

Watershed Report

White Oak Creek-Arkansas River

1111020109

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)

White Oak Creek-Arkansas River (1111020109)

Area Summary

Area - Square Miles.....	138.70
Area - Acres.....	89807.36

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximum.....	657.00	2155.00
Elevation Minimum.....	99.00	325.00
Elevation Average.....	236.00	774.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	2.67	1.93%
Bare.....	.06	.04%
Water.....	8.36	6.04%
Herbaceous.....	1.11	.80%
Forest.....	83.11	60.06%
Agri - Crops.....	.32	.23%
Agri - pasture.....	42.75	30.89%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	5.83	4.21%
Bare.....	.73	.53%
Water.....	7.97	5.76%
Herbaceous.....	3.05	2.20%
Forest.....	84.91	61.37%
Agri - Crops.....	.54	.39%
Agri - pasture.....	35.32	25.53%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	6.99	4.88%
Bare.....	.30	.21%
Water.....	7.59	5.29%
Herbaceous.....	11.55	8.06%
Forest.....	80.74	56.32%
Agri - Crops.....	.86	.60%

Agri - pasture.....: 30.37 21.19%

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	1.00	-.--	1.61	.80	1.40	.40	.40
Water	19.87	62.02	-.--	50.38	240.85	21.68	43.55
FROM Herb	74.87	10.04	49.78	-.--	371.31	11.64	55.20
Forest	918.05	234.63	243.86	354.86	-.--	28.50	1445.92
Agri-Crops	30.91	6.42	1.20	7.23	44.76	-.--	4.42
Agri-Pasture	897.18	179.03	29.71	1389.92	2947.03	134.48	-.--

Sub-Watershed Summary (12 Digit HUC)

South Fork-White Oak Creek (111102010903)

Area Summary

Area - Square Miles.....	24.29
Area - Acres.....	15725.11

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	599.00	1965.00
Elevation Minimum.....	144.00	472.00
Elevation Average.....	321.00	1053.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.29	1.18%
Bare.....	.00	-.--%
Water.....	.75	3.06%
Herbaceous.....	.06	.25%
Forest.....	14.03	57.31%
Agri - Crops.....	.01	.04%
Agri - pasture.....	9.34	38.15%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.64	2.61%
Bare.....	.16	.65%
Water.....	.68	2.78%
Herbaceous.....	.47	1.92%
Forest.....	14.86	60.68%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	7.68	31.36%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.81	3.31%
Bare.....	.09	.37%
Water.....	.68	2.78%
Herbaceous.....	2.31	9.43%
Forest.....	13.73	56.06%
Agri - Crops.....	.19	.78%
Agri - pasture.....	6.68	27.28%

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	.20	-.--	0.00	0.00	0.00	0.00	0.00
Water	0.00	21.88	-.--	2.41	37.53	0.00	8.63
FROM Herb	7.63	1.20	4.21	-.--	20.07	0.00	1.81
Forest	93.33	35.73	7.02	29.71	-.--	0.00	248.28
Agri-Crops	3.81	2.81	0.00	0.00	.40	-.--	.80
Agri-Pasture	73.86	38.54	3.01	288.22	753.87	0.00	-.--

**Ozark Jola Taylor Lock and Dam-Arkansas River
(111102010906)**

Area Summary

Area - Square Miles.....	18.63
Area - Acres.....	12063.59

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	297.00	974.00
Elevation Minimum.....	107.00	351.00
Elevation Average.....	179.00	587.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.41	2.19%
Bare.....	.01	.05%
Water.....	3.66	19.56%
Herbaceous.....	.18	.96%
Forest.....	11.23	60.02%
Agri - Crops.....	.01	.05%
Agri - pasture.....	3.21	17.16%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.65	3.48%
Bare.....	.06	.32%
Water.....	3.51	18.77%
Herbaceous.....	.48	2.57%
Forest.....	11.13	59.52%
Agri - Crops.....	.04	.21%
Agri - pasture.....	2.83	15.13%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.77	4.11%
Bare.....	.02	.11%
Water.....	3.40	18.15%
Herbaceous.....	1.18	6.30%
Forest.....	10.90	58.20%
Agri - Crops.....	.04	.21%
Agri - pasture.....	2.42	12.92%

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	0.00	0.00	0.00
Water	9.03	12.85	-.--	14.05	75.67	3.81	11.04
FROM Herb	5.62	2.01	4.01	-.--	57.20	.60	17.06
Forest	59.81	22.28	115.21	87.11	-.--	7.02	179.64
Agri-Crops	.40	0.00	.40	1.20	2.21	-.--	0.00
Agri-Pasture	67.04	9.23	15.25	199.10	200.71	3.81	-.--

**North Fork-White Oak Creek
(111102010902)**

Area Summary

Area - Square Miles.....:	22.08
Area - Acres.....:	14295.16

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	657.00	2155.00
Elevation Minimum.....:	142.00	466.00
Elevation Average.....:	354.00	1161.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.12	.55%
Bare.....:	.00	-.--%
Water.....:	.02	.09%
Herbaceous.....:	.03	.14%
Forest.....:	17.36	80.04%
Agri - Crops.....:	.01	.05%
Agri - pasture.....:	4.15	19.13%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.19	.88%
Bare.....:	.08	.37%
Water.....:	.02	.09%
Herbaceous.....:	.32	1.48%
Forest.....:	17.54	80.94%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	3.52	16.24%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.21	.97%
Bare.....:	.02	.09%
Water.....:	.01	.05%
Herbaceous.....:	1.53	7.05%
Forest.....:	16.82	77.55%
Agri - Crops.....:	.07	.32%
Agri - pasture.....:	3.03	13.97%

