

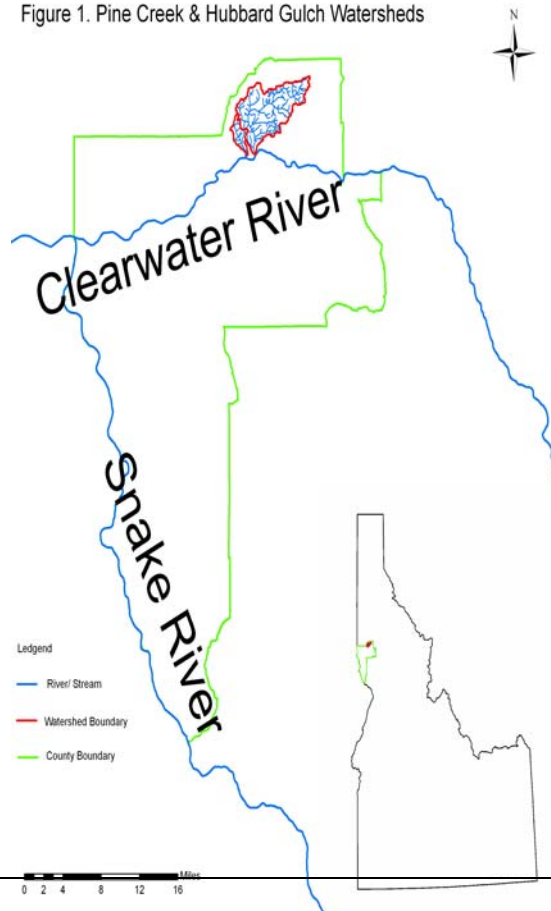
Pine Creek

Nez Perce County, Idaho

1993 Crop Residue Evaluation

Pine Creek is located in Nez Perce County, Idaho and is a tributary to the Clearwater River. The data shown in this report was collected for a watershed restoration project in the calendar year 1993. The data was collected by USDA-NRCS conservationists. The landowner names were removed from the data. Table 1 contains lentil residue measurements which were collected after fall seeding. Measurements were taken using the string point method. Data includes soil type, soil T value, crop, residue measurement, crop yield, tillage performed. Table 2 contains the erosion rate calculations using RUSLE. Table 3 contains rotational erosion rate and RUSLE C value analysis. Copies of this report can be found at the Nez Perce Soil and Water Conservation District web site. www.nezperceswcd.org/watersheds/pinecreek. Or by contacting the District at 208-843-2931; po box 131, Culatesac, Idaho 83524, npswcd@co.nezperce.id.us.

