

# Watershed Report

## Poke Bayou

### 1101000405

The Center for Advanced Spatial Technologies at the University of Arkansas has developed the Arkansas Automated Reporting and Mapping System with funding from the Arkansas 85th General Assembly through the Arkansas Natural Resource Commission.

The 308 ten-digit watershed units and the 1556 twelve-digit watershed units were delineated by the Natural Resources Conservation Service, a division of the US Department of Agriculture.

For all watersheds that cross the Arkansas border, only the Arkansas portion of the watershed was used for mapping and statistical reporting.

## Watershed Summary (10 Digit HUC)

### *Poke Bayou* *(1101000405)*

#### **Area Summary**

Area - Square Miles.....	172.71
Area - Acres.....	111833.86

#### **Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximum.....	280.00	918.00
Elevation Minimum.....	74.00	243.00
Elevation Average.....	164.00	538.00

#### **Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	3.95	2.30%
Bare.....	.08	.05%
Water.....	.23	.13%
Herbaceous.....	.19	.11%
Forest.....	113.43	66.12%
Agri - Crops.....	.05	.03%
Agri - pasture.....	53.61	31.25%

#### **Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	8.06	4.70%
Bare.....	.23	.13%
Water.....	.24	.14%
Herbaceous.....	1.52	.89%
Forest.....	104.11	60.69%
Agri - Crops.....	.10	.06%
Agri - pasture.....	57.28	33.39%

#### **Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	9.06	5.16%
Bare.....	.33	.19%
Water.....	.36	.20%
Herbaceous.....	4.37	2.49%
Forest.....	102.87	58.54%
Agri - Crops.....	1.47	.84%

Agri - pasture.....: 53.05 30.19%

**Land Use / Land Cover Change from 1999 to 2004**

Area in Acres	Change TO						
	Urban	Bare	Water	Herbaceous	Forest	Agri-Crop	Agri-Pasture
FROM Urban	-.--	-.--	-.--	-.--	-.--	-.--	-.--
Bare	8.83	-.--	0.00	0.00	.60	0.00	3.01
Water	10.44	.20	-.--	1.00	45.16	0.00	35.73
FROM Herb	34.72	0.00	0.00	-.--	31.51	0.00	46.77
Forest	1775.69	10.24	11.84	221.58	-.--	0.00	5663.05
Agri-Crops	3.61	.80	0.00	0.00	1.20	-.--	6.02
Agri-Pasture	1400.56	38.94	9.03	331.57	1040.28	14.05	-.--

# Sub-Watershed Summary (12 Digit HUC)

## Middle Poke Bayou (110100040503)

### Area Summary

Area - Square Miles.....	34.97
Area - Acres.....	22644.76

### Elevation Summary

	Meters	Feet
Elevation Maximun.....	256.00	840.00
Elevation Minimum.....	87.00	285.00
Elevation Average.....	167.00	548.00

### Land Use / Land Cover for 1999

	Sq. Miles	% of Total
Urban.....	.09	.25%
Bare.....	.00	-.--%
Water.....	.05	.14%
Herbaceous.....	.02	.06%
Forest.....	29.01	81.79%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	6.30	17.76%

### Land Use / Land Cover for 2004

	Sq. Miles	% of Total
Urban.....	.22	.62%
Bare.....	.01	.03%
Water.....	.06	.17%
Herbaceous.....	.28	.79%
Forest.....	27.37	77.14%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	7.54	21.25%

### Land Use / Land Cover for 2006

	Sq. Miles	% of Total
Urban.....	.30	.85%
Bare.....	.02	.06%
Water.....	.07	.20%
Herbaceous.....	.84	2.37%
Forest.....	26.94	75.95%
Agri - Crops.....	.11	.31%
Agri - pasture.....	7.19	20.27%