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>
FROM Urban	-.--	-.--	-.--	-.--	-.--	-.--	-.--
Bare	0.0	-.--	0.00	0.00	0.00	0.00	0.00
Water	0.0	.80	-.--	2.61	5.22	0.00	.20
FROM Herb	0.0	.40	0.00	-.--	10.44	0.00	1.81
Forest	8.63	38.74	3.01	33.92	-.--	0.00	213.56
Agri-Crops	0.0	.60	0.00	0.00	.80	-.--	.40
Agri-Pasture	7.02	22.08	0.00	220.18	447.79	0.00	-.--

**Mulberry River-Arkansas River
(111102010901)**

Area Summary

Area - Square Miles.....	17.52
Area - Acres.....	11345.42

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	273.00	895.00
Elevation Minimum.....	105.00	344.00
Elevation Average.....	161.00	528.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.05	.28%
Bare.....	.01	.06%
Water.....	3.17	18.01%
Herbaceous.....	.50	2.84%
Forest.....	8.39	47.67%
Agri - Crops.....	.23	1.31%
Agri - pasture.....	5.25	29.83%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.07	.40%
Bare.....	.03	.17%
Water.....	3.10	17.61%
Herbaceous.....	.54	3.07%
Forest.....	8.81	50.06%
Agri - Crops.....	.48	2.73%
Agri - pasture.....	4.57	25.97%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.15	.85%
Bare.....	.03	.17%
Water.....	2.90	16.48%
Herbaceous.....	1.26	7.16%
Forest.....	8.72	49.55%
Agri - Crops.....	.42	2.39%
Agri - pasture.....	4.12	23.41%

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	-.--	1.61	.80	1.40	.40	.40
Water	0.0	.80	-.--	23.28	65.83	17.06	3.21
FROM Herb	1.00	.20	38.74	-.--	167.19	10.24	19.47
Forest	5.02	14.85	89.32	83.29	-.--	18.87	161.97
Agri-Crops	0.0	0.00	.60	5.42	34.92	-.--	1.81
Agri-Pasture	6.82	5.02	7.23	177.83	198.30	130.46	-.--

**Gay Creek-Arkansas River
(111102010905)**

Area Summary

Area - Square Miles.....:	20.83
Area - Acres.....:	13487.50

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	323.00	1059.00
Elevation Minimum.....:	107.00	351.00
Elevation Average.....:	195.00	640.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	1.34	6.42%
Bare.....:	.03	.14%
Water.....:	.17	.81%
Herbaceous.....:	.14	.67%
Forest.....:	10.36	49.64%
Agri - Crops.....:	.06	.29%
Agri - pasture.....:	8.77	42.02%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	3.20	15.32%
Bare.....:	.13	.62%
Water.....:	.10	.48%
Herbaceous.....:	.50	2.39%
Forest.....:	10.36	49.59%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	6.60	31.59%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	3.72	17.82%
Bare.....:	.07	.34%
Water.....:	.11	.53%
Herbaceous.....:	2.35	11.25%
Forest.....:	8.68	41.57%
Agri - Crops.....:	.10	.48%
Agri - pasture.....:	5.85	28.02%

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	.80	-.--	0.00	0.00	0.00	0.00	0.00
Water	7.63	16.26	-.--	4.01	15.45	0.00	13.65
FROM Herb	39.94	1.61	1.00	-.--	34.52	0.00	8.43
Forest	558.18	23.28	2.81	29.10	-.--	0.00	247.88
Agri-Crops	24.89	2.81	.20	.60	6.02	-.--	1.40
Agri-Pasture	570.62	25.29	1.40	193.69	554.76	0.00	-.--

**White Oak Creek-Arkansas River
(111102010904)**

Area Summary

Area - Square Miles.....:	35.35
Area - Acres.....:	22890.58

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	340.00	1115.00
Elevation Minimum.....:	99.00	325.00
Elevation Average.....:	197.00	646.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.46	1.31%
Bare.....:	.01	.03%
Water.....:	.59	1.68%
Herbaceous.....:	.20	.57%
Forest.....:	21.74	62.06%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	12.03	34.34%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	1.08	3.09%
Bare.....:	.27	.77%
Water.....:	.56	1.60%
Herbaceous.....:	.74	2.11%
Forest.....:	22.21	63.46%
Agri - Crops.....:	.02	.06%
Agri - pasture.....:	10.12	28.91%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	1.33	3.80%
Bare.....:	.07	.20%
Water.....:	.49	1.40%
Herbaceous.....:	2.92	8.34%
Forest.....:	21.89	62.52%
Agri - Crops.....:	.04	.11%
Agri - pasture.....:	8.27	23.62%

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	3.21	9.43	-.--	4.01	41.15	.80	6.82
FROM Herb	20.67	4.62	1.81	-.--	81.89	.80	6.62
Forest	193.08	99.75	26.49	91.72	-.--	2.61	394.60
Agri-Crops	1.81	.20	0.00	0.00	.40	-.--	0.00
Agri-Pasture	171.81	78.88	2.81	310.90	791.60	.20	-.--