Figure 1. Pine Creek & Hubbard Gulch Watersheds



Pine Creek Residue Measurements

Acres	Soil Type	T	Year	Crop		Yield	Residue lbs.	Tillage	Seeded To
33	Ty4	4	1993	lentils	small browns	2000	406	Disc, cross-harrow, spring tooth, seed	w.wheat
51.4	Sk2	5	1993	lentils	small browns	2000	406	Disc, cross-harrow, spring tooth, seed	w.wheat
40.3	Sk2	5	1993	lentils	small browns	2200	426	harvest, dry fert, cultivate, cultivate, seed	
9	Sk2	5	1993	lentils	small browns	2200	346	harvest, dry fert, cultivate, cultivate, seed	
26.1	Sk2	5	1993	lentils	small browns	2200	386	harvest, dry fert, cultivate, cultivate, seed	w.wheat
8.4	Ty5	3	1993	lentils	small browns	2200	346	harvest, dry fert, cultivate, cultivate, seed	w.wheat
15.3	Sk2	5	1993	lentils		1800	386	harvest, shank, cultivate, harrow, seed	w.wheat
6.1	Sk2	5	1993	lentils		1800	386	harvest, shank, cultivate, harrow, seed	w.wheat
25.5	Sk2	5	1993	lentils		1800	406	harvest, shank, cultivate, harrow, seed	w.wheat
26.7	Sk2	5	1993	lentils		1800	386	harvest, shank, cultivate, harrow, seed	w.wheat
46.8	Nf2	5	1993	lentils	small browns	2200	386	harvest, shank, cultivate, seed	w.wheat
13.5	Nf2	5	1993	lentils	Small Browns	2200	346	Harvest, cultivate, cultivate, seed	w.wheat
13.9	Nf2	5	1993	lentils	Small Browns	2200	346	Harvest, cultivate, cultivate, seed	w.wheat
26	Nf2	5	1993	lentils	Small Browns	2200	386	Harvest, cultivate, cultivate, seed	w.wheat
47			1993	lentils	small brown	2000	446	harvest, cultivate, spray, shank, rod, seed	w.wheat
18.9	Sk2	5	1993	lentils	Small Browns	1900	346	Harvest, Cultivate, Cultivate, Seed	w.wheat
85.3	Nf2 / Ta2	5	1993	lentils	small browns	2000	181	harvest, cultivate, dry fert, cultivate, seed	w.wheat
70.7	Nf2	5	1993	lentils	small browns	2400	426	harvest, dry fert, cultivate, cultivate, seed	w.wheat
145.3	Nf2	5	1993	lentils	small browns	2000	386	harvest, dry fert, cultivate, cultivate, seed	w.wheat
77.7	Nf2	5	1993	lentils	small browns	2000	346	harvest, spring tooth, shank, rod, seed	w.wheat
14.9	Nf2/Nf9	5	1993	lentils	small browns	2000	308	harvest, spring tooth, shank, rod, seed	w.wheat
83	Ta2/Sk2	5	1993	lentils	small browns	2000	308	harvest, spring tooth, shank, rod, seed	w.wheat
80	Nf2	5	1993	lentils	small browns	1800	308	Harvest, spray, cultivate, shank, rod, seed	w.wheat
19.5	Nf2	5	1993	lentils	small browns	2000	216	harvest, cultivate, dry fert, cultivate, seed	
9.9	Nf2	5	1993	lentils	small browns	2000	198	harvest, cultivate, dry fert, cultivate, seed	

Pine Creek Rotation Evaluation

Field	Acres	Soil Type	T	Year	Crop	Residue lbs.	C factor	R	K	LS	P	Erosion Rate TAY
1b	33	Ty4	4	1990	Peas	600	0.302	68	0.37	1.75	0.75	
				1991	Wheat	1400	0.08	68	0.37	1.75	0.75	
				1992	wheat	1800	0.034	68	0.37	1.75	0.75	
				1993	lentils	406	0.41	68	0.37	1.75	0.75	
					Rotational C		0.2065					
1a	34.4	Ty4	4	1990	Peas	600	0.302	68	0.37	1.75	0.75	
				1991	wheat	1400	0.08	68	0.37	1.75	0.75	
				1992	wheat	1800	0.034	68	0.37	1.75	0.75	
				1993	fallow	366	0.55	68	0.37	1.75	0.75	
					Rotational C		0.2415					
1	51.4	Sk2	5	1990	peas	600	0.302	67	0.43	1.75	0.75	
				1991	wheat	1200	0.095	67	0.43	1.75	0.75	
				1992	s.barley	1800	0.034	67	0.43	1.75	0.75	
				1993	lentils	406	0.41	67	0.43	1.75	0.75	
					Rotational C		0.21025					
1	40.3	Sk2	5	1990	s.peas	400	0.415	67	0.32	1.75	0.75	
				1991	w.wheat	1600	0.058	67	0.32	1.75	0.75	
				1992	S.barley	1600	0.058	67	0.32	1.75	0.75	
				1993	lentils	426	0.398	67	0.32	1.75	0.75	
					Rotational C		0.23225					
4	9	Sk2	5	1990	s.peas	400	0.415	67	0.43	1.75	0.75	
				1991	w.wheat	1800	0.034	67	0.43	1.75	0.75	
				1992	S.barley	1600	0.058	67	0.43	1.75	0.75	
				1993	lentils	346	0.45	67	0.43	1.75	0.75	
					Rotational C		0.23925					
2b	26.1	Sk2	5	1990	s.peas	400	0.415	67	0.43	1.75	0.75	
				1991	b.peas/ww	800	0.232	67	0.43	1.75	0.75	
				1992	w.wheat	1600	0.058	67	0.43	1.75	0.75	
				1993	lentils	386	0.422	67	0.43	1.75	0.75	
					Rotational C		0.28175					
8b	8.4	Ty5	3	1990	w.wheat	1400	0.078	69	0.49	1.53	0.65	
				1991	s.peas	600	0.306	69	0.49	1.53	0.65	

