

# Watershed Report

## Little Sugar Creek

### 1107020802

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 Sugar Creek (1107020802)*

#### **Area Summary**

Area - Square Miles.....	138.76
Area - Acres.....	89843.34

#### **Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximum.....	531.00	1742.00
Elevation Minimum.....	292.00	958.00
Elevation Average.....	383.00	1256.00

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

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	13.76	9.94%
Bare.....	.22	.16%
Water.....	1.64	1.18%
Herbaceous.....	.23	.17%
Forest.....	79.33	57.30%
Agri - Crops.....	.02	.01%
Agri - pasture.....	43.24	31.23%

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

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	24.94	18.01%
Bare.....	.96	.69%
Water.....	1.48	1.07%
Herbaceous.....	1.38	1.00%
Forest.....	74.56	53.85%
Agri - Crops.....	.01	.01%
Agri - pasture.....	35.12	25.37%

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

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	25.75	17.96%
Bare.....	.72	.50%
Water.....	1.69	1.18%
Herbaceous.....	6.46	4.51%
Forest.....	73.59	51.34%
Agri - Crops.....	.01	.01%

Agri - pasture.....: 30.25 21.10%

**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	3.41	-.--	0.00	.40	0.00	0.00	.40
Water	28.30	35.73	-.--	17.46	49.78	0.00	14.05
FROM Herb	52.99	.40	1.61	-.--	57.60	0.00	20.07
Forest	3666.78	292.03	103.17	49.58	-.--	0.00	1679.75
Agri-Crops	10.84	1.20	0.00	0.00	3.01	-.--	3.61
Agri-Pasture	3282.42	295.85	6.02	321.54	1872.43	0.00	-.--

# Sub-Watershed Summary (12 Digit HUC)

## *Browning Creek-Little Sugar Creek (110702080205)*

### Area Summary

Area - Square Miles.....	22.39
Area - Acres.....	14494.53

### Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	429.00	1407.00
Elevation Minimum.....	292.00	958.00
Elevation Average.....	364.00	1194.00

### Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	3.16	14.12%
Bare.....	.02	.09%
Water.....	.76	3.40%
Herbaceous.....	.05	.22%
Forest.....	14.97	66.89%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	3.42	15.28%

### Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	4.68	20.90%
Bare.....	.08	.36%
Water.....	.70	3.13%
Herbaceous.....	.20	.89%
Forest.....	13.84	61.81%
Agri - Crops.....	.01	.04%
Agri - pasture.....	2.88	12.86%

### Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	4.50	20.10%
Bare.....	.04	.18%
Water.....	.79	3.53%
Herbaceous.....	.52	2.32%
Forest.....	13.94	62.26%
Agri - Crops.....	.01	.04%
Agri - pasture.....	2.59	11.57%

### 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	10.84	11.04	-.--	12.24	9.83	0.00	2.41
FROM Herb	9.83	.20	.80	-.--	17.06	0.00	3.81
Forest	715.93	34.92	48.17	6.42	-.--	0.00	201.11
Agri-Crops	1.81	.80	0.00	0.00	.20	-.--	0.00
Agri-Pasture	201.91	17.86	2.01	10.24	179.44	0.00	-.--



**McKisic Creek-Little Sugar Creek  
(110702080203)**

**Area Summary**

Area - Square Miles.....:	40.70
Area - Acres.....:	26354.93

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	428.00	1404.00
Elevation Minimum.....:	308.00	1010.00
Elevation Average.....:	376.00	1233.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	4.31	10.75%
Bare.....:	.13	.32%
Water.....:	.06	.15%
Herbaceous.....:	.07	.17%
Forest.....:	19.85	49.50%
Agri - Crops.....:	.01	.02%
Agri - pasture.....:	15.67	39.08%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	7.68	19.16%
Bare.....:	.38	.95%
Water.....:	.03	.07%
Herbaceous.....:	.29	.72%
Forest.....:	18.96	47.29%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	12.75	31.80%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	8.50	21.20%
Bare.....:	.28	.70%
Water.....:	.06	.15%
Herbaceous.....:	1.52	3.79%
Forest.....:	18.80	46.88%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	10.94	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
FROM Urban	-.--	-.--	-.--	-.--	-.--	-.--	-.--
Bare	2.41	-.--	0.00	0.00	0.00	0.00	0.00
Water	6.82	2.41	-.--	1.40	9.63	0.00	5.22
FROM Herb	21.28	0.00	0.00	-.--	16.06	0.00	1.40
Forest	934.31	63.83	3.21	3.81	-.--	0.00	486.12
Agri-Crops	8.03	.20	0.00	0.00	.20	-.--	1.00
Agri-Pasture	1124.18	155.35	.60	4.62	525.06	0.00	-.--

