

14240525 NORTH FORK TOUTLE RIVER BELOW SRS NEAR KID VALLEY, WA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990-91, February to September 2001.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May to September 1990-91 (discontinued).

WATER TEMPERATURE: May to September 1990-91, May to September 2001.

SUSPENDED SEDIMENT: February to September 2001.

INSTRUMENTATION.--Temperature sensor and electronic data logger, with 15-minute logging interval. Automatic pumping sediment sampler.

REMARKS.--Water temperature records good, except May 25-28, June 12-14, July 22-25, July 28-Aug. 14, Sept. 16-22, 25-26, which are fair; and May 29-June 5, June 15-22, and Aug. 15-Sept. 15, which are poor.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 999 microsiemens Sept. 26, 1991; minimum recorded, 322 microsiemens May 26, 1991.

WATER TEMPERATURE: Maximum recorded (more than 20 percent missing record), 29.5°C, (rounded) Aug. 9, 10, 12; minimum recorded, 5.5°C (rounded) May 6.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded (more than 20 percent missing record), 29.5°C, Aug. 9, 10, 12; minimum recorded 5.5°C, May 6.

SEDIMENT CONCENTRATION: Maximum daily, 2,210 mg/L Aug. 23; minimum daily, 82 mg/L Feb. 12.

SEDIMENT DISCHARGE: Maximum daily, 4,050 tons Apr. 30, minimum daily, 45 tons Sept. 22.

TEMPERATURE, WATER (DEG. C), WATER YEAR MAY TO SEPTEMBER 2001

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	13.7	7.2	10.0
6	---	---	---	---	---	---	---	---	---	17.7	5.5	11.1
7	---	---	---	---	---	---	---	---	---	19.7	7.3	12.9
8	---	---	---	---	---	---	---	---	---	17.2	8.4	12.0
9	---	---	---	---	---	---	---	---	---	18.2	8.2	12.2
10	---	---	---	---	---	---	---	---	---	19.2	7.7	12.7
11	---	---	---	---	---	---	---	---	---	21.2	8.1	14.0
12	---	---	---	---	---	---	---	---	---	20.4	10.1	14.7
13	---	---	---	---	---	---	---	---	---	18.4	10.5	14.0
14	---	---	---	---	---	---	---	---	---	12.9	9.1	10.4
15	---	---	---	---	---	---	---	---	---	13.1	8.9	10.7
16	---	---	---	---	---	---	---	---	---	15.6	7.7	11.1
17	---	---	---	---	---	---	---	---	---	12.9	7.4	10.2
18	---	---	---	---	---	---	---	---	---	16.8	8.4	11.6
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	22.9	8.3	15.1
22	---	---	---	---	---	---	---	---	---	25.6	11.3	18.1
23	---	---	---	---	---	---	---	---	---	24.6	13.3	18.8
24	---	---	---	---	---	---	---	---	---	23.5	13.3	17.2
25	---	---	---	---	---	---	---	---	---	24.2	11.4	17.4
26	---	---	---	---	---	---	---	---	---	24.5	11.9	17.7
27	---	---	---	---	---	---	---	---	---	20.3	12.3	16.2
28	---	---	---	---	---	---	---	---	---	15.2	11.2	13.5
29	---	---	---	---	---	---	---	---	---	21.8	9.7	14.7
30	---	---	---	---	---	---	---	---	---	23.5	11.2	16.2
31	---	---	---	---	---	---	---	---	---	26.5	12.8	19.2
MONTH	---	---	---	---	---	---	---	---	---	26.5	5.5	14.1