### Land Use / Land Cover Change from 1999 to 2004

Area in Acres	Change TO						
	Urban	Bare	Water	Herbaceous	Forest	Agri-Crop	Agri-Pasture
Urban	-.--	-.--	-.--	-.--	-.--	-.--	-.--
Bare	0.0	-.--	0.00	0.00	.40	0.00	.40
Water	0.0	0.00	-.--	0.00	3.01	0.00	2.81
FROM Herb	1.40	0.00	0.00	-.--	4.42	0.00	6.82
Forest	65.63	.60	4.01	45.96	-.--	0.00	974.05
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	30.91	.20	.40	66.23	214.16	0.00	-.--

**Sullivan Creek  
(110100040502)**

**Area Summary**

Area - Square Miles.....:	38.72
Area - Acres.....:	25072.86

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	247.00	810.00
Elevation Minimum.....:	87.00	285.00
Elevation Average.....:	174.00	571.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.21	.55%
Bare.....:	.00	-.--%
Water.....:	.01	.03%
Herbaceous.....:	.03	.08%
Forest.....:	27.65	71.76%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	10.63	27.59%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.26	.67%
Bare.....:	.02	.05%
Water.....:	.03	.08%
Herbaceous.....:	.31	.80%
Forest.....:	25.66	66.61%
Agri - Crops.....:	.01	.03%
Agri - pasture.....:	12.23	31.75%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.41	1.06%
Bare.....:	.05	.13%
Water.....:	.05	.13%
Herbaceous.....:	1.15	2.99%
Forest.....:	25.03	64.98%
Agri - Crops.....:	.36	.93%
Agri - pasture.....:	11.47	29.78%

**Land Use / Land Cover Change from 1999 to 2004**

<u>Area in Acres</u>	<u>Change TO</u>						
	<u>Urban</u>	<u>Bare</u>	<u>Water</u>	<u>Herbaceous</u>	<u>Forest</u>	<u>Agri-Crop</u>	<u>Agri-Pasture</u>
Urban	-.--	-.--	-.--	-.--	-.--	-.--	-.--
Bare	0.0	-.--	0.00	0.00	.20	0.00	0.00
Water	0.0	0.00	-.--	0.00	2.01	0.00	4.82
FROM Herb	.20	0.00	0.00	-.--	6.22	0.00	8.83
Forest	28.90	1.40	.80	67.44	-.--	0.00	1488.27
Agri-Crops	0.0	0.00	0.00	0.00	.60	-.--	1.40
Agri-Pasture	18.26	5.22	3.21	106.18	254.90	0.00	-.--

**Lower Poke Bayou  
(110100040505)**

**Area Summary**

Area - Square Miles.....:	22.14
Area - Acres.....:	14335.10

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	240.00	787.00
Elevation Minimum.....:	74.00	243.00
Elevation Average.....:	146.00	479.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	1.45	6.52%
Bare.....:	.02	.09%
Water.....:	.04	.18%
Herbaceous.....:	.03	.13%
Forest.....:	17.95	80.75%
Agri - Crops.....:	.04	.18%
Agri - pasture.....:	2.70	12.15%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	2.20	9.90%
Bare.....:	.03	.14%
Water.....:	.02	.09%
Herbaceous.....:	.16	.72%
Forest.....:	16.69	75.11%
Agri - Crops.....:	.06	.27%
Agri - pasture.....:	3.06	13.77%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	2.29	10.31%
Bare.....:	.03	.14%
Water.....:	.04	.18%
Herbaceous.....:	.29	1.31%
Forest.....:	16.78	75.55%
Agri - Crops.....:	.21	.95%
Agri - pasture.....:	2.57	11.57%

**Land Use / Land Cover Change from 1999 to 2004**

<u>Area in Acres</u>	<u>Change TO</u>						
	<u>Urban</u>	<u>Bare</u>	<u>Water</u>	<u>Herbaceous</u>	<u>Forest</u>	<u>Agri-Crop</u>	<u>Agri-Pasture</u>
FROM Urban	-.--	-.--	-.--	-.--	-.--	-.--	-.--
Bare	2.41	-.--	0.00	0.00	0.00	0.00	1.00
Water	2.61	0.00	-.--	0.00	18.67	0.00	1.81
FROM Herb	10.04	0.00	0.00	-.--	4.42	0.00	6.22
Forest	417.28	2.81	0.00	6.62	-.--	0.00	392.39
Agri-Crops	1.40	0.00	0.00	0.00	0.00	-.--	.60
Agri-Pasture	171.01	3.01	0.00	2.81	59.01	14.05	-.--