Pine Creek Rotation Evaluation

Field	Acres	Soil Type	T	Year	Crop	Residue lbs.	C factor	R	K	LS	P	Erosion Rate TAY
10	6.1	Sk2	5	1989	w.wheat	2000	0.01	67	0.43	1.75	0.75	
				1990	s.peas	300	0.478	67	0.43	1.75	0.75	
				1991	s.wheat	1800	0.034	67	0.43	1.75	0.75	
				1992	s.barley	1600	0.058	67	0.43	1.75	0.75	
				1993	lentils	386	0.425	67	0.43	1.75	0.75	
					Rotational C		0.201					7.600438125
3	25.5	Sk2	5	1989	w.wheat	1400	0.078	67	0.43	1.75	0.75	
				1990	s.wheat	1000	0.12	67	0.43	1.75	0.75	
				1991	s.peas	510	0.35	67	0.43	1.75	0.75	
				1992	w.wheat	1600	0.058	67	0.43	1.75	0.75	
				1993	lentils	406	0.415	67	0.43	1.75	0.75	
					Rotational C		0.2042					7.721440125
1	26.7	Sk2	5	1989	w.wheat	1400	0.078	67	0.43	1.75	0.75	
				1990	s.wheat	1000	0.12	67	0.43	1.75	0.75	
				1991	s.peas	510	0.35	67	0.43	1.75	0.75	
				1992	w.wheat	1600	0.058	67	0.43	1.75	0.75	
				1993	lentils	386	0.43	67	0.43	1.75	0.75	
					Rotational C		0.2072					7.8348795
1	46.8	Nf2	5	1990	w.wheat	1400	0.078	63	0.37	2.1	0.75	
				1991	peas/s.b.	740/2000	0.168	63	0.37	2.1	0.75	
				1992	w.wheat	1600	0.058	63	0.37	2.1	0.75	
				1993	lentils	386	0.422	63	0.37	2.1	0.75	
					Rotational C		0.1815					6.663454875
2	13.5	Nf2	5	1988	cereal	1200	0.1	63	0.37	2.1	0.75	
				1989	cereal	1600	0.058	63	0.37	2.1	0.75	
				1990	s.peas	600	0.306	63	0.37	2.1	0.75	
				1991	cereal	1600	0.058	63	0.37	2.1	0.75	
				1992	cereal	1800	0.034	63	0.37	2.1	0.75	
				1993	lentils	346	0.45	63	0.37	2.1	0.75	
					Rotational C		0.167667					6.15558825
5	13.9	Nf2	5	1989	cereal	1600	0.058	63	0.37	2.1	0.75	
				1990	cereal	1600	0.058	63	0.37	2.1	0.75	
				1991	s. peas	1000	0.18	63	0.37	2.1	0.75	
				1992	cereal	1800	0.034	63	0.37	2.1	0.75	

