

14241500 SOUTH FORK TOUTLE RIVER AT TOUTLE, WA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1996 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: February 1996 to March 1999, October 1999 to current year. Water year 1999, daily sediment discharge values for period October to March, monthly sediment discharge values only for the period April to September.

INSTRUMENTATION.--Samples obtained by observer, February 1996 to September 1999. Automatic pumping sampler since October 1999.

REMARKS.--Station was placed in operation after the station at South Fork Toutle River at Camp 12, near Toutle, WA (14241490) was destroyed by flood of February 1996. Current site is 2.2 miles downstream from destroyed station.

EXTREMES FOR PERIOD OF DAILY RECORDS.--

SEDIMENT CONCENTRATION: Maximum daily, 18,000 mg/L (estimated) Oct. 4, 1997; minimum, 1 mg/L on many days 1996, 1998-2002, SEDIMENT DISCHARGE: Maximum daily, 356,000 tons Jan. 1, 1997; minimum, 0.25 tons Aug. 29, 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily, 8,260 mg/L Nov. 14; minimum, 1 mg/L on several days.

SEDIMENT DISCHARGE: Maximum daily, 124,000 tons Dec. 17; minimum, 0.25 tons Aug. 29.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)		DISCHARGE (CFS)	CONCEN- TRATION (MG/L)		DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	
OCTOBER			NOVEMBER			DECEMBER			
1	81	18	3.9	821	426	959	3110	1800	15400
2	79	13	2.8	648	216	382	2640	1210	9100
3	77	9.0	1.8	499	107	147	1730	603	2860
4	77	6.0	1.2	402	56	61.0	1430	312	1230
5	73	3.0	0.56	397	46	50.0	1230	232	780
6	72	5.0	0.90	328	24	21.0	1300	265	951
7	76	9.0	1.9	289	15	11.0	1220	272	908
8	89	14	3.4	261	13	9.4	1090	97	286
9	91	12	3.0	239	10	6.7	1040	70	196
10	113	41	18.0	221	12	7.4	932	81	204
11	161	80	36.0	205	9.0	4.9	894	63	153
12	120	27	8.8	210	9.0	5.0	849	49	112
13	170	84	40.0	351	301	643	2810	1010	15800
14	152	55	23.0	4450	8260	106000	4520	1650	23600
15	137	29	11.0	2120	4060	23700	2300	313	2000
16	123	14	4.5	1440	2000	8080	5420	e3610	e76000
17	127	10	3.5	976	1170	3090	6010	e6890	e124000
18	112	12	3.7	738	844	1690	2810	e2630	e20600
19	108	8.0	2.4	707	785	1500	1870	805	4200
20	109	6.0	1.6	1000	989	2730	1400	329	1270
21	113	5.0	1.4	1360	1360	5020	1120	169	513
22	168	47	37.0	3210	3960	40300	944	106	272
23	540	652	994	2950	3440	29600	759	59	122
24	422	167	204	1600	1290	5670	637	41	72.0
25	327	52	47.0	1110	686	2070	526	16	24.0
26	279	34	26.0	934	656	1640	454	10	12.0
27	299	52	47.0	794	604	1280	412	7.0	7.5
28	289	36	29.0	1070	873	2460	412	1.0	1.5
29	245	9.0	5.9	1780	1010	5080	359	1.0	1.1
30	420	290	549	1600	696	3110	326	2.0	1.8
31	982	1080	2910	---	---	---	347	2.0	2.1
TOTAL	6231	---	5022.26	32710	---	245327.4	50901	---	300679.0