COWLITZ RIVER BASIN

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	20.1	13.4	15.8	---	---	---	21.2	12.7	17.1	19.8	16.8	18.1
2	16.2	11.5	13.5	---	---	---	25.7	15.4	19.7	22.6	14.7	18.0
3	16.4	11.5	13.6	---	---	---	23.5	15.9	18.5	19.2	15.3	17.4
4	17.5	11.8	14.4	---	---	---	20.9	15.1	17.6	21.5	15.8	17.9
5	---	---	---	---	---	---	26.6	14.2	19.5	19.0	14.2	16.4
6	---	---	---	---	---	---	26.3	16.7	20.7	18.3	13.7	15.6
7	---	---	---	---	---	---	27.0	16.0	20.5	21.5	14.5	17.2
8	---	---	---	---	---	---	27.6	13.9	20.2	22.0	13.1	17.1
9	18.0	13.9	15.7	---	---	---	29.5	15.8	21.9	22.4	14.0	17.9
10	16.1	12.1	14.0	---	---	---	29.5	16.1	22.1	22.0	13.9	17.7
11	14.4	11.7	13.3	27.2	14.0	20.1	27.9	16.4	21.3	22.7	14.2	18.0
12	12.7	10.0	11.4	26.4	14.5	19.6	29.5	16.2	22.2	22.4	14.8	18.2
13	22.5	10.3	15.4	25.2	14.0	18.6	27.6	16.9	21.6	24.8	15.1	19.1
14	17.5	11.4	14.5	24.7	13.8	17.9	26.6	16.6	20.6	23.9	15.1	19.2
15	21.6	11.9	15.5	16.6	13.8	14.9	26.3	17.0	20.6	22.2	15.7	18.5
16	20.5	11.8	15.1	17.6	13.0	15.2	22.2	16.5	18.7	20.2	15.0	17.3
17	20.9	12.3	15.6	18.1	13.3	15.3	25.9	15.4	19.1	18.8	14.2	16.0
18	22.0	12.6	16.7	22.1	13.8	17.1	23.3	15.3	18.6	17.4	14.6	15.8
19	23.5	13.2	18.1	26.4	14.6	19.3	25.5	13.2	18.5	20.5	13.2	16.2
20	24.6	15.4	19.8	17.7	14.9	16.5	25.7	15.1	19.2	19.6	11.4	15.1
21	24.9	16.4	20.5	21.2	14.1	17.0	18.2	14.3	16.3	19.3	12.8	15.5
22	---	---	---	23.8	14.5	18.0	---	---	---	22.8	13.5	17.5
23	---	---	---	27.0	15.6	20.2	---	---	---	---	---	---
24	---	---	---	25.5	15.6	19.7	---	---	---	---	---	---
25	---	---	---	27.1	15.3	20.3	25.3	13.5	18.9	---	---	---
26	---	---	---	---	---	---	26.2	15.4	20.3	15.7	13.7	14.5
27	---	---	---	---	---	---	25.3	15.7	20.3	15.7	10.0	12.6
28	---	---	---	18.7	15.4	16.9	25.4	17.2	20.8	18.1	10.4	13.5
29	---	---	---	19.5	13.9	16.4	26.0	16.2	20.5	19.0	10.5	14.1
30	---	---	---	23.5	14.4	17.9	25.6	17.9	21.1	19.4	11.5	15.0
31	---	---	---	22.8	14.1	17.2	23.8	17.8	20.2	---	---	---
MONTH	24.9	10.0	15.5	27.2	13.0	17.8	29.5	12.7	19.9	24.8	10.0	16.6
YEAR	29.5	5.5	16.9									

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

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	e480	---	---	e390	160	e168	400	172	202
2	e450	---	---	511	317	451	463	205	256
3	e430	---	---	474	183	234	422	123	140
4	e500	---	---	987	1170	3380	401	109	118
5	e540	---	---	946	337	889	401	131	142
6	e570	---	---	764	170	352	395	123	131
7	e530	---	---	646	151	264	388	125	131
8	e490	---	---	522	140	197	444	146	175
9	e480	---	---	474	124	159	472	116	148
10	e460	---	---	429	101	118	452	117	143
11	e430	---	---	399	88	95	441	109	130
12	e440	---	---	368	82	81	424	101	116
13	e470	---	---	348	88	83	434	116	136
14	e470	---	---	337	123	112	441	113	135
15	e430	---	---	353	121	117	478	166	218
16	e440	---	---	466	214	275	485	143	188
17	e420	---	---	374	117	118	469	128	162
18	e420	---	---	353	127	121	560	210	335
19	e450	---	---	333	146	131	793	426	928
20	e450	---	---	318	197	169	690	195	363
21	e460	---	---	311	194	163	634	159	272
22	e460	---	---	311	166	140	596	150	241
23	e430	---	---	315	150	131	556	169	253
24	e430	---	---	394	149	159	559	180	273
25	e410	---	---	380	126	129	795	277	595
26	e390	---	---	370	128	128	778	192	404
27	e400	---	---	366	128	127	748	200	414
28	e370	---	---	365	147	152	786	221	471
29	e400	---	---	---	---	---	744	196	392
30	e390	---	---	---	---	---	734	180	357
31	e410	---	---	---	---	---	878	345	887
TOTAL	13900	---	0	12604	---	8643	17261	---	8856

