

# Watershed Report

## Lake Greeson-Little Missouri River

### 0804010301

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)

### *Lake Greeson-Little Missouri River (0804010301)*

#### **Area Summary**

Area - Square Miles.....	251.58
Area - Acres.....	162896.13

#### **Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	698.00	2289.00
Elevation Minimum.....	102.00	335.00
Elevation Average.....	272.00	892.00

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

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.35	.54%
Bare.....	.03	.01%
Water.....	10.72	4.25%
Herbaceous.....	1.36	.54%
Forest.....	225.34	89.34%
Agri - Crops.....	.03	.01%
Agri - pasture.....	13.39	5.31%

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

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	3.12	1.24%
Bare.....	.21	.08%
Water.....	9.83	3.90%
Herbaceous.....	7.64	3.03%
Forest.....	216.68	85.92%
Agri - Crops.....	.36	.14%
Agri - pasture.....	14.35	5.69%

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

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	4.83	1.94%
Bare.....	.20	.08%
Water.....	9.36	3.76%
Herbaceous.....	19.82	7.97%
Forest.....	199.33	80.13%
Agri - Crops.....	.86	.35%

Agri - pasture.....: 17.78 7.15%

**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	2.81	11.44	2.01
Water	34.92	1.61	-.--	7.23	496.36	1.61	8.03
FROM Herb	7.83	3.81	6.02	-.--	281.60	1.40	129.06
Forest	542.32	112.80	251.09	3917.67	-.--	50.78	1324.49
Agri-Crops	1.20	.20	.20	9.03	1.00	-.--	.80
Agri-Pasture	129.66	25.29	18.06	655.12	1114.95	47.57	-.--

# Sub-Watershed Summary (12 Digit HUC)

## Little Missouri River-Upper Lake Greason (080401030105)

### Area Summary

Area - Square Miles.....	26.71
Area - Acres.....	17296.49

### Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	314.00	1030.00
Elevation Minimum.....	166.00	544.00
Elevation Average.....	217.00	712.00

### Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.23	.84%
Bare.....	.00	-.--%
Water.....	1.25	4.57%
Herbaceous.....	.19	.69%
Forest.....	24.46	89.37%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	1.24	4.53%

### Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.65	2.37%
Bare.....	.03	.11%
Water.....	1.16	4.24%
Herbaceous.....	1.24	4.53%
Forest.....	22.97	83.92%
Agri - Crops.....	.02	.07%
Agri - pasture.....	1.30	4.75%

### Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.93	3.40%
Bare.....	.02	.07%
Water.....	1.10	4.02%
Herbaceous.....	3.01	11.01%
Forest.....	20.40	74.59%
Agri - Crops.....	.07	.26%
Agri - pasture.....	1.82	6.65%

### 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	0.00	0.00	.80
Water	6.22	0.00	-.--	4.01	45.36	.40	.40
FROM Herb	1.00	0.00	0.00	-.--	40.94	0.00	6.62
Forest	167.99	15.45	33.32	667.96	-.--	4.42	192.08
Agri-Crops	0.0	0.00	0.00	0.00	.20	-.--	0.00
Agri-Pasture	53.19	3.81	2.41	125.85	104.17	3.81	-.--

**Middle Lake Greeson  
(080401030106)**

**Area Summary**

Area - Square Miles.....	41.13
Area - Acres.....	26633.13

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	393.00	1289.00
Elevation Minimum.....	165.00	541.00
Elevation Average.....	206.00	676.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.28	.68%
Bare.....	.01	.02%
Water.....	3.75	9.11%
Herbaceous.....	.08	.19%
Forest.....	33.53	81.42%
Agri - Crops.....	.01	.02%
Agri - pasture.....	3.52	8.55%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.89	2.16%
Bare.....	.06	.15%
Water.....	3.43	8.33%
Herbaceous.....	1.64	3.98%
Forest.....	31.86	77.39%
Agri - Crops.....	.06	.15%
Agri - pasture.....	3.23	7.85%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.47	3.57%
Bare.....	.04	.10%
Water.....	3.25	7.89%
Herbaceous.....	5.08	12.34%
Forest.....	27.61	67.06%
Agri - Crops.....	.08	.19%
Agri - pasture.....	3.64	8.84%

