

Watershed Report

Lafferty Creek-White River

1101000404

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)

Lafferty Creek-White River (1101000404)

Area Summary

Area - Square Miles.....	298.94
Area - Acres.....	193568.28

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximum.....	483.00	1584.00
Elevation Minimum.....	76.00	249.00
Elevation Average.....	195.00	640.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.98	.66%
Bare.....	.09	.03%
Water.....	3.62	1.22%
Herbaceous.....	.23	.08%
Forest.....	254.15	85.30%
Agri - Crops.....	.02	.01%
Agri - pasture.....	37.85	12.70%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	4.83	1.62%
Bare.....	.15	.05%
Water.....	3.15	1.06%
Herbaceous.....	1.35	.45%
Forest.....	242.60	81.41%
Agri - Crops.....	.05	.02%
Agri - pasture.....	45.86	15.39%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	5.47	1.82%
Bare.....	.23	.08%
Water.....	3.62	1.20%
Herbaceous.....	3.76	1.25%
Forest.....	240.70	80.02%
Agri - Crops.....	1.16	.39%

Agri - pasture.....: 42.99 14.29%

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	5.42	-.--	0.00	0.00	.80	0.00	17.06
Water	11.64	7.23	-.--	0.00	171.01	0.00	120.83
FROM Herb	22.68	.40	1.20	-.--	35.33	0.00	80.69
Forest	1250.83	12.04	146.72	124.64	-.--	0.00	6130.10
Agri-Crops	2.21	1.40	1.61	0.00	4.01	-.--	3.61
Agri-Pasture	520.64	11.64	34.72	195.09	963.41	0.00	-.--

Sub-Watershed Summary (12 Digit HUC)

East Twin Creek-White River (110100040404)

Area Summary

Area - Square Miles.....	36.62
Area - Acres.....	23714.35

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	336.00	1102.00
Elevation Minimum.....	78.00	256.00
Elevation Average.....	183.00	600.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.38	1.03%
Bare.....	.00	-.--%
Water.....	1.29	3.51%
Herbaceous.....	.07	.19%
Forest.....	32.09	87.27%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	2.94	8.00%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.80	2.17%
Bare.....	.01	.03%
Water.....	1.11	3.02%
Herbaceous.....	.13	.35%
Forest.....	30.89	83.96%
Agri - Crops.....	.01	.03%
Agri - pasture.....	3.84	10.44%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.85	2.31%
Bare.....	.02	.05%
Water.....	1.29	3.51%
Herbaceous.....	.28	.76%
Forest.....	30.69	83.46%
Agri - Crops.....	.09	.24%
Agri - pasture.....	3.55	9.65%

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	.60	-.--	0.00	0.00	.60	0.00	1.20
Water	.80	.20	-.--	0.00	63.22	0.00	26.69
FROM Herb	7.23	0.00	1.20	-.--	7.43	0.00	27.10
Forest	174.62	1.00	44.36	11.64	-.--	0.00	604.14
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	64.63	.60	3.01	4.82	72.06	0.00	-.--

**West Rocky Bayou-Rocky Bayou
(110100040405)**

Area Summary

Area - Square Miles.....:	35.53
Area - Acres.....:	23004.45

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	309.00	1014.00
Elevation Minimum.....:	85.00	279.00
Elevation Average.....:	181.00	594.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.18	.51%
Bare.....:	.05	.14%
Water.....:	.01	.03%
Herbaceous.....:	.02	.06%
Forest.....:	29.03	82.17%
Agri - Crops.....:	.01	.03%
Agri - pasture.....:	6.03	17.07%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.65	1.84%
Bare.....:	.07	.20%
Water.....:	.02	.06%
Herbaceous.....:	.26	.74%
Forest.....:	26.57	75.18%
Agri - Crops.....:	.01	.03%
Agri - pasture.....:	7.76	21.96%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.85	2.41%
Bare.....:	.09	.25%
Water.....:	.03	.08%
Herbaceous.....:	.83	2.35%
Forest.....:	25.91	73.36%
Agri - Crops.....:	.41	1.16%
Agri - pasture.....:	7.20	20.39%

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	3.41	-.--	0.00	0.00	0.00	0.00	9.23
Water	1.81	0.00	-.--	0.00	2.81	0.00	1.00
FROM Herb	2.21	0.00	0.00	-.--	4.62	0.00	5.82
Forest	245.07	8.03	1.20	28.10	-.--	0.00	1213.90
Agri-Crops	0.0	1.40	0.00	0.00	.20	-.--	.40
Agri-Pasture	69.04	3.41	2.01	43.15	183.45	0.00	-.--

