

Watershed Report

Little Vache Grasse Creek-Arkansas River

1111020101

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)

Little Vache Grasse Creek-Arkansas River (1111020101)

Area Summary

Area - Square Miles.....	153.25
Area - Acres.....	99229.35

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximum.....	283.00	928.00
Elevation Minimum.....	104.00	341.00
Elevation Average.....	148.00	485.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	8.89	5.80%
Bare.....	.43	.28%
Water.....	10.89	7.10%
Herbaceous.....	5.91	3.85%
Forest.....	50.44	32.88%
Agri - Crops.....	11.74	7.65%
Agri - pasture.....	65.09	42.43%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	20.60	13.43%
Bare.....	.64	.42%
Water.....	9.04	5.89%
Herbaceous.....	9.40	6.13%
Forest.....	53.16	34.66%
Agri - Crops.....	16.03	10.45%
Agri - pasture.....	44.52	29.02%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	26.94	16.45%
Bare.....	1.25	.76%
Water.....	7.99	4.88%
Herbaceous.....	20.77	12.68%
Forest.....	44.06	26.91%
Agri - Crops.....	18.21	11.12%

Agri - pasture.....: 34.21 20.89%

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	127.05	-.--	3.01	2.61	13.45	27.90	14.85
Water	80.28	21.28	-.--	296.25	684.22	521.25	77.27
FROM Herb	318.13	7.02	87.91	-.--	1524.40	264.14	231.82
Forest	3956.81	100.56	384.96	1235.98	-.--	257.51	1351.38
Agri-Crops	444.77	24.89	137.09	165.18	872.49	-.--	64.23
Agri-Pasture	3010.66	97.75	249.88	4245.43	3131.69	3602.35	-.--

Sub-Watershed Summary (12 Digit HUC)

Upper Rock Creek (111102010101)

Area Summary

Area - Square Miles.....	30.30
Area - Acres.....	19618.34

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	283.00	928.00
Elevation Minimum.....	118.00	387.00
Elevation Average.....	152.00	499.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	5.05	16.65%
Bare.....	.21	.69%
Water.....	.57	1.88%
Herbaceous.....	.53	1.75%
Forest.....	7.37	24.30%
Agri - Crops.....	2.04	6.73%
Agri - pasture.....	14.56	48.01%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	8.51	28.06%
Bare.....	.29	.96%
Water.....	.57	1.88%
Herbaceous.....	1.30	4.29%
Forest.....	7.45	24.56%
Agri - Crops.....	3.20	10.55%
Agri - pasture.....	9.01	29.71%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	10.42	34.37%
Bare.....	.41	1.35%
Water.....	.49	1.62%
Herbaceous.....	3.71	12.24%
Forest.....	5.96	19.66%
Agri - Crops.....	3.09	10.19%
Agri - pasture.....	6.24	20.58%

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	44.36	-.--	2.01	0.00	10.24	12.85	3.41
Water	16.06	3.21	-.--	13.45	44.96	11.84	5.62
FROM Herb	72.66	1.20	4.21	-.--	57.20	34.52	23.08
Forest	818.70	26.29	67.64	126.05	-.--	75.27	334.99
Agri-Crops	151.74	19.47	4.01	29.50	98.15	-.--	8.63
Agri-Pasture	1209.68	47.17	34.52	466.85	724.57	1029.44	-.--

**Upper Little Vache Grasse Creek
(111102010102)**

Area Summary

Area - Square Miles.....:	17.16
Area - Acres.....:	11109.30

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	209.00	686.00
Elevation Minimum.....:	113.00	371.00
Elevation Average.....:	144.00	472.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	1.79	10.52%
Bare.....:	.17	1.00%
Water.....:	.20	1.18%
Herbaceous.....:	.70	4.11%
Forest.....:	8.83	51.88%
Agri - Crops.....:	.08	.47%
Agri - pasture.....:	5.25	30.85%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	6.43	37.78%
Bare.....:	.05	.29%
Water.....:	.18	1.06%
Herbaceous.....:	1.48	8.70%
Forest.....:	5.98	35.14%
Agri - Crops.....:	.12	.71%
Agri - pasture.....:	2.78	16.33%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	8.41	49.41%
Bare.....:	.04	.24%
Water.....:	.17	1.00%
Herbaceous.....:	2.02	11.87%
Forest.....:	4.24	24.91%
Agri - Crops.....:	.18	1.06%
Agri - pasture.....:	1.96	11.52%

