

U.S. Forest Service Stream Survey Results- Upper Sandy Subwatershed*

*not all existing surveys included

Sandy River		Stream Name		From RM	To RM	Reach	Miles	%Pool Habitat	%Riffle Habitat	%Side-Channel Habitat	%Special Habitat (Waterfalls, wetlands, etc.)	Survey Length (ft)	GIS Channel Length (ft)	Valley Length (ft)	Valley Width (ft)	Sloosity	Gradient	Measured Discharge (cfs)	Stream Order	Rogson Channel Type	Average Bankfull Width (ft)	Average Flood Prone Width (ft)	Average Bankfull Maximum Depth (ft)	Average Bankfull Depth (ft)	Average Entrenchment Ratio	Average Bankfull Width:Depth Ratio	Pool Count	# Pools/ Mile	# Primary Pools/Mile	Average Residual Pool Depth	# Large Wood Pieces/ Mile	# Medium Wood Pieces/ Mile	# Small Wood Pieces/ Mile
1991	8/19/1991	Sandy River	68,948	74,251	1	3.99	0.0%	0.0%	0.0%	0.0%	21,900.00	24,299.24	21,121.03	1.19	7.00	7.00	113.96	4	A	21.00	27.00	2.10	1.33	1.68	12	31.68	1.33	3.00	0.00	0.00	0.00	0.00	0.00
	8/19/1991	Sandy River	81,754	81,754	2	0.00	0.0%	0.0%	0.0%	0.0%	12,900.00	24,299.24	21,121.03	1.16	9.00	113.96	4	A	21.00	27.00	2.10	1.33	1.68	12	31.68	1.33	3.00	0.00	0.00	0.00	0.00	0.00	
	8/19/1991	Sandy River	81,754	82,881	3	0.75	0.4%	97.5%	2.2%	0.0%	39,623.00	39,623.00	31,681.15	1.13	14.00	113.96	4	A	21.00	27.00	2.10	1.33	1.68	12	31.68	1.33	3.00	0.00	0.00	0.00	0.00	0.00	0.00
	8/19/1991	Sandy River	82,881	84,329	4	0.84	0.5%	93.0%	0.0%	0.0%	10,244.00	24,299.24	11,880.87	1.11	4.00	113.96	4	A	21.00	27.00	2.10	1.33	1.68	12	31.68	1.33	3.00	0.00	0.00	0.00	0.00	0.00	0.00
1996	8/4/1996	Sandy River	68,948	77,892	1	5.74	10.1%	62.7%	7.2%	0.0%	30,326.70	35,997.26	34,321.67	100.00	3.00	178.58	4	B	53.71	78.11	2.77	1.95	1.43	29.47	63	10.88	9.58	1.59	0.17	0.70	0.87	0.00	0.00
	8/4/1996	Sandy River	77,892	82,881	2	2.84	6.8%	90.0%	3.2%	0.0%	16,536.00	16,938.91	14,784.72	900.02	1.00	3.00	4.00	F	31.08	43.00	2.16	1.48	1.38	21.39	46	15.88	6.46	1.50	0.00	1.02	0.88	0.00	0.00
	8/4/1996	Sandy River	82,881	84,329	3	0.38	10.0%	99.0%	0.0%	0.0%	1,989.00	4,750.86	1,643.09	100.00	1.00	3.00	4.00	B	22.00	27.00	2.10	1.33	1.68	15.26	12	31.68	1.33	3.00	0.00	0.00	0.00	0.00	
8/4/1996	Sandy River	84,329	85,617	4	1.24	8.3%	93.0%	1.7%	0.0%	6,979.80	4,225.53	5,898.28	150.01	1.05	10.00	10.00	4	A	25.00	39.00	2.00	1.40	3.98	22.73	17	13.80	6.00	1.95	0.00	0.00	0.00	0.00	