**Hidden Creek-White River
(110100040406)**

Area Summary

Area - Square Miles.....:	26.50
Area - Acres.....:	17160.10

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	322.00	1056.00
Elevation Minimum.....:	78.00	256.00
Elevation Average.....:	177.00	581.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.10	.38%
Bare.....:	.01	.04%
Water.....:	.51	1.95%
Herbaceous.....:	.01	.04%
Forest.....:	24.23	92.80%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	1.25	4.79%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.27	1.03%
Bare.....:	.01	.04%
Water.....:	.42	1.61%
Herbaceous.....:	.07	.27%
Forest.....:	23.69	90.70%
Agri - Crops.....:	.01	.04%
Agri - pasture.....:	1.65	6.32%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.33	1.26%
Bare.....:	.01	.04%
Water.....:	.46	1.76%
Herbaceous.....:	.21	.80%
Forest.....:	23.50	89.97%
Agri - Crops.....:	.04	.15%
Agri - pasture.....:	1.57	6.01%

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	.20	-.--	0.00	0.00	0.00	0.00	1.40
Water	6.22	2.61	-.--	0.00	16.46	0.00	23.68
FROM Herb	.60	0.00	0.00	-.--	2.41	0.00	3.41
Forest	76.67	.40	27.70	8.43	-.--	0.00	239.05
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	22.88	1.00	5.82	6.62	54.19	0.00	-.--

**Cagens Creek-White River
(110100040409)**

Area Summary

Area - Square Miles.....	48.60
Area - Acres.....	31469.15

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	483.00	1584.00
Elevation Minimum.....	76.00	249.00
Elevation Average.....	192.00	630.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.20	.41%
Bare.....	.00	-.--%
Water.....	.96	1.97%
Herbaceous.....	.04	.08%
Forest.....	41.33	84.97%
Agri - Crops.....	.01	.02%
Agri - pasture.....	6.10	12.54%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.39	.80%
Bare.....	.02	.04%
Water.....	.84	1.73%
Herbaceous.....	.22	.45%
Forest.....	39.30	80.76%
Agri - Crops.....	.01	.02%
Agri - pasture.....	7.88	16.19%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.45	.92%
Bare.....	.03	.06%
Water.....	.98	2.01%
Herbaceous.....	.39	.80%
Forest.....	39.20	80.58%
Agri - Crops.....	.18	.37%
Agri - pasture.....	7.42	15.25%

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	1.00
Water	1.61	4.42	-.--	0.00	33.72	0.00	36.73
FROM Herb	2.41	.40	0.00	-.--	6.02	0.00	15.05
Forest	69.25	.60	37.33	6.02	-.--	0.00	1127.79
Agri-Crops	0.0	0.00	1.61	0.00	3.21	-.--	2.21
Agri-Pasture	8.23	2.01	15.05	7.63	113.20	0.00	-.--

**Prong Cove-Rocky Bayou
(110100040403)**

Area Summary

Area - Square Miles.....	42.98
Area - Acres.....	27830.41

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	481.00	1578.00
Elevation Minimum.....	86.00	282.00
Elevation Average.....	233.00	764.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.57	1.34%
Bare.....	.02	.05%
Water.....	.02	.05%
Herbaceous.....	.04	.09%
Forest.....	35.50	83.18%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	6.53	15.30%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.38	3.23%
Bare.....	.02	.05%
Water.....	.02	.05%
Herbaceous.....	.15	.35%
Forest.....	33.67	78.85%
Agri - Crops.....	.01	.02%
Agri - pasture.....	7.45	17.45%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.44	3.37%
Bare.....	.03	.07%
Water.....	.05	.12%
Herbaceous.....	.34	.80%
Forest.....	33.78	79.11%
Agri - Crops.....	.13	.30%
Agri - pasture.....	6.93	16.23%

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	.80
Water	0.0	0.00	-.--	0.00	3.81	0.00	10.04
FROM Herb	6.62	0.00	0.00	-.--	5.22	0.00	14.45
Forest	348.63	.40	1.20	7.02	-.--	0.00	818.50
Agri-Crops	2.21	0.00	0.00	0.00	0.00	-.--	.20
Agri-Pasture	162.78	2.01	0.00	16.26	84.50	0.00	-.--