**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	1.20	-.--	0.00	0.00	1.00	.80	0.00
Water	10.24	.20	-.--	0.00	154.15	.40	2.61
FROM Herb	3.81	0.00	2.61	-.--	18.87	0.00	3.01
Forest	257.31	26.90	90.72	869.28	-.--	10.64	226.40
Agri-Crops	1.20	.20	.20	0.00	.20	-.--	.80
Agri-Pasture	64.43	9.63	3.01	119.42	294.04	10.84	-.--

**Headwaters Little Missouri River  
(080401030101)**

**Area Summary**

Area - Square Miles.....: 47.53  
 Area - Acres.....: 30778.65

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	698.00	2289.00
Elevation Minimum.....:	255.00	836.00
Elevation Average.....:	429.00	1407.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.03	.06%
Bare.....:	.00	-.--%
Water.....:	.00	-.--%
Herbaceous.....:	.56	1.16%
Forest.....:	47.54	98.71%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	.03	.06%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.10	.21%
Bare.....:	.01	.02%
Water.....:	.01	.02%
Herbaceous.....:	.82	1.70%
Forest.....:	46.34	96.20%
Agri - Crops.....:	.04	.08%
Agri - pasture.....:	.85	1.76%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.21	.44%
Bare.....:	.00	-.--%
Water.....:	.00	-.--%
Herbaceous.....:	.88	1.83%
Forest.....:	45.35	94.18%
Agri - Crops.....:	.23	.48%
Agri - pasture.....:	1.48	3.07%

**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	0.00	0.00	0.00
Water	0.0	0.00	-.--	0.00	.20	0.00	0.00
FROM Herb	0.0	2.61	0.00	-.--	114.41	1.20	77.67
Forest	.40	15.86	0.00	284.21	-.--	.80	164.78
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	0.0	0.00	0.00	3.41	6.62	0.00	-.--

**Blocker Creek-Little Missouri River  
(080401030103)**

**Area Summary**

Area - Square Miles.....	34.86
Area - Acres.....	22568.65

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	609.00	1998.00
Elevation Minimum.....	196.00	643.00
Elevation Average.....	294.00	964.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.09	.26%
Bare.....	.00	-.--%
Water.....	.01	.03%
Herbaceous.....	.12	.35%
Forest.....	32.38	95.01%
Agri - Crops.....	.01	.03%
Agri - pasture.....	1.47	4.31%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.14	.41%
Bare.....	.01	.03%
Water.....	.03	.09%
Herbaceous.....	.59	1.73%
Forest.....	31.56	92.66%
Agri - Crops.....	.03	.09%
Agri - pasture.....	1.70	4.99%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.25	.73%
Bare.....	.02	.06%
Water.....	.02	.06%
Herbaceous.....	1.32	3.87%
Forest.....	30.28	88.88%
Agri - Crops.....	.06	.18%
Agri - pasture.....	2.12	6.22%

**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	0.0	0.00	-.--	0.00	3.41	0.00	.20
FROM Herb	0.0	.60	0.00	-.--	20.47	0.00	17.26
Forest	2.41	8.03	3.01	245.87	-.--	6.62	193.89
Agri-Crops	0.0	0.00	0.00	4.01	0.00	-.--	0.00
Agri-Pasture	.20	2.41	1.20	81.49	115.01	5.42	-.--