COWLITZ RIVER BASIN

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SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	392	24	31.0	650	90	159	668	16	29.0
2	623	70	120	558	65	98.0	579	14	22.0
3	623	67	113	628	69	117	509	8.0	11.0
4	529	36	52.0	571	49	77.0	466	7.0	8.2
5	502	8.0	10.0	556	69	105	464	6.0	7.2
6	952	186	871	699	97	208	512	5.0	6.6
7	6880	4720	97100	1220	191	628	422	2.0	2.3
8	5970	6320	107000	1280	125	433	378	2.0	2.4
9	2640	2340	18000	1080	78	230	367	3.0	2.7
10	1640	992	4380	920	41	102	588	59	103
11	1230	1990	6450	819	39	86.0	2560	922	9450
12	1300	2880	9770	679	28	51.0	2870	948	7700
13	1180	956	3060	580	16	26.0	1900	329	1730
14	1030	448	1260	496	14	18.0	1480	167	671
15	875	280	665	445	11	13.0	1190	132	423
16	788	220	468	449	13	16.0	1010	120	328
17	714	206	397	418	8.0	9.2	840	111	253
18	644	251	439	445	12	15.0	725	76	149
19	757	969	1990	896	66	167	990	75	224
20	885	274	656	905	47	116	1250	104	357
21	1090	252	751	1830	205	1160	1040	38	108
22	867	130	309	2230	252	1530	900	21	51.0
23	698	60	114	2450	320	2140	815	16	35.0
24	1160	275	1040	2140	227	1340	804	14	31.0
25	2880	1360	11300	1510	86	359	778	18	37.0
26	1720	377	1820	1160	49	154	739	14	28.0
27	1240	233	778	950	22	58.0	707	12	22.0
28	1010	244	668	791	19	41.0	684	11	20.0
29	797	119	260	---	---	---	652	10	17.0
30	667	55	101	---	---	---	618	9.0	15.0
31	686	80	151	---	---	---	597	9.0	14.0
TOTAL	42969	---	270124.0	27355	---	9456.2	28102	---	21857.4
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	602	9.0	14.0	654	17	30.0	602	20	33.0
2	609	8.0	14.0	700	13	25.0	544	16	23.0
3	589	8.0	13.0	632	11	19.0	499	11	15.0
4	607	10	16.0	548	9.0	13.0	471	10	13.0
5	689	13	24.0	565	4.0	5.2	456	11	13.0
6	783	16	34.0	526	4.0	5.2	431	7.0	7.7
7	834	19	43.0	481	5.0	6.8	396	9.0	9.7
8	766	17	35.0	457	4.0	5.4	400	7.0	7.8
9	951	e24	e68.0	420	5.0	5.4	339	6.0	5.2
10	1780	e111	e561	391	4.0	4.2	319	4.0	3.6
11	1970	e122	e648	380	3.0	3.1	312	6.0	5.2
12	2020	e120	e661	403	6.0	7.0	315	6.0	4.8
13	2280	e174	e1140	542	8.0	13.0	325	8.0	6.9
14	3890	e985	e11500	604	12	20.0	333	4.0	3.3
15	2190	e171	e1030	555	9.0	13.0	320	2.0	2.2
16	1590	e117	e505	524	3.0	4.7	300	2.0	1.8
17	1300	e97	e341	552	5.0	7.6	285	3.0	2.4
18	1120	e88	e266	551	6.0	9.1	376	23	23.0
19	986	80	214	550	5.0	8.1	318	10	8.9
20	883	73	175	615	8.0	13.0	270	6.0	4.7
21	795	66	142	643	9.0	16.0	251	5.0	3.3
22	733	59	116	628	11	19.0	240	4.0	2.7
23	668	51	93.0	595	10	16.0	232	4.0	2.8
24	614	44	73.0	535	8.0	12.0	223	5.0	2.8
25	593	39	63.0	533	10	14.0	214	5.0	3.0
26	596	37	59.0	557	9.0	13.0	208	6.0	3.6
27	601	34	55.0	581	11	18.0	206	4.0	2.3
28	552	31	47.0	826	52	121	249	11	8.8
29	546	28	42.0	1310	154	564	636	52	93.0
30	586	26	41.0	905	77	192	368	17	17.0
31	---	---	---	714	42	81.0	---	---	---
TOTAL	32723	---	18033.0	18477	---	1283.8	10438	---	333.5

COWLITZ RIVER BASIN

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DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	298	5.0	4.2	108	2.0	0.65	80	2.0	0.43
2	261	4.0	2.9	106	2.0	0.63	80	2.0	0.43
3	239	5.0	3.1	102	2.0	0.59	81	2.0	0.44
4	231	4.0	2.6	107	2.0	0.60	79	2.0	0.43
5	219	4.0	2.3	117	2.0	0.64	78	2.0	0.42
6	203	3.0	1.7	117	1.0	0.43	78	2.0	0.42
7	200	4.0	2.1	108	1.0	0.29	77	2.0	0.41
8	210	11	6.0	106	1.0	0.32	79	2.0	0.43
9	193	3.0	1.6	106	2.0	0.57	79	2.0	0.43
10	180	4.0	1.9	110	3.0	0.85	77	2.0	0.41
11	169	2.0	0.71	109	3.0	0.88	76	2.0	0.41
12	163	2.0	0.84	102	3.0	0.95	76	2.0	0.41
13	160	2.0	0.86	98	4.0	1.2	74	2.0	0.40
14	156	2.0	0.78	96	3.0	0.82	73	2.0	0.39
15	150	1.0	0.45	97	3.0	0.76	73	2.0	0.45
16	147	3.0	1.0	94	2.0	0.54	75	4.0	0.71
17	143	3.0	1.2	96	2.0	0.52	81	5.0	1.0
18	140	3.0	1.1	e93	e3.0	e0.68	77	4.0	0.85
19	137	3.0	1.1	e92	e2.0	e0.50	74	3.0	0.60
20	136	3.0	1.1	e93	e2.0	e0.50	74	2.0	0.31
21	130	3.0	1.0	e91	e3.0	e0.78	72	3.0	0.50
22	127	3.0	0.95	92	4.0	0.92	70	2.0	0.42
23	122	3.0	0.90	90	4.0	0.92	69	2.0	0.40
24	121	3.0	0.88	87	2.0	0.56	69	4.0	0.66
25	120	3.0	0.85	87	3.0	0.67	68	3.0	0.56
26	122	3.0	0.84	89	3.0	0.72	67	2.0	0.28
27	122	3.0	0.83	90	3.0	0.67	67	3.0	0.48
28	119	2.0	0.79	87	1.0	0.30	68	3.0	0.55
29	120	2.0	0.78	85	1.0	0.25	80	6.0	1.3
30	115	2.0	0.73	84	2.0	0.43	120	7.0	2.1
31	112	2.0	0.70	83	2.0	0.45	---	---	---
TOTAL	5065	---	46.79	3022	---	19.59	2291	---	17.03
YEAR	260284		872199.97						

e Estimated