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	78.48	-.--	0.00	.80	0.00	5.62	7.43
Water	6.42	.40	-.--	.40	9.03	0.00	2.21
FROM Herb	187.46	1.00	2.81	-.--	57.20	1.20	21.88
Forest	2179.32	7.83	13.45	367.50	-.--	7.63	115.41
Agri-Crops	35.33	.80	0.00	.20	.40	-.--	2.01
Agri-Pasture	769.93	8.03	8.43	904.00	140.30	36.13	-.--

**Mill Creek-Arkansas River
(111102010106)**

Area Summary

Area - Square Miles.....:	17.78
Area - Acres.....:	11512.89

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	276.00	905.00
Elevation Minimum.....:	108.00	354.00
Elevation Average.....:	206.00	676.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.23	1.27%
Bare.....:	.00	-.--%
Water.....:	.05	.28%
Herbaceous.....:	.68	3.76%
Forest.....:	10.48	58.00%
Agri - Crops.....:	.02	.11%
Agri - pasture.....:	6.61	36.58%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.29	1.60%
Bare.....:	.03	.17%
Water.....:	.03	.17%
Herbaceous.....:	.89	4.92%
Forest.....:	11.27	62.33%
Agri - Crops.....:	.07	.39%
Agri - pasture.....:	5.50	30.42%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.38	2.10%
Bare.....:	.03	.17%
Water.....:	.01	.06%
Herbaceous.....:	1.97	10.90%
Forest.....:	10.53	58.24%
Agri - Crops.....:	.10	.55%
Agri - pasture.....:	5.06	27.99%

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	.20	-.--	5.22	14.65	2.81	1.20
FROM Herb	0.0	1.00	.20	-.--	299.06	1.61	29.50
Forest	.60	13.05	1.40	154.95	-.--	5.62	142.71
Agri-Crops	0.0	0.00	0.00	.60	11.64	-.--	.20
Agri-Pasture	6.62	2.61	2.81	455.61	475.28	23.68	-.--

**Courthouse Slough-Arkansas River
(111102010107)**

Area Summary

Area - Square Miles.....	24.36
Area - Acres.....	15775.24

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	244.00	800.00
Elevation Minimum.....	104.00	341.00
Elevation Average.....	120.00	394.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.12	.49%
Bare.....	.01	.04%
Water.....	6.08	24.96%
Herbaceous.....	1.47	6.03%
Forest.....	4.87	19.99%
Agri - Crops.....	4.60	18.88%
Agri - pasture.....	7.21	29.60%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.67	2.75%
Bare.....	.07	.29%
Water.....	5.11	20.98%
Herbaceous.....	1.71	7.02%
Forest.....	7.09	29.11%
Agri - Crops.....	5.35	21.96%
Agri - pasture.....	4.36	17.90%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.11	4.56%
Bare.....	.22	.90%
Water.....	4.75	19.50%
Herbaceous.....	3.86	15.85%
Forest.....	5.91	24.26%
Agri - Crops.....	5.89	24.18%
Agri - pasture.....	2.62	10.76%

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	-.--	.20	1.81	.80	3.21	.20
Water	3.61	10.84	-.--	154.75	311.50	260.52	42.75
FROM Herb	.60	1.20	52.18	-.--	340.41	135.48	33.52
Forest	131.06	9.03	174.22	117.82	-.--	73.46	94.94
Agri-Crops	15.25	1.61	49.78	77.47	412.06	-.--	21.88
Agri-Pasture	192.88	6.62	82.09	396.40	496.56	733.80	-.--