**Self Creek-Lake Greeson  
(080401030104)**

**Area Summary**

Area - Square Miles.....	42.97
Area - Acres.....	27822.11

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	510.00	1673.00
Elevation Minimum.....	165.00	541.00
Elevation Average.....	243.00	797.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.26	.61%
Bare.....	.00	-.--%
Water.....	.90	2.10%
Herbaceous.....	.13	.30%
Forest.....	37.90	88.41%
Agri - Crops.....	.01	.02%
Agri - pasture.....	3.67	8.56%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.59	1.38%
Bare.....	.04	.09%
Water.....	.77	1.80%
Herbaceous.....	1.53	3.57%
Forest.....	36.01	84.00%
Agri - Crops.....	.08	.19%
Agri - pasture.....	3.85	8.98%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.94	2.19%
Bare.....	.04	.09%
Water.....	.66	1.54%
Herbaceous.....	4.96	11.57%
Forest.....	31.45	73.36%
Agri - Crops.....	.20	.47%
Agri - pasture.....	4.62	10.78%

**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>
FROM Urban	-.--	-.--	-.--	-.--	-.--	-.--	-.--
Bare	.20	-.--	0.00	0.00	0.00	0.00	0.00
Water	18.26	.40	-.--	2.41	47.37	.20	2.21
FROM Herb	2.61	.20	1.40	-.--	32.31	.20	9.43
Forest	91.52	22.28	23.68	770.93	-.--	10.44	302.47
Agri-Crops	0.0	0.00	0.00	5.02	.60	-.--	0.00
Agri-Pasture	8.63	4.01	1.00	116.01	252.90	16.06	-.--

**Blocker Creek  
(080401030102)**

**Area Summary**

Area - Square Miles.....	21.05
Area - Acres.....	13627.86

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	574.00	1883.00
Elevation Minimum.....	198.00	649.00
Elevation Average.....	300.00	984.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.16	.76%
Bare.....	.00	-.--%
Water.....	.00	-.--%
Herbaceous.....	.06	.29%
Forest.....	18.74	89.24%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	2.04	9.71%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.23	1.10%
Bare.....	.04	.19%
Water.....	.00	-.--%
Herbaceous.....	.30	1.43%
Forest.....	18.19	86.66%
Agri - Crops.....	.07	.33%
Agri - pasture.....	2.16	10.29%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.30	1.43%
Bare.....	.07	.33%
Water.....	.00	-.--%
Herbaceous.....	.65	3.09%
Forest.....	17.19	81.82%
Agri - Crops.....	.19	.90%
Agri - pasture.....	2.61	12.42%

**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	0.00	0.00	0.00
Water	0.0	0.00	-.--	0.00	.20	0.00	0.00
FROM Herb	.40	0.00	.20	-.--	14.45	0.00	10.84
Forest	.80	14.05	0.00	261.33	-.--	2.61	152.94
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	0.0	2.41	2.41	56.40	143.31	6.22	-.--



**Lower Lake Greesson-Little Missouri River  
(080401030107)**

**Area Summary**

Area - Square Miles.....:	37.33
Area - Acres.....:	24169.24

**Elevation Summary**

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	311.00	1020.00
Elevation Minimum.....:	102.00	335.00
Elevation Average.....:	178.00	584.00

**Land Use / Land Cover for 1999**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.30	.80%
Bare.....:	.02	.05%
Water.....:	4.81	12.81%
Herbaceous.....:	.22	.59%
Forest.....:	30.79	81.98%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	1.42	3.78%

**Land Use / Land Cover for 2004**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.52	1.38%
Bare.....:	.02	.05%
Water.....:	4.43	11.79%
Herbaceous.....:	1.52	4.05%
Forest.....:	29.75	79.21%
Agri - Crops.....:	.06	.16%
Agri - pasture.....:	1.26	3.35%

**Land Use / Land Cover for 2006**

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.73	1.94%
Bare.....:	.01	.03%
Water.....:	4.33	11.53%
Herbaceous.....:	3.92	10.44%
Forest.....:	27.05	72.02%
Agri - Crops.....:	.03	.08%
Agri - pasture.....:	1.49	3.97%

**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	1.40	-.--	0.00	.40	1.81	10.64	1.20
Water	.20	1.00	-.--	.80	245.67	.60	2.61
FROM Herb	0.0	.40	1.81	-.--	40.14	0.00	4.21
Forest	21.88	10.24	100.36	818.10	-.--	15.25	91.93
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	3.21	3.01	8.03	152.54	198.90	5.22	-.--