North Boulder Creek		Stream Name		From RM	To RM	Reach	Miles	%Pool Habitat	%Riffle Habitat	%Side-Channel Habitat	%Special Habitat (Waterfalls, wetlands, etc.)	Survey Length (ft)	GIS Channel Length (ft)	Valley Length (ft)	Valley Width (ft)	Sloosity	Gradient	Measured Discharge (cfs)	Stream Order	Rogson Channel Type	Average Bankfull Width (ft)	Average Flood Prone Width (ft)	Average Bankfull Maximum Depth (ft)	Average Bankfull Depth (ft)	Average Entrenchment Ratio	Average Bankfull Width:Depth Ratio	Pool Count	# Pools/ Mile	# Primary Pools/Mile	Average Residual Pool Depth	# Large Wood Pieces/ Mile	# Medium Wood Pieces/ Mile	# Small Wood Pieces/ Mile
1996	8/21/1996	North Boulder Creek	0	0,965	1	0.69	21.8%	78.0%	0.0%	0.2%	3,668.40						27.50				1.10	1.10	25.17	53	76.81	15.94	1.81	0.00	1.45	0.00	0.00	0.00	
	8/21/1996	North Boulder Creek	0,965	2,574	2	1.02	21.8%	81.0%	26.6%	0.6%	5,360.60						17.75				1.07	1.07	16.75	86	84.31	38.24	2.29	1.36	0.00	0.00	0.00		
	8/21/1996	North Boulder Creek	2,574	3,701	3	0.78	16.4%	78.0%	7.6%	0.0%	4,119.80						17.50				0.98	0.98	16.63	44	56.41	12.82	1.85	5.13	14.10	0.00	0.00	0.00	
	8/21/1996	North Boulder Creek	3,701	4,828	4	0.64	9.2%	81.0%	5.1%	0.0%	3,392.60						21.00				0.90	0.90	22.33	17	26.56	3.13	1.81	7.81	28.13	0.00	0.00		
1992	8/21/1996	North Boulder Creek	4,828	7,081	5	1.45	14.5%	62.1%	3.1%	0.0%	7,680.60						10.50				0.87	0.87	12.91	67	48.21	1.38	1.23	1.38	20.00	0.00	0.00	0.00	
	8/21/1996	North Boulder Creek	7,081	7,402	6	0.24	7.0%	83.1%	9.9%	0.4%	1,289.10						5.00				0.80	0.80	8.33	8	33.33	0.81	0.00	8.33	0.00	0.00	0.00		

Bear Creek		Stream Name		From RM	To RM	Reach	Miles	%Pool Habitat	%Riffle Habitat	%Side-Channel Habitat	%Special Habitat (Waterfalls, wetlands, etc.)	Survey Length (ft)	GIS Channel Length (ft)	Valley Length (ft)	Valley Width (ft)	Sloosity	Gradient	Measured Discharge (cfs)	Stream Order	Rogson Channel Type	Average Bankfull Width (ft)	Average Flood Prone Width (ft)	Average Bankfull Maximum Depth (ft)	Average Bankfull Depth (ft)	Average Entrenchment Ratio	Average Bankfull Width:Depth Ratio	Pool Count	# Pools/ Mile	# Primary Pools/Mile	Average Residual Pool Depth	# Large Wood Pieces/ Mile	# Medium Wood Pieces/ Mile	# Small Wood Pieces/ Mile
1993	8/2/1993	Bear Creek	0	853	2	0.32	23.1%	0.0%	0.0%	0.0%	1,629.40	1,581.44	1,584.08	1.00	2.00	13.00	0.70	1			12.00		0.90		13.33	28	81.27	2.82	0.00	25.00	50.00	0.00	
	8/2/1993	Bear Creek	0	1,282	2	0.56	37.0%	62.1%	0.0%	0.0%	2,834.00	3,168.45	3,168.15	1.00	2.00	20.00	1			12.00		0.90		13.33	28	81.27	2.82	0.00	25.00	50.00	0.00		
	8/2/2004	Bear Creek	0	3,907.1	1	3.99	58.1%	13.3%	0.0%	0.0%	10,938.00	18,026.66	16,938.08	1.12	3.39	11.2	CA	13.08			55.55	1.10	0.87	4.23	15.34	18	46.15	1.01	0.00	37.00	0.00	0.00	
8/2/2004	Bear Creek	0	6,692	1,780.3	2	0.70	52.3%	47.7%	0.0%	0.0%	39,706.00	35,701.71	32,226.16	1.11	1.48	11.88				16.90	0.90	0.89	1.42	17.63	44	62.86	1.01	0.00	4.29	68.57	0.00		

