

Watershed Report

Willow Slough-White River

1101001303

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)

Willow Slough-White River (1101001303)

Area Summary

Area - Square Miles.....	74.04
Area - Acres.....	47940.43

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximum.....	77.00	253.00
Elevation Minimum.....	56.00	184.00
Elevation Average.....	66.00	216.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.06	1.45%
Bare.....	.02	.03%
Water.....	4.96	6.76%
Herbaceous.....	.50	.68%
Forest.....	9.51	12.97%
Agri - Crops.....	47.39	64.61%
Agri - pasture.....	9.91	13.51%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	2.22	3.03%
Bare.....	.04	.05%
Water.....	3.91	5.33%
Herbaceous.....	.54	.74%
Forest.....	9.75	13.30%
Agri - Crops.....	47.45	64.71%
Agri - pasture.....	9.42	12.85%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	2.56	3.28%
Bare.....	.10	.13%
Water.....	4.11	5.27%
Herbaceous.....	1.19	1.52%
Forest.....	10.09	12.93%
Agri - Crops.....	50.59	64.81%

Agri - pasture.....:

4.71

6.03%

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	.60	-.--	.40	0.00	.40	3.01	.40
Water	14.45	.80	-.--	.20	177.03	347.23	11.84
FROM Herb	11.04	0.00	2.61	-.--	40.74	148.73	25.29
Forest	218.98	.80	140.30	7.43	-.--	1381.29	85.50
Agri-Crops	464.24	8.23	48.17	27.90	753.47	-.--	163.18
Agri-Pasture	56.80	1.00	.40	6.82	15.25	364.29	-.--

Sub-Watershed Summary (12 Digit HUC)

Willow Slough (110100130302)

Area Summary

Area - Square Miles.....	26.14
Area - Acres.....	16925.95

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	73.00	239.00
Elevation Minimum.....	59.00	194.00
Elevation Average.....	67.00	220.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.19	.72%
Bare.....	.00	-.--%
Water.....	.61	2.31%
Herbaceous.....	.22	.83%
Forest.....	2.06	7.81%
Agri - Crops.....	20.61	78.19%
Agri - pasture.....	2.67	10.13%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.24	.91%
Bare.....	.01	.04%
Water.....	.41	1.56%
Herbaceous.....	.22	.83%
Forest.....	1.98	7.51%
Agri - Crops.....	20.85	79.10%
Agri - pasture.....	2.65	10.05%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.30	1.14%
Bare.....	.03	.11%
Water.....	.41	1.56%
Herbaceous.....	.33	1.25%
Forest.....	2.05	7.78%
Agri - Crops.....	22.37	84.86%
Agri - pasture.....	.87	3.30%

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	.40	0.00
Water	0.0	0.00	-.--	0.00	29.30	88.11	0.00
FROM Herb	.80	0.00	.20	-.--	7.63	77.27	5.82
Forest	4.01	.20	10.84	2.81	-.--	521.25	11.44
Agri-Crops	5.22	5.02	7.02	3.41	236.84	-.--	22.68
Agri-Pasture	3.01	0.00	0.00	0.00	.80	19.47	-.--

**Bergern Lake-White River
(110100130301)**

Area Summary

Area - Square Miles.....	26.76
Area - Acres.....	17325.68

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	77.00	253.00
Elevation Minimum.....	59.00	194.00
Elevation Average.....	68.00	223.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.84	3.21%
Bare.....	.02	.08%
Water.....	1.80	6.88%
Herbaceous.....	.22	.84%
Forest.....	3.95	15.11%
Agri - Crops.....	13.64	52.16%
Agri - pasture.....	5.68	21.72%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.92	7.34%
Bare.....	.03	.11%
Water.....	1.40	5.35%
Herbaceous.....	.26	.99%
Forest.....	4.11	15.72%
Agri - Crops.....	13.29	50.82%
Agri - pasture.....	5.14	19.66%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	2.07	7.92%
Bare.....	.06	.23%
Water.....	1.56	5.97%
Herbaceous.....	.58	2.22%
Forest.....	4.33	16.56%
Agri - Crops.....	14.42	55.16%
Agri - pasture.....	3.12	11.94%

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	-.--	.40	0.00	0.00	2.21	0.00
Water	14.05	.40	-.--	0.00	66.03	124.04	5.02
FROM Herb	10.04	0.00	1.61	-.--	21.28	56.40	16.06
Forest	211.95	.60	46.77	4.21	-.--	446.18	55.20
Agri-Crops	440.36	3.21	14.05	15.66	306.08	-.--	107.38
Agri-Pasture	53.79	1.00	.40	6.82	14.05	335.79	-.--

**Horsehoe Lake
(110100130303)**

Area Summary

Area - Square Miles.....:	21.14
Area - Acres.....:	13688.80

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	69.00	226.00
Elevation Minimum.....:	56.00	184.00
Elevation Average.....:	63.00	207.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.03	.14%
Bare.....:	.00	-.--%
Water.....:	2.55	12.24%
Herbaceous.....:	.06	.29%
Forest.....:	3.50	16.79%
Agri - Crops.....:	13.14	63.05%
Agri - pasture.....:	1.56	7.49%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.06	.29%
Bare.....:	.00	-.--%
Water.....:	2.10	10.09%
Herbaceous.....:	.06	.29%
Forest.....:	3.66	17.58%
Agri - Crops.....:	13.31	63.93%
Agri - pasture.....:	1.63	7.83%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.19	.91%
Bare.....:	.01	.05%
Water.....:	2.14	10.26%
Herbaceous.....:	.28	1.34%
Forest.....:	3.71	17.79%
Agri - Crops.....:	13.80	66.19%
Agri - pasture.....:	.72	3.45%

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	.40	.40	.40
Water	.40	.40	-.--	.20	81.69	135.08	6.82
FROM Herb	.20	0.00	.80	-.--	11.84	15.05	3.41
Forest	3.01	0.00	82.69	.40	-.--	413.87	18.87
Agri-Crops	18.67	0.00	27.10	8.83	210.55	-.--	33.12
Agri-Pasture	0.0	0.00	0.00	0.00	.40	9.03	-.--