**Tanyard Creek-Little Sugar Creek  
(110702080204)**

**Area Summary**

Area - Square Miles.....	29.29
Area - Acres.....	18962.52

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	428.00	1404.00
Elevation Minimum.....	298.00	977.00
Elevation Average.....	369.00	1210.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	3.79	12.82%
Bare.....	.02	.07%
Water.....	.80	2.71%
Herbaceous.....	.05	.17%
Forest.....	21.49	72.70%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	3.41	11.54%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	5.21	17.63%
Bare.....	.10	.34%
Water.....	.74	2.50%
Herbaceous.....	.18	.61%
Forest.....	20.36	68.88%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	2.97	10.05%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	4.92	16.64%
Bare.....	.06	.20%
Water.....	.82	2.77%
Herbaceous.....	.53	1.79%
Forest.....	20.59	69.63%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	2.65	8.96%

**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	.20	-.--	0.00	0.00	0.00	0.00	0.00
Water	6.62	20.87	-.--	0.00	26.69	0.00	3.21
FROM Herb	6.22	0.00	.40	-.--	18.67	0.00	5.42
Forest	703.49	34.52	51.78	3.61	-.--	0.00	234.03
Agri-Crops	.40	0.00	0.00	0.00	0.00	-.--	.20
Agri-Pasture	138.09	18.87	3.41	1.61	211.95	0.00	-.--

**Brush Creek-Little Sugar Creek  
(110702080202)**

**Area Summary**

Area - Square Miles.....: 24.41  
 Area - Acres.....: 15806.22

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	416.00	1364.00
Elevation Minimum.....:	329.00	1079.00
Elevation Average.....:	388.00	1273.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	2.00	8.12%
Bare.....:	.05	.20%
Water.....:	.02	.08%
Herbaceous.....:	.04	.16%
Forest.....:	10.60	43.05%
Agri - Crops.....:	.01	.04%
Agri - pasture.....:	11.90	48.33%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	5.41	21.97%
Bare.....:	.23	.93%
Water.....:	.01	.04%
Herbaceous.....:	.35	1.42%
Forest.....:	9.37	38.04%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	9.26	37.60%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	5.85	23.75%
Bare.....:	.29	1.18%
Water.....:	.02	.08%
Herbaceous.....:	1.79	7.27%
Forest.....:	8.88	36.05%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	7.80	31.67%

**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	.20	-.--	0.00	.40	0.00	0.00	0.00
Water	3.61	.60	-.--	3.61	2.61	0.00	2.61
FROM Herb	10.44	0.00	.40	-.--	2.41	0.00	8.43
Forest	894.57	63.42	0.00	15.05	-.--	0.00	346.63
Agri-Crops	.60	.20	0.00	0.00	2.61	-.--	2.41
Agri-Pasture	1304.62	72.06	0.00	28.90	299.26	0.00	-.--

**Headwaters Little Sugar Creek  
(110702080201)**

**Area Summary**

Area - Square Miles.....:	21.52
Area - Acres.....:	13930.95

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	531.00	1742.00
Elevation Minimum.....:	359.00	1178.00
Elevation Average.....:	430.00	1410.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.45	2.11%
Bare.....:	.00	-.--%
Water.....:	.00	-.--%
Herbaceous.....:	.02	.09%
Forest.....:	12.02	56.35%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	8.84	41.44%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	1.90	8.90%
Bare.....:	.17	.80%
Water.....:	.00	-.--%
Herbaceous.....:	.36	1.69%
Forest.....:	11.65	54.59%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	7.26	34.02%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	1.92	9.00%
Bare.....:	.05	.23%
Water.....:	.00	-.--%
Herbaceous.....:	2.10	9.85%
Forest.....:	10.99	51.52%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	6.27	29.40%

**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	.40	-.--	0.00	0.00	0.00	0.00	.40
Water	.40	.80	-.--	.20	1.00	0.00	.60
FROM Herb	5.22	.20	0.00	-.--	3.41	0.00	1.00
Forest	416.88	95.34	0.00	20.67	-.--	0.00	411.86
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	513.62	31.71	0.00	276.18	656.72	0.00	-.--