Clear Creek		Stream Name		From RM	To RM	Reach	Miles	%Pool Habitat	%Riffle Habitat	%Side-Channel Habitat	%Special Habitat (Waterfalls, wetlands, etc.)	Survey Length (ft)	GIS Channel Length (ft)	Valley Length (ft)	Valley Width (ft)	Sloosity	Gradient	Measured Discharge (cfs)	Stream Order	Rogson Channel Type	Average Bankfull Width (ft)	Average Flood Prone Width (ft)	Average Bankfull Maximum Depth (ft)	Average Bankfull Depth (ft)	Average Entrenchment Ratio	Average Bankfull Width:Depth Ratio	Pool Count	# Pools/ Mile	# Primary Pools/Mile	Average Residual Pool Depth	# Large Wood Pieces/ Mile	# Medium Wood Pieces/ Mile	# Small Wood Pieces/ Mile	
1990	7/21/1990	Clear Creek	4,989	10,621	1	4.30	6.0%	91.3%	2.7%	0.0%	23,756.90	18,481.87	17,424.85	1.10	20.00	6.00	4				30.09		5.00		0.32	66	14.07	6.89	2.23	30.89	18.00	10.22	0.00	
	8/3/1993	Clear Creek	1,931	2,574	2	0.31	30.6%	63.1%	6.4%	0.0%	1,651.60						6.90			39.00		5.00		0.32	66	14.07	6.89	2.23	30.89	18.00	10.22	0.00		
	8/3/1993	Clear Creek	2,574	3,217	3	0.29	29.2%	69.8%	1.0%	0.0%	1,599.60						6.90			39.00		5.00		0.32	66	14.07	6.89	2.23	30.89	18.00	10.22	0.00		
	8/3/1993	Clear Creek	3,217	3,960	4	0.37	29.2%	69.8%	1.0%	0.0%	1,599.60						6.90			39.00		5.00		0.32	66	14.07	6.89	2.23	30.89	18.00	10.22	0.00		
1993	8/3/1993	Clear Creek	3,960	4,989	4	1.14	16.8%	77.9%	5.4%	0.0%	5,966.50						29.00			41.00		3.60		15.77	17	20.69	17.24	2.62	23.81	3.52	0.00	0.00		
	8/3/1993	Clear Creek	4,989	5,703	6	0.58	17.0%	78.4%	3.7%	0.0%	3,948.80						28.00			28.00		2.50		11.33	27	46.95	27.59	2.19	12.07	22.41	0.00	0.00		
	8/3/1993	Clear Creek	5,703	7,262	6	0.88	17.6%	72.8%	8.6%	0.6%	4,633.30						32.00			32.00		1.60		21.98	53	60.23	19.92	2.01	12.90	19.91	0.00	0.00		
	8/3/1993	Clear Creek	7,262	9,173	7	1.21	23.5%	73.4%	3.1%	0.1%	6,412.60						16.50			16.50		1.67		12.38	102	84.30	17.36	2.06	32.23	87.60	0.00	0.00		
	8/3/1993	Clear Creek	9,173	9,334	6	0.10	33.0%	67.0%	0.0%	0.0%	523.90						49.00			49.00		1.80		11.11	16	100.00	10.00	1.61	10.00	130.00	0.00			
	8/3/1993	Clear Creek	9,334	10,343	6	1.04	28.4%	66.1%	1.5%	0.0%	4,684.10						49.00			49.00		1.80		11.11	16	100.00	10.00	1.61	10.00	130.00	0.00			
	8/21/2008	Clear Creek	0	3,227.8	1	2.05	30.1%	68.6%	1.3%	0.0%	10,850.00	10,698.84	9,698.47	810.04	1.11	2.08	11.00	2.28	10.00			42.86	58.65	2.28	1.41	1.30	35.94	39	19.02	10.24	2.19	0.49	2.44	6.76
	7/2/2006	Clear Creek	3,227.8	8,562	2	2.07	12.6%	83.0%	4.6%	0.0%	10,626.00	10,716.46	9,831.48	598.03	1.10	4.00	11.00	4.10	10.00			32.25	55.55	1.78	1.18	1.24	49.07	30	17.38	5.80	2.28	0.00	0.97	6.80
	7/11/2006	Clear Creek	8,562	7,916.2	3	0.83	7.7%	87.8%	4.5%	0.0%	4,993.00	4,509.79	4,138.20	22.01	0.00	2.00	11.00	2.00	10.00			30.50	63.50	2.50	1.33	1.83	28.74	12	14.46	4.82	2.03	1.20	1.20	7.23
	7/11/2006	Clear Creek	7,916.2	9,973	4	0.30	7.9%	83.9%	6.6%	0.0%	1,646.00	674.36	681.26	280.01	1.02	8.69	11.77	54.00	1.78			11.78	54.00	1.78	1.15	1.09	14.44	26	16.38	6.19	3.28	3.68	3.88	48.16
7/24/2008	Clear Creek	9,973	11,435.6	4	1.03	9.1%	89.6%	3.3%	0.0%	5,437.00	4,786.82	4,251.21	215.01	1.13	7.28	11.50	9.00				15.00	19.00	0.80	0.87	1.02	25.05	11	10.88	0.97	1.70	4.85	3.88	21.35	
8/8/1995	Little Clear Creek	0	0,804	1	0.46	32.0%	69.8%	7.6%	0.6%	2,445.20	2,637.92	2,640.13	1.20	2.00	0.99																			