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Field	Acres	Soil Type	T	Year	Crop	Residue lbs.	C factor	R	K	LS	P	Erosion Rate TAY
1a	18.9	Sk2	5	1989		1600	0.058	67	0.32	1.75	0.75	
				1990	w.wheat	1400	0.078	67	0.32	1.75	0.75	
				1991	s.peas	1114	0.144	67	0.32	1.75	0.75	
				1992	w.wheat	1400	0.078	67	0.32	1.75	0.75	
				1993	lentils	346	0.45	67	0.32	1.75	0.75	
						Rotational C	0.1616					4.547424
1c	31.1	Sk2	5	1989		1600	0.058	67	0.43	1.75	0.75	
				1990	w.wheat	1400	0.078	67	0.43	1.75	0.75	
				1991	s.peas	1114	0.144	67	0.43	1.75	0.75	
				1992	w.wheat	1400	0.078	67	0.43	1.75	0.75	
				1993	lentils	346	0.45	67	0.43	1.75	0.75	
						Rotational C	0.1616					6.110601
1	85.3	Nf2 / Ta2	5	1988		1600	0.058	63	0.37	2.5	0.75	
				1989		1400	0.078	63	0.37	2.5	0.75	
				1990	w.wheat	1400	0.078	63	0.37	2.5	0.75	
				1991	s.bly/canola	1000/146	0.26	63	0.37	2.5	0.75	
				1992	w.wheat	1600	0.058	63	0.37	2.5	0.75	
				1993	lentils	181	0.6	63	0.37	2.5	0.75	
						Rotational C	0.188667					8.2459125
2	13.5	Nf2	5	1988	cereal	1200	0.1	63	0.37	2.1	0.75	
				1989	cereal	1600	0.058	63	0.37	2.1	0.75	
				1990	s.peas	600	0.306	63	0.37	2.1	0.75	
				1991	cereal	1600	0.058	63	0.37	2.1	0.75	
				1992	cereal	1800	0.034	63	0.37	2.1	0.75	
				1993	lentils	346	0.45	63	0.37	2.1	0.75	
						Rotational C	0.167667					6.15558825
5	13.9	Nf2	5	1989	cereal	1600	0.058	63	0.37	2.1	0.75	
				1990	cereal	1600	0.058	63	0.37	2.1	0.75	
				1991	s. peas	1000	0.18	63	0.37	2.1	0.75	
				1992	cereal	1800	0.034	63	0.37	2.1	0.75	
				1993	lentils	346	0.45	63	0.37	2.1	0.75	
						Rotational C	0.156					5.727267
4	26	Nf2	5	1989	s. peas	800	0.228	63	0.37	2.1	0.75	
				1990	cereal	1600	0.058	63	0.37	2.1	0.75	
				1991	peas	1000	0.18	63	0.37	2.1	0.75	

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Field	Acres	Soil Type	T	Year	Crop	Residue lbs.	C factor	R	K	LS	P	Erosion Rate TAY
6a	24.6	Nf2	5	1989	cereal	1400	0.078	63	0.37	2.1	0.75	
				1990	cereal	1600	0.058	63	0.37	2.1	0.75	
				1991	peas	600	0.306	63	0.37	2.1	0.75	
				1992	w.wheat	1800	0.034	63	0.37	2.1	0.75	
				1993	s.barley	1000	0.12	63	0.37	2.1	0.75	
					Rotational C		0.1192					4.3762194
7	20.8	Nf2	5	1989		1200	0.13	63	0.37	2.1	0.75	
				1990	cereal	1600	0.058	63	0.37	2.1	0.75	
				1991	peas	600	0.306	63	0.37	2.1	0.75	
				1992	w.wheat	1800	0.034	63	0.37	2.1	0.75	
				1993	s.wheat	1000	0.12	63	0.37	2.1	0.75	
					Rotational C		0.1296					4.7580372
1a	70.7	Nf2	5	1989	cereal	1600	0.058	63	0.37	1.7	0.75	
				1990	cereal	1800	0.034	63	0.37	1.7	0.75	
				1991	lentils	450	0.382	63	0.37	1.7	0.75	
				1992	w.wheat	1600	0.058	63	0.37	1.7	0.75	
				1993	lentils	426	0.4	63	0.37	1.7	0.75	
					Rotational C		0.1864					5.5398546
1b	69.4	Nf2	5	1989	cereal	1600	0.058	63	0.37	2.1	0.75	
				1990	peas	400	0.415	63	0.37	2.1	0.75	
				1991	w.wheat	1600	0.058	63	0.37	2.1	0.75	
				1992	peas	880	0.21	63	0.37	2.1	0.75	
				1993	w.wheat	1600	0.058	63	0.37	2.1	0.75	
					Rotational C		0.1482					5.44090365
1	145.3	Nf2	5	1989	cereal	1500	0.07	63	0.37	1.78	0.75	
				1990	cereal	1400	0.078	63	0.37	1.78	0.75	
				1991	peas	1250	0.14	63	0.37	1.78	0.75	
				1992	cereal	1600	0.052	63	0.37	1.78	0.75	
				1993	lentils	386	0.422	63	0.37	1.78	0.75	
					Rotational C		0.1524					4.74251274
2	96.6	Nf1/Nf2	5	1989	cereal	1500	0.07	63	0.37	1.53	0.75	
				1990	cereal	1400	0.078	63	0.37	1.53	0.75	
				1991	peas	1500	0.1	63	0.37	1.53	0.75	