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SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
1	888	313	753	1370	973	3600	499	277	375
2	839	269	609	1270	720	2470	555	293	442
3	779	267	562	1130	564	1720	601	290	473
4	714	270	518	1030	607	1690	519	246	345
5	701	260	492	994	521	1400	505	301	411
6	774	245	513	884	452	1080	530	373	533
7	722	231	450	807	390	850	488	336	442
8	711	221	425	764	285	587	470	340	431
9	684	246	453	746	252	508	511	326	450
10	755	265	555	711	282	541	497	304	409
11	958	397	1050	697	299	563	654	466	899
12	826	312	696	701	292	553	732	546	1080
13	785	312	660	712	286	550	654	467	824
14	725	440	859	834	396	961	604	351	573
15	678	416	760	960	430	1170	568	323	496
16	677	426	781	999	442	1230	541	288	420
17	825	419	943	826	265	591	520	296	415
18	787	303	643	755	242	492	498	283	381
19	747	299	602	703	299	567	482	309	402
20	715	388	749	660	287	512	464	275	345
21	673	395	717	626	262	444	455	251	308
22	649	424	743	614	264	437	449	243	295
23	674	398	724	621	326	546	439	263	312
24	652	370	650	612	309	511	460	269	334
25	654	389	687	592	262	418	467	261	329
26	667	417	751	574	257	398	430	262	304
27	699	446	841	556	250	375	542	233	341
28	788	399	849	589	264	423	597	266	429
29	737	399	792	555	253	379	489	323	426
30	1150	1120	4050	507	281	384	453	468	574
31	---	---	---	486	267	350	---	---	---
TOTAL	22633	---	23877	23885	---	26300	15673	---	13798
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)
1	428	322	372	278	154	115	232	474	297
2	409	263	291	261	155	110	229	423	262
3	397	185	198	274	155	115	226	420	256
4	390	171	181	279	155	117	222	418	250
5	384	155	161	271	144	105	215	416	242
6	374	135	137	264	156	112	208	414	232
7	360	125	121	260	192	135	207	412	231
8	351	140	132	258	183	128	206	410	228
9	345	122	114	252	183	125	205	408	225
10	340	147	135	246	186	124	202	406	221
11	332	173	155	242	183	119	201	404	219
12	325	179	157	240	174	113	199	402	216
13	319	191	164	236	186	119	198	414	221
14	316	215	184	236	184	117	197	494	263
15	323	224	196	234	216	136	200	354	191
16	363	286	283	233	192	121	198	400	214
17	357	266	257	230	203	126	198	367	196
18	348	254	240	227	171	105	196	466	247
19	320	215	186	224	158	95	196	309	164
20	317	213	182	221	189	112	167	187	85
21	332	237	213	227	222	136	153	121	50
22	314	199	169	316	569	545	154	108	45
23	307	175	145	421	2210	2530	151	146	60
24	310	167	140	344	1020	963	147	160	64
25	306	162	134	288	693	539	169	234	117
26	302	147	120	266	631	455	230	422	263
27	296	156	125	255	546	376	183	433	212
28	364	252	250	249	549	368	160	238	103
29	327	183	161	242	509	332	191	196	101
30	309	168	140	234	454	286	192	183	95
31	296	155	124	232	516	323	---	---	---
TOTAL	10561	---	5567	8040	---	9202	5832	---	5570
YEAR	169849		101813						

e Estimated