**Upper Poke Bayou  
(110100040501)**

**Area Summary**

Area - Square Miles.....:	33.42
Area - Acres.....:	21641.50

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	280.00	918.00
Elevation Minimum.....:	141.00	462.00
Elevation Average.....:	198.00	649.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.40	1.22%
Bare.....:	.01	.03%
Water.....:	.03	.09%
Herbaceous.....:	.03	.09%
Forest.....:	16.20	49.30%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	16.19	49.27%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	1.72	5.23%
Bare.....:	.04	.12%
Water.....:	.04	.12%
Herbaceous.....:	.33	1.00%
Forest.....:	13.95	42.45%
Agri - Crops.....:	.02	.06%
Agri - pasture.....:	16.76	51.00%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	1.87	5.69%
Bare.....:	.09	.27%
Water.....:	.06	.18%
Herbaceous.....:	1.03	3.14%
Forest.....:	13.21	40.23%
Agri - Crops.....:	.46	1.40%
Agri - pasture.....:	16.12	49.09%

**Land Use / Land Cover Change from 1999 to 2004**

<u>Area in Acres</u>	<u>Change TO</u>						
	<u>Urban</u>	<u>Bare</u>	<u>Water</u>	<u>Herbaceous</u>	<u>Forest</u>	<u>Agri-Crop</u>	<u>Agri-Pasture</u>
FROM Urban	-.--	-.--	-.--	-.--	-.--	-.--	-.--
Bare	0.0	-.--	0.00	0.00	0.00	0.00	0.00
Water	1.20	0.00	-.--	0.00	3.41	0.00	8.83
FROM Herb	2.81	0.00	0.00	-.--	5.42	0.00	8.43
Forest	401.02	1.40	2.01	88.91	-.--	0.00	1481.85
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	.20
Agri-Pasture	525.26	5.02	3.01	143.11	240.85	0.00	-.--

**Miller Creek  
(110100040504)**

**Area Summary**

Area - Square Miles.....	43.46
Area - Acres.....	28139.64

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	230.00	754.00
Elevation Minimum.....	74.00	243.00
Elevation Average.....	134.00	440.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.80	4.24%
Bare.....	.05	.12%
Water.....	.10	.24%
Herbaceous.....	.08	.19%
Forest.....	22.62	53.29%
Agri - Crops.....	.01	.02%
Agri - pasture.....	17.79	41.91%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	3.66	8.62%
Bare.....	.13	.31%
Water.....	.09	.21%
Herbaceous.....	.44	1.04%
Forest.....	20.44	48.14%
Agri - Crops.....	.01	.02%
Agri - pasture.....	17.69	41.66%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	4.19	9.87%
Bare.....	.14	.33%
Water.....	.14	.33%
Herbaceous.....	1.06	2.50%
Forest.....	20.91	49.23%
Agri - Crops.....	.33	.78%
Agri - pasture.....	15.70	36.97%

**Land Use / Land Cover Change from 1999 to 2004**

<u>Area in Acres</u>	<u>Change TO</u>						
	<u>Urban</u>	<u>Bare</u>	<u>Water</u>	<u>Herbaceous</u>	<u>Forest</u>	<u>Agri-Crop</u>	<u>Agri-Pasture</u>
Urban	-.--	-.--	-.--	-.--	-.--	-.--	-.--
Bare	6.42	-.--	0.00	0.00	0.00	0.00	1.61
Water	6.62	.20	-.--	1.00	18.06	0.00	17.46
FROM Herb	20.27	0.00	0.00	-.--	11.04	0.00	16.46
Forest	862.85	4.01	5.02	12.64	-.--	0.00	1326.50
Agri-Crops	2.21	.80	0.00	0.00	.60	-.--	3.81
Agri-Pasture	655.12	25.49	2.41	13.25	271.36	0.00	-.--