**Livingston Creek
(110100040401)**

Area Summary

Area - Square Miles.....:	21.68
Area - Acres.....:	14040.19

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	360.00	1181.00
Elevation Minimum.....:	89.00	292.00
Elevation Average.....:	241.00	790.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.10	.47%
Bare.....:	.00	-.--%
Water.....:	.00	-.--%
Herbaceous.....:	.00	-.--%
Forest.....:	21.04	98.83%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	.15	.70%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.13	.61%
Bare.....:	.00	-.--%
Water.....:	.01	.05%
Herbaceous.....:	.01	.05%
Forest.....:	20.94	98.36%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	.20	.94%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.11	.52%
Bare.....:	.00	-.--%
Water.....:	.00	-.--%
Herbaceous.....:	.04	.19%
Forest.....:	20.97	98.54%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	.16	.75%

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	0.00	-.--	0.00	0.00	0.00	0.00
FROM Herb	0.0	0.00	0.00	-.--	1.00	0.00	1.40
Forest	.80	0.00	3.21	.40	-.--	0.00	26.29
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	0.0	0.00	0.00	1.00	8.83	0.00	-.--

**Lafferty Creek
(110100040408)**

Area Summary

Area - Square Miles.....	29.50
Area - Acres.....	19100.74

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	297.00	974.00
Elevation Minimum.....	79.00	259.00
Elevation Average.....	177.00	581.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.17	.57%
Bare.....	.01	.03%
Water.....	.01	.03%
Herbaceous.....	.02	.07%
Forest.....	22.78	76.70%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	6.71	22.59%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.57	1.92%
Bare.....	.01	.03%
Water.....	.01	.03%
Herbaceous.....	.24	.81%
Forest.....	21.42	72.15%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	7.44	25.06%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.65	2.19%
Bare.....	.02	.07%
Water.....	.02	.07%
Herbaceous.....	.81	2.73%
Forest.....	20.90	70.39%
Agri - Crops.....	.15	.51%
Agri - pasture.....	7.14	24.05%

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	.40	-.--	0.00	0.00	0.00	0.00	2.61
Water	0.0	0.00	-.--	0.00	2.81	0.00	3.01
FROM Herb	2.01	0.00	0.00	-.--	1.61	0.00	6.02
Forest	181.64	.60	.40	40.74	-.--	0.00	876.90
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	103.17	1.20	.40	93.53	251.29	0.00	-.--

**Wideman Creek-White River
(110100040402)**

Area Summary

Area - Square Miles.....:	27.02
Area - Acres.....:	17495.70

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	345.00	1132.00
Elevation Minimum.....:	86.00	282.00
Elevation Average.....:	178.00	584.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.10	.37%
Bare.....:	.00	-.--%
Water.....:	.79	2.96%
Herbaceous.....:	.01	.04%
Forest.....:	24.10	90.33%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	1.68	6.30%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.14	.52%
Bare.....:	.00	-.--%
Water.....:	.68	2.55%
Herbaceous.....:	.05	.19%
Forest.....:	23.66	88.71%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	2.14	8.02%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.20	.75%
Bare.....:	.00	-.--%
Water.....:	.74	2.77%
Herbaceous.....:	.26	.97%
Forest.....:	23.47	88.00%
Agri - Crops.....:	.03	.11%
Agri - pasture.....:	1.97	7.39%

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	.20	0.00	.80
Water	0.0	0.00	-.--	0.00	45.36	0.00	15.86
FROM Herb	0.0	0.00	0.00	-.--	2.21	0.00	2.01
Forest	22.88	.40	28.10	3.21	-.--	0.00	289.02
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	2.41	0.00	3.81	4.01	44.96	0.00	-.--

**West Lafferty Creek
(110100040407)**

Area Summary

Area - Square Miles.....	30.51
Area - Acres.....	19753.19

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	300.00	984.00
Elevation Minimum.....	82.00	269.00
Elevation Average.....	193.00	633.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.18	.59%
Bare.....	.00	-.--%
Water.....	.03	.10%
Herbaceous.....	.02	.07%
Forest.....	24.05	78.24%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	6.46	21.01%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.50	1.63%
Bare.....	.01	.03%
Water.....	.04	.13%
Herbaceous.....	.22	.72%
Forest.....	22.46	73.09%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	7.50	24.41%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.59	1.92%
Bare.....	.03	.10%
Water.....	.05	.16%
Herbaceous.....	.60	1.95%
Forest.....	22.28	72.50%
Agri - Crops.....	.13	.42%
Agri - pasture.....	7.05	22.94%

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	2.81	0.00	3.81
FROM Herb	1.61	0.00	0.00	-.--	4.82	0.00	5.42
Forest	131.26	.60	3.21	19.07	-.--	0.00	934.51
Agri-Crops	0.0	0.00	0.00	0.00	.60	-.--	.80
Agri-Pasture	87.51	1.40	4.62	18.06	150.93	0.00	-.--