Lost Creek																																
Survey Year	Survey Date	Stream Name	From RM	To RM	Reach	Miles	%Pool Habitat	%Riffle Habitat	%Side-Channel Habitat	%Special Habitat (Waterfalls, wetlands, etc.)	Survey Length (ft)	GIS Channel Length (ft)	Valley Length (ft)	Valley Width (ft)	Sinuosity	Gradient	Measured Discharge (cfs)	Stream Order	Roggen Channel Type	Average Bankfull Width (ft)	Average Flood Prone Width (ft)	Average Bankfull Maximum Depth (ft)	Average Bankfull Depth (ft)	Average Entrenchment Ratio	Average Bankfull Width:Depth Ratio	Pool Count	# Pools/ Mile	# Primary Pools/ Mile	Average Residual Pool Depth	# Large Wood Pieces/ Mile	# Medium Wood Pieces/ mile	# Small Wood Pieces/ Mile
1992	01/31/1992	Lost Creek	0	5.62	1	5.62	11.2%	88.1%	2.8%	0.2%	11708.70	18478.59	18480.90	1.20	5.00	2				32.11	29.29	0.29	0.95	29.29	52	14.59	4.80	2.35	0.26	8.76	85.16	0.00
	01/31/1992	Lost Creek	5.632	11.205	2	5.573	14.1%	73.2%	0.7%	12.1%	18906.10	18481.67	18480.90	1.00	10.00	2				16.88	16.50	0.38	0.95	16.50	106	29.53	4.74	1.88	2.79	17.55	206.69	0.00
	01/31/1992	Lost Creek	13.196	14.805	4	0.96	3.5%	91.2%	0.0%	7.3%	2682.50	5279.13	5280.26	1.10	25.00	2				3.50	0.80	0.26	0.80	0.26	8	8.33	1.21	0.00	0.00	0.00	0.00	0.00
	10/18/1995	Cast Creek	0	0.663	1	0.643	23.76%	75.3%	0.0%	0.0%	2770.20	2709.68	2712.10	1.00	4.00	2				15.33	12.77	2.1	1.27	12.77	21	31.22	2.44	1.48	0.00	7.36	0.00	0.00
	10/18/1995	Cast Creek	0.643	1.609	2	0.94	22.30%	73.4%	0.3%	2.0%	2836.90	3169.45	3168.15	1.10	3.00	2				19.83	19.87	21.35	1.32	19.87	32	59.28	14.81	1.21	0.56	7.41	0.00	0.00
	10/18/1995	Cast Creek	1.609	2.414	3	0.49	15.0%	89.7%	0.0%	4.2%	2579.40	2641.21	2640.33	1.10	10.00	2				16.90	15.00	21	1.20	15.00	21	42.86	10.20	2.09	28.57	16.33	0.00	0.00
	10/18/1995	Cast Creek	2.414	3.218	4	0.45	13.6%	71.0%	1.3%	14.1%	2384.30	2827.92	2840.13	1.10	16.00	2				17.25	16.74	26	0.85	16.74	26	57.79	15.56	2.16	24.44	11.11	0.00	0.00
	10/18/1995	Cast Creek	3.218	4.184	6	0.56	8.8%	89.6%	0.6%	0.0%	2985.10	3169.45	3168.15	1.10	8.00	2				8.25	8.85	9.83	0.85	8.85	26	46.43	1.79	1.89	17.88	21.43	0.00	0.00
	10/18/1995	Cast Creek	4.184	4.888	6	0.78	4.6%	87.6%	2.6%	5.6%	4102.60	2637.52	2840.13	1.20	20.00	2				9.83	16.50	1.00	0.78	16.50	25	32.05	1.30	12.82	14.10	0.00	0.00	

