+/-60	25	+/-38
Income in the past 12 months at or above poverty level:	33,512	+/-914	19,987	+/-839	17,508	+/-750	3,562	+/-782	1,926	+/-268
Male:	16,259	+/-600	9,864	+/-403	8,792	+/-382	1,773	+/-397	891	+/-164
Under 5 years	1,013	+/-140	691	+/-130	422	+/-103	64	+/-42	89	+/-39
5 years	227	+/-107	77	+/-55	71	+/-49	41	+/-47	5	+/-8
6 to 11 years	1,019	+/-157	663	+/-162	586	+/-149	79	+/-66	80	+/-48
12 to 14 years	617	+/-130	321	+/-89	303	+/-108	50	+/-49	10	+/-12
15 years	389	+/-108	245	+/-104	126	+/-77	6	+/-11	14	+/-17
16 and 17 years	432	+/-98	219	+/-101	118	+/-60	106	+/-64	49	+/-39
18 to 24 years	1,220	+/-179	949	+/-155	787	+/-106	133	+/-95	55	+/-50
25 to 34 years	1,896	+/-218	1,013	+/-161	1,135	+/-109	256	+/-181	113	+/-52
35 to 44 years	2,291	+/-140	1,410	+/-182	1,212	+/-92	209	+/-106	162	+/-64
45 to 54 years	2,623	+/-153	1,519	+/-115	1,469	+/-86	230	+/-99	105	+/-59
55 to 64 years	2,205	+/-115	1,386	+/-77	1,216	+/-98	290	+/-95	82	+/-42
65 to 74 years	1,321	+/-49	807	+/-61	846	+/-45	244	+/-81	76	+/-35
75 years and over	1,006	+/-93	564	+/-63	501	+/-51	65	+/-78	51	+/-56
Female:	17,253	+/-502	10,123	+/-543	8,716	+/-446	1,789	+/-438	1,035	+/-162
Under 5 years	910	+/-131	429	+/-96	557	+/-57	70	+/-55	57	+/-41
5 years	236	+/-93	153	+/-102	88	+/-55	0	+/-119	11	+/-13
6 to 11 years	1,235	+/-188	641	+/-117	556	+/-146	98	+/-60	81	+/-48
12 to 14 years	700	+/-172	329	+/-104	322	+/-135	115	+/-69	64	+/-48
15 years	178	+/-95	135	+/-73	133	+/-63	55	+/-44	74	+/-65
16 and 17 years	506	+/-81	237	+/-87	223	+/-65	52	+/-38	8	+/-11

18 to 24 years	886	+/-124	965	+/-103	696	+/-117	131	+/-91	59	+/-50
25 to 34 years	2,055	+/-159	1,034	+/-159	980	+/-109	161	+/-89	101	+/-51
35 to 44 years	2,342	+/-132	1,480	+/-109	1,090	+/-118	183	+/-79	211	+/-89
45 to 54 years	2,719	+/-160	1,722	+/-131	1,509	+/-92	291	+/-107	93	+/-49
55 to 64 years	2,058	+/-110	1,314	+/-109	1,209	+/-75	318	+/-109	112	+/-48
65 to 74 years	1,594	+/-77	935	+/-87	844	+/-73	164	+/-83	79	+/-43
75 years and over	1,834	+/-149	749	+/-142	509	+/-121	151	+/-95	85	+/-54

Source: U.S. Census Bureau, 2005-2009 American Community Survey

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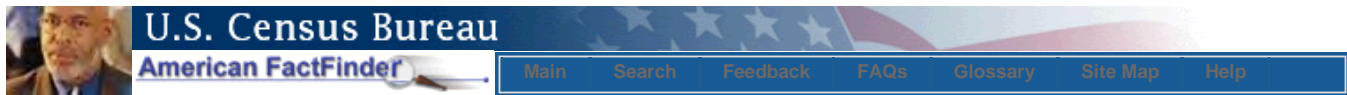
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[Accuracy of the Data](#)



