

Watershed Report

Upper Frog Bayou

1111020104

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)

Upper Frog Bayou (1111020104)

Area Summary

Area - Square Miles.....	127.93
Area - Acres.....	82838.29

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximum.....	736.00	2414.00
Elevation Minimum.....	223.00	731.00
Elevation Average.....	470.00	1542.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.63	.49%
Bare.....	.02	.02%
Water.....	1.54	1.21%
Herbaceous.....	.11	.09%
Forest.....	115.35	90.46%
Agri - Crops.....	.16	.13%
Agri - pasture.....	9.70	7.61%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	2.78	2.18%
Bare.....	.47	.37%
Water.....	1.60	1.25%
Herbaceous.....	.79	.62%
Forest.....	113.59	89.08%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	8.29	6.50%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	3.51	2.72%
Bare.....	.13	.10%
Water.....	1.16	.90%
Herbaceous.....	3.59	2.78%
Forest.....	112.31	87.04%
Agri - Crops.....	.04	.03%

Agri - pasture.....:

6.79

5.26%

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	2.61	-.--	4.01	2.81	.40	0.00	0.00
Water	7.43	17.66	-.--	16.86	62.02	0.00	27.30
FROM Herb	25.49	2.81	0.00	-.--	25.49	0.00	5.02
Forest	755.68	354.86	78.08	223.59	-.--	0.00	531.68
Agri-Crops	93.33	2.01	.40	0.00	3.21	-.--	1.40
Agri-Pasture	322.74	59.01	3.21	380.15	803.24	0.00	-.--

Sub-Watershed Summary (12 Digit HUC)

Headwaters Frog Bayou (111102010402)

Area Summary

Area - Square Miles.....	33.65
Area - Acres.....	21789.46

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	736.00	2414.00
Elevation Minimum.....	283.00	928.00
Elevation Average.....	545.00	1788.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.00	-.--%
Bare.....	.00	-.--%
Water.....	.01	.03%
Herbaceous.....	.01	.03%
Forest.....	31.18	91.60%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	2.84	8.34%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.00	-.--%
Bare.....	.07	.21%
Water.....	.08	.24%
Herbaceous.....	.12	.35%
Forest.....	31.23	91.75%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	2.54	7.46%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.02	.06%
Bare.....	.01	.03%
Water.....	.01	.03%
Herbaceous.....	.73	2.14%
Forest.....	31.21	91.69%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	2.06	6.05%

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	.60	-.--	.40	2.61	0.00	2.21
FROM Herb	0.0	.60	0.00	-.--	4.42	0.00	.80
Forest	0.0	58.41	16.46	10.84	-.--	0.00	87.91
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	0.0	12.64	0.00	42.35	203.72	0.00	-.--

**Lake Fort Smith-Frog Bayou
(111102010404)**

Area Summary

Area - Square Miles.....:	29.72
Area - Acres.....:	19244.24

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	687.00	2253.00
Elevation Minimum.....:	223.00	731.00
Elevation Average.....:	402.00	1319.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.16	.55%
Bare.....:	.02	.07%
Water.....:	1.47	5.02%
Herbaceous.....:	.01	.03%
Forest.....:	26.03	88.93%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	1.58	5.40%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.74	2.53%
Bare.....:	.21	.72%
Water.....:	1.44	4.92%
Herbaceous.....:	.19	.65%
Forest.....:	25.23	86.17%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	1.47	5.02%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	1.08	3.69%
Bare.....:	.10	.34%
Water.....:	1.13	3.86%
Herbaceous.....:	.91	3.11%
Forest.....:	24.96	85.22%
Agri - Crops.....:	.02	.07%
Agri - pasture.....:	1.09	3.72%

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	2.61	-.--	4.01	2.61	.40	0.00	0.00
Water	3.61	12.24	-.--	12.85	46.56	0.00	21.28
FROM Herb	2.21	0.00	0.00	-.--	5.02	0.00	.40
Forest	230.62	163.78	41.55	100.76	-.--	0.00	147.52
Agri-Crops	0.0	0.00	.40	0.00	0.00	-.--	0.00
Agri-Pasture	35.33	15.45	0.00	51.38	140.10	0.00	-.--

**Clear Creek-Frog Bayou
(111102010403)**

Area Summary

Area - Square Miles.....	43.75
Area - Acres.....	28330.50

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	634.00	2080.00
Elevation Minimum.....	225.00	738.00
Elevation Average.....	439.00	1440.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.40	.92%
Bare.....	.00	-.--%
Water.....	.04	.09%
Herbaceous.....	.08	.18%
Forest.....	39.22	90.54%
Agri - Crops.....	.16	.37%
Agri - pasture.....	3.42	7.89%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.84	4.25%
Bare.....	.16	.37%
Water.....	.03	.07%
Herbaceous.....	.41	.95%
Forest.....	38.29	88.39%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	2.59	5.98%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	2.14	4.94%
Bare.....	.02	.05%
Water.....	.01	.02%
Herbaceous.....	1.52	3.51%
Forest.....	37.35	86.24%
Agri - Crops.....	.01	.02%
Agri - pasture.....	2.26	5.22%

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>
FROM Urban	-.--	-.--	-.--	-.--	-.--	-.--	-.--
Bare	0.0	-.--	0.00	0.00	0.00	0.00	0.00
Water	3.81	2.61	-.--	3.01	9.63	0.00	2.01
FROM Herb	21.68	2.01	0.00	-.--	13.85	0.00	2.41
Forest	461.63	101.76	1.61	107.38	-.--	0.00	223.39
Agri-Crops	93.33	2.01	0.00	0.00	3.21	-.--	1.40
Agri-Pasture	279.79	23.48	2.01	266.54	307.89	0.00	-.--

**Jones Fork-Frog Bayou
(111102010401)**

Area Summary

Area - Square Miles.....: 20.81
 Area - Acres.....: 13474.09

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	709.00	2326.00
Elevation Minimum.....:	283.00	928.00
Elevation Average.....:	506.00	1660.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.07	.34%
Bare.....:	.00	-.--%
Water.....:	.02	.10%
Herbaceous.....:	.01	.05%
Forest.....:	18.92	90.61%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	1.86	8.91%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.20	.96%
Bare.....:	.03	.14%
Water.....:	.05	.24%
Herbaceous.....:	.07	.34%
Forest.....:	18.84	90.23%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	1.69	8.09%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.27	1.29%
Bare.....:	.00	-.--%
Water.....:	.01	.05%
Herbaceous.....:	.43	2.06%
Forest.....:	18.79	89.95%
Agri - Crops.....:	.01	.05%
Agri - pasture.....:	1.38	6.61%

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	.20	0.00	0.00	0.00
Water	0.0	2.21	-.--	.60	3.21	0.00	1.81
FROM Herb	1.61	.20	0.00	-.--	2.21	0.00	1.40
Forest	63.42	30.91	18.47	4.62	-.--	0.00	72.86
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	7.63	7.43	1.20	19.87	151.54	0.00	-.--