

Watershed Report

Dutch Creek

1111020403

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)

Dutch Creek (1111020403)

Area Summary

Area - Square Miles.....	143.30
Area - Acres.....	92789.44

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximum.....	692.00	2270.00
Elevation Minimum.....	97.00	318.00
Elevation Average.....	236.00	774.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.90	.63%
Bare.....	.01	.01%
Water.....	.11	.08%
Herbaceous.....	.25	.17%
Forest.....	119.02	83.21%
Agri - Crops.....	.01	.01%
Agri - pasture.....	22.74	15.90%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.52	1.06%
Bare.....	.10	.07%
Water.....	.10	.07%
Herbaceous.....	1.67	1.17%
Forest.....	118.35	82.74%
Agri - Crops.....	.08	.06%
Agri - pasture.....	21.22	14.84%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	1.86	1.29%
Bare.....	.13	.09%
Water.....	.08	.06%
Herbaceous.....	3.65	2.53%
Forest.....	116.41	80.75%
Agri - Crops.....	.81	.56%

Agri - pasture.....: 20.09 13.94%

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	3.41	.20	.20
Water	1.20	.20	-.--	9.43	16.46	.20	11.84
FROM Herb	12.85	.40	0.00	-.--	50.58	0.00	35.93
Forest	112.00	18.87	13.45	501.58	-.--	5.82	1093.07
Agri-Crops	.20	.40	0.00	2.21	2.01	-.--	.20
Agri-Pasture	74.06	18.67	4.82	618.19	1201.05	36.33	-.--

Sub-Watershed Summary (12 Digit HUC)

Dutch Creek Outlet (111102040304)

Area Summary

Area - Square Miles.....	22.90
Area - Acres.....	14829.69

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	436.00	1430.00
Elevation Minimum.....	97.00	318.00
Elevation Average.....	162.00	531.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.31	1.34%
Bare.....	.00	-.--%
Water.....	.05	.22%
Herbaceous.....	.10	.43%
Forest.....	15.78	67.96%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	6.98	30.06%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.62	2.67%
Bare.....	.04	.17%
Water.....	.05	.22%
Herbaceous.....	.27	1.16%
Forest.....	15.69	67.57%
Agri - Crops.....	.02	.09%
Agri - pasture.....	6.53	28.12%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.70	3.01%
Bare.....	.05	.22%
Water.....	.02	.09%
Herbaceous.....	.60	2.58%
Forest.....	15.66	67.44%
Agri - Crops.....	.24	1.03%
Agri - pasture.....	5.95	25.62%

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	1.20	0.00	-.--	4.82	7.83	.20	5.42
FROM Herb	12.64	.20	0.00	-.--	21.07	0.00	14.05
Forest	105.77	5.82	9.03	91.12	-.--	2.41	277.98
Agri-Crops	.20	0.00	0.00	.60	.20	-.--	.20
Agri-Pasture	63.63	7.43	1.81	225.60	298.26	8.23	-.--

**Freedom Creek-Dutch Creek
(111102040302)**

Area Summary

Area - Square Miles.....	45.63
Area - Acres.....	29545.58

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	692.00	2270.00
Elevation Minimum.....	120.00	394.00
Elevation Average.....	266.00	872.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.14	.31%
Bare.....	.00	-.--%
Water.....	.03	.07%
Herbaceous.....	.02	.04%
Forest.....	40.31	88.77%
Agri - Crops.....	.01	.02%
Agri - pasture.....	4.90	10.79%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.23	.51%
Bare.....	.01	.02%
Water.....	.02	.04%
Herbaceous.....	.40	.88%
Forest.....	40.35	88.86%
Agri - Crops.....	.01	.02%
Agri - pasture.....	4.39	9.67%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.27	.59%
Bare.....	.01	.02%
Water.....	.02	.04%
Herbaceous.....	.93	2.05%
Forest.....	39.57	87.16%
Agri - Crops.....	.33	.73%
Agri - pasture.....	4.27	9.41%

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	-.--	1.61	5.42	0.00	2.41
FROM Herb	0.0	0.00	0.00	-.--	8.23	0.00	3.61
Forest	.80	1.61	1.00	55.40	-.--	.40	215.36
Agri-Crops	0.0	0.00	0.00	1.61	1.40	-.--	0.00
Agri-Pasture	1.20	2.21	.80	90.72	309.70	4.82	-.--

**Headwaters Dutch Creek
(111102040301)**

Area Summary

Area - Square Miles.....	35.93
Area - Acres.....	23264.99

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....	483.00	1584.00
Elevation Minimum.....	156.00	512.00
Elevation Average.....	287.00	941.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.30	.84%
Bare.....	.00	-.--%
Water.....	.00	-.--%
Herbaceous.....	.04	.11%
Forest.....	31.31	87.53%
Agri - Crops.....	.00	-.--%
Agri - pasture.....	4.12	11.52%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.45	1.26%
Bare.....	.02	.06%
Water.....	.00	-.--%
Herbaceous.....	.60	1.68%
Forest.....	30.66	85.71%
Agri - Crops.....	.02	.06%
Agri - pasture.....	4.02	11.24%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....	.56	1.57%
Bare.....	.03	.08%
Water.....	.00	-.--%
Herbaceous.....	1.27	3.55%
Forest.....	30.00	83.85%
Agri - Crops.....	.08	.22%
Agri - pasture.....	3.84	10.73%

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	.80	0.00	1.00
FROM Herb	0.0	0.00	0.00	-.--	8.63	0.00	12.85
Forest	2.21	6.42	0.00	226.00	-.--	2.81	278.79
Agri-Crops	0.0	.40	0.00	0.00	.40	-.--	0.00
Agri-Pasture	1.40	4.62	0.00	137.89	222.59	10.04	-.--

**Mitchell Branch-Dutch Creek
(111102040303)**

Area Summary

Area - Square Miles.....:	38.84
Area - Acres.....:	25149.18

Elevation Summary

	<u>Meters</u>	<u>Feet</u>
Elevation Maximun.....:	579.00	1899.00
Elevation Minimum.....:	103.00	338.00
Elevation Average.....:	199.00	653.00

Land Use / Land Cover for 1999

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.15	.39%
Bare.....:	.01	.03%
Water.....:	.03	.08%
Herbaceous.....:	.09	.23%
Forest.....:	31.62	81.83%
Agri - Crops.....:	.00	-.--%
Agri - pasture.....:	6.74	17.44%

Land Use / Land Cover for 2004

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.22	.57%
Bare.....:	.03	.08%
Water.....:	.03	.08%
Herbaceous.....:	.40	1.04%
Forest.....:	31.65	81.91%
Agri - Crops.....:	.03	.08%
Agri - pasture.....:	6.28	16.25%

Land Use / Land Cover for 2006

	<u>Sq. Miles</u>	<u>% of Total</u>
Urban.....:	.33	.85%
Bare.....:	.04	.10%
Water.....:	.04	.10%
Herbaceous.....:	.85	2.20%
Forest.....:	31.18	80.71%
Agri - Crops.....:	.16	.41%
Agri - pasture.....:	6.03	15.61%

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	3.41	.20	.20
Water	0.0	.20	-.--	3.01	2.41	0.00	3.01
FROM Herb	.20	.20	0.00	-.--	12.64	0.00	5.42
Forest	3.21	5.02	3.41	129.06	-.--	.20	320.94
Agri-Crops	0.0	0.00	0.00	0.00	0.00	-.--	0.00
Agri-Pasture	7.83	4.42	2.21	163.98	370.51	13.25	-.--