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Field	Acres	Soil Type	T	Year	Crop	Residue lbs.	C factor	R	K	LS	P	Erosion Rate TAY
1	54	Nf2	5	1990	s. peas	426	0.398	63	0.37	2.1	0.75	
				1991	cereal	1600	0.052	63	0.37	2.1	0.75	
				1992	lentils	426	0.398	63	0.37	2.1	0.75	
				1993	w.wheat	1000	0.12	63	0.37	2.1	0.75	
					Rotational C		0.242					8.8846065
2	47.7	Sk2	5	1990	lentils	216	0.538	67	0.43	1.75	0.75	
				1991	cereal	1600	0.052	67	0.43	1.75	0.75	
				1992	lentils	426	0.398	67	0.43	1.75	0.75	
				1993	w.wheat	1000	0.12	67	0.43	1.75	0.75	
					Rotational C		0.277					10.47423563
1	136.4	Nf2	5	1990	peas	400	0.415	67	0.32	2.24	0.75	
				1991	cereal	1800	0.034	67	0.32	2.24	0.75	
				1992	lentils	450	0.382	67	0.32	2.24	0.75	
				1993	w.wheat	1000	0.12	67	0.32	2.24	0.75	
					Rotational C		0.23775					8.5635648
3	77.7	Nf2	5	1990	cereal	600	0.2	67	0.32	2.02	0.75	
				1991	lentils	345	0.448	67	0.32	2.02	0.75	
				1992	cereal	1600	0.058	67	0.32	2.02	0.75	
				1993	lentils	346	0.452	67	0.32	2.02	0.75	
					Rotational C		0.2895					9.4034232
4a	44.2	Sk2	5	1990	w.wheat	1000	0.12	67	0.43	2.65	0.75	
				1991	lentils	386	0.425	67	0.43	2.65	0.75	
				1992	w.wheat	1600	0.058	67	0.43	2.65	0.75	
				1993	s. peas	426	0.398	67	0.43	2.65	0.75	
					Rotational C		0.25025					14.32928372
8	14.9	Nf2/Nf9	5	1990	w.wheat	1200	0.098	67	0.32	2.51	0.75	
				1991	lentils	289	0.498	67	0.32	2.51	0.75	
				1992	w.wheat	1600	0.058	67	0.32	2.51	0.75	
				1993	lentils	308	0.482	67	0.32	2.51	0.75	
					Rotational C		0.284					11.4624672
7	83	Ta2/Sk2	5	1990	w.wheat	1200	0.098	68	0.375	2.65	0.75	
				1991	lentils	446	0.389	68	0.375	2.65	0.75	

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Field	Acres	Soil Type	T	Year	Crop	Residue lbs.	C factor	R	K	LS	P	Erosion Rate TAY
2	19.5	Nf2	5	1989		1400	0.078	63	0.32	1.78	0.75	
				1990	cereal	1400	0.078	63	0.32	1.78	0.75	
				1991	peas	819	0.228	63	0.32	1.78	0.75	
				1992	cereal	1600	0.058	63	0.32	1.78	0.75	
				1993	lentils	216	0.59	63	0.32	1.78	0.75	
						Rotational C	0.2064					5.55496704
3	9.9	Nf2	5	1989		1400	0.078	63	0.32	2.1	0.75	
				1990		1400	0.078	63	0.32	2.1	0.75	
				1991		800	0.228	63	0.32	2.1	0.75	
				1992		1600	0.058	63	0.32	2.1	0.75	
				1993	lentils	198	0.6	63	0.32	2.1	0.75	
						Rotational C	0.2084					6.6171168
2	130.1	Nf2	5	1992	w.wheat	1600	0.058	63	0.32	2.5	0.75	
				1993	lentils	234	0.53	63	0.32	2.5	0.75	
						Rotational C	0.294					11.1132