



Appendix 1 - Stream Temperature Data

Upper Cispus River Watershed Lower

Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average temp exceeded 16.0°C (#)