**Onion Creek-Arkansas River
(111102010105)**

Area Summary

Area - Square Miles.....:	23.73
Area - Acres.....:	15364.95

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	254.00	833.00
Elevation Minimum.....:	112.00	367.00
Elevation Average.....:	162.00	531.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.27	1.14%
Bare.....:	.00	-.--%
Water.....:	.07	.30%
Herbaceous.....:	.87	3.67%
Forest.....:	9.59	40.50%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	12.88	54.39%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.34	1.44%
Bare.....:	.05	.21%
Water.....:	.06	.25%
Herbaceous.....:	1.86	7.85%
Forest.....:	10.54	44.51%
Agri - Crops.....:	.17	.72%
Agri - pasture.....:	10.66	45.02%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.52	2.20%
Bare.....:	.04	.17%
Water.....:	.03	.13%
Herbaceous.....:	4.36	18.40%
Forest.....:	9.00	37.99%
Agri - Crops.....:	.14	.59%
Agri - pasture.....:	9.60	40.52%

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	0.0	-.--	0.00	0.00	.60	1.40	1.00
Water	0.0	2.01	-.--	7.02	18.26	.80	4.82
FROM Herb	0.0	1.00	.20	-.--	267.15	2.21	94.74
Forest	.20	19.47	6.82	279.79	-.--	11.44	374.12
Agri-Crops	0.0	0.00	0.00	.40	.20	-.--	2.01
Agri-Pasture	8.03	4.82	15.05	1229.95	657.73	82.29	-.--

**Little Vache Grasse Creek Outlet-Arkansas River
(111102010104)**

Area Summary

Area - Square Miles.....	19.12
Area - Acres.....	12382.44

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	180.00	590.00
Elevation Minimum.....	107.00	351.00
Elevation Average.....	124.00	407.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.03	5.38%
Bare.....	.02	.10%
Water.....	3.78	19.74%
Herbaceous.....	1.16	6.06%
Forest.....	6.57	34.31%
Agri - Crops.....	.87	4.54%
Agri - pasture.....	5.72	29.87%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	2.44	12.75%
Bare.....	.05	.26%
Water.....	2.84	14.84%
Herbaceous.....	1.13	5.90%
Forest.....	7.14	37.30%
Agri - Crops.....	2.35	12.28%
Agri - pasture.....	3.19	16.67%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	3.30	17.22%
Bare.....	.12	.63%
Water.....	2.42	12.63%
Herbaceous.....	1.76	9.19%
Forest.....	5.85	30.53%
Agri - Crops.....	3.26	17.01%
Agri - pasture.....	2.45	12.79%

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	1.61	-.--	0.00	0.00	0.00	.20	.80
Water	46.16	3.21	-.--	109.59	268.15	239.25	14.05
FROM Herb	44.56	1.40	21.88	-.--	458.62	32.52	9.43
Forest	593.10	6.62	105.17	143.31	-.--	63.83	73.26
Agri-Crops	50.58	.20	34.12	22.68	101.76	-.--	2.01
Agri-Pasture	240.65	5.62	47.97	481.91	254.50	702.89	-.--

**Mays Branch
(111102010103)**

Area Summary

Area - Square Miles.....	20.80
Area - Acres.....	13466.19

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	168.00	551.00
Elevation Minimum.....	112.00	367.00
Elevation Average.....	132.00	433.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.40	1.92%
Bare.....	.02	.10%
Water.....	.14	.67%
Herbaceous.....	.50	2.41%
Forest.....	2.73	13.14%
Agri - Crops.....	4.13	19.87%
Agri - pasture.....	12.86	61.89%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.92	9.24%
Bare.....	.10	.48%
Water.....	.25	1.20%
Herbaceous.....	1.03	4.96%
Forest.....	3.69	17.76%
Agri - Crops.....	4.77	22.95%
Agri - pasture.....	9.02	43.41%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	2.80	13.46%
Bare.....	.39	1.88%
Water.....	.12	.58%
Herbaceous.....	3.09	14.86%
Forest.....	2.57	12.36%
Agri - Crops.....	5.55	26.68%
Agri - pasture.....	6.28	30.19%

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	2.61	-.--	.80	0.00	1.61	4.62	2.01
Water	8.03	1.40	-.--	5.82	17.66	6.02	6.62
FROM Herb	12.85	.20	6.42	-.--	44.76	56.60	19.67
Forest	233.83	18.26	16.26	46.56	-.--	20.27	215.96
Agri-Crops	191.88	2.81	49.17	34.32	248.28	-.--	27.50
Agri-Pasture	582.86	22.88	59.01	310.70	382.76	994.12	-.--