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	Strong city, Arkansas	
	Estimate	Margin of Error
Total:	249	+/-92
Income in the past 12 months below poverty level:	48	+/-38
Male:	25	+/-23
Under 5 years	4	+/-8
5 years	0	+/-119
6 to 11 years	0	+/-119
12 to 14 years	0	+/-119
15 years	0	+/-119
16 and 17 years	4	+/-8
18 to 24 years	12	+/-15
25 to 34 years	0	+/-119
35 to 44 years	0	+/-119
45 to 54 years	5	+/-9
55 to 64 years	0	+/-119
65 to 74 years	0	+/-119
75 years and over	0	+/-119
Female:	23	+/-18
Under 5 years	0	+/-119
5 years	0	+/-119
6 to 11 years	0	+/-119
12 to 14 years	0	+/-119
15 years	0	+/-119
16 and 17 years	0	+/-119
18 to 24 years	13	+/-14
25 to 34 years	0	+/-119
35 to 44 years	3	+/-5
45 to 54 years	4	+/-6
55 to 64 years	3	+/-6
65 to 74 years	0	+/-119
75 years and over	0	+/-119
Income in the past 12 months at or above poverty level:	201	+/-86
Male:	102	+/-45
Under 5 years	0	+/-119
5 years	0	+/-119
6 to 11 years	8	+/-14
12 to 14 years	9	+/-10
15 years	4	+/-6
16 and 17 years	5	+/-7
18 to 24 years	0	+/-119
25 to 34 years	6	+/-7
35 to 44 years	14	+/-17
45 to 54 years	20	+/-13
55 to 64 years	8	+/-11
65 to 74 years	28	+/-24
75 years and over	0	+/-119
Female:	99	+/-49
Under 5 years	0	+/-119
5 years	0	+/-119
6 to 11 years	5	+/-9
12 to 14 years	0	+/-119
15 years	0	+/-119
16 and 17 years	17	+/-26
18 to 24 years	0	+/-119
25 to 34 years	11	+/-15

35 to 44 years	0	+/-119
45 to 54 years	8	+/-8
55 to 64 years	25	+/-19
65 to 74 years	11	+/-13
75 years and over	22	+/-15

Source: U.S. Census Bureau, 2005-2009 American Community Survey

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[Accuracy of the Data](#)



P3

RACE

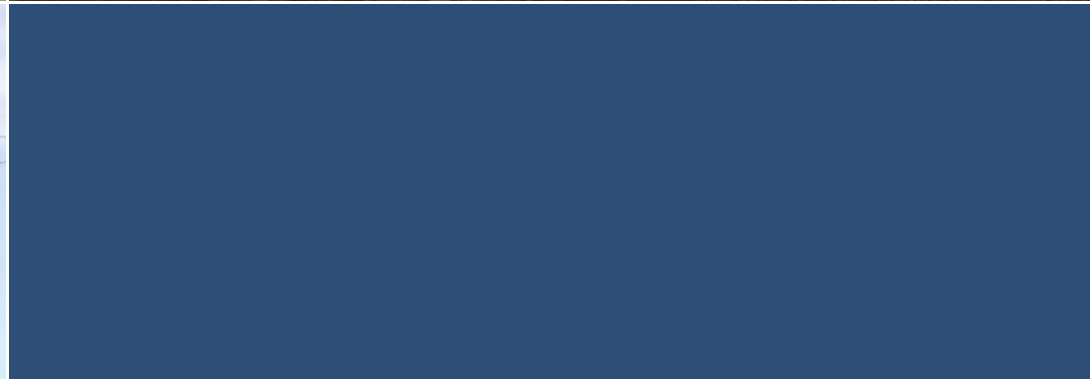
Universe: Total population
2010 Census Summary File 1

NOTE: For information on confidentiality protection, nonsampling error, and definitions, see <http://www.census.gov/prod/cen2010/doc/sf1.pdf>.

	United States	Arkansas	Louisiana	Ashley County, Arkansas	Bradley County, Arkansas	Union County, Arkansas	Morehouse Parish, Louisiana	Union Parish, Louisiana
Total:	308,745,538	2,915,918	4,533,372	21,853	11,508	41,639	27,979	22,721
White alone	223,553,265	2,245,229	2,836,192	15,143	6,934	26,276	14,345	15,682
Black or African American alone	38,929,319	449,895	1,452,396	5,640	3,173	13,721	13,133	6,182
American Indian and Alaska Native alone	2,932,248	22,248	30,579	70	56	143	36	58
Asian alone	14,674,252	36,102	70,132	40	27	207	102	32
Native Hawaiian and Other Pacific Islander alone	540,013	5,863	1,963	3	1	14	14	17
Some Other Race alone	19,107,368	99,571	69,227	709	1,162	756	75	572
Two or More Races	9,009,073	57,010	72,883	248	155	522	274	178

	Crossett city, Arkansas	Hamburg city, Arkansas	Strong city, Arkansas
Total:	5,507	2,857	558
White alone	3,025	1,664	176
Black or African American alone	2,326	859	339
American Indian and Alaska Native alone	8	20	1
Asian alone	26	4	1
Native Hawaiian and Other Pacific Islander alone	0	1	0
Some Other Race alone	63	273	30
Two or More Races	59	36	11

Source: U.S. Census Bureau, 2010 Census.



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