Muddy Fork Sandy																																	
Survey Year	Survey Date	Stream Name	From RM	To RM	Reach	Miles	%Pool Habitat	%Riffle Habitat	%Side-Channel Habitat	%Special Habitat (Waterfalls, wetlands, etc.)	Survey Length (ft)	GIS Channel Length (ft)	Valley Length (ft)	Valley Width (ft)	Sinuosity	Gradient	Measured Discharge (cfs)	Stream Order	Roggen Channel Type	Average Bankfull Width (ft)	Average Flood Prone Width (ft)	Average Bankfull Maximum Depth (ft)	Average Bankfull Depth (ft)	Average Entrenchment Ratio	Average Bankfull Width:Depth Ratio	Pool Count	# Pools/ Mile	# Primary Pools/ Mile	Average Residual Pool Depth	# Large Wood Pieces/ Mile	# Medium Wood Pieces/ mile	# Small Wood Pieces/ Mile	
1993	02/7/1991	Muddy Fork	0	4.345	1	0.77	8.3%	87.0%	4.5%	0.3%	4086.00	14255.95	14256.10	1.00	5.00	4				11.55	42.88	0.66	0.66	42.88	33	42.88	0.56	46.76	235.00	319.48	0.00		
	02/7/1991	Muddy Fork	4.345	7.081	2	0.40	4.5%	89.6%	5.9%	0.0%	2112.20	8976.82	11088.94	1.00	3.00	4				8.90	0.80	14.83	1.1	27.50	11	27.50	0.68	17.50	67.50	147.50	0.00		
	02/20/04	Muddy Fork	0	4.345	1	2.84	7.0%	91.6%	1.5%	0.0%	16386.00	14255.95	13084.64	2105.10	1.09	3.93	3	B3		29.10	41.80	2.05	1.92	1.43	19.31	29	9.15	7.75	1.96	0.35	2.92	22.18	0.00
	01/20/2004	Muddy Fork	4.345	8.0881	2	0.40	4.2%	39.9%	55.9%	0.0%	2993.00	2431.55	2289.11	1261.06	1.08	4.36	3			16.40	100.00	1.40	1.13	6.49	13.59	9	22.90	5.00	1.60	2.40	5.00	2.40	0.00
	01/12/2004	Muddy Fork	8.0881	8.2407	3	0.77	0.0%	86.1%	1.8%	0.0%	4043.00	3788.24	3624.19	765.04		7.87	2	A2											5.19	2.60	0.00	0.00	
	01/12/2004	Muddy Fork	8.2407	17.2904	4	0.63	1.4%	89.7%	0.0%	0.0%	3323.00	3444.07	3143.15	450.02	1.10	9.26	2	A2+								2	3.17	3.17	1.40	0.00	0.00	0.00	

Rushing Water Creek																																	
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1993	10/5/1993	Rushing Water Creek	0	1.287	1	0.89	8.1%	88.9%	2.1%	0.0%	4706.30									7.00		1.30			6.38	25	28.09	2.25	1.26	0.00	42.70	0.00	0.00
	10/5/1993	Rushing Water Creek	1.287	1.931	2	0.44	0.0%	98.7%	0.0%	1.3%	2308.90									12.00		1.20			10.00				0.00	0.00	0.00	0.00	

Unnamed stream (location unknown)																																	
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1994	7/10/1994	Unnamed stream	0	0.482	1	0.42	18.6%	76.8%	4.7%	1.9%	2719.50	1581.44	1584.83	100.00	1.00	4.00	3	B		23.00	36.34	1.27	1.12	1.54	20.75	17	40.43	7.44	1.43	2.38	11.90	25.71	0.00
	7/10/1994	Unnamed stream	0.482	2.574	2	1.18	13.0%	43.9%	4.1%	39.1%	6241.00	6863.85	6864.33	10.00	1.10	10.00	3	A		12.14	18.29	1.16	0.64	1.26	22.06	72	61.02	4.24	1.38	11.86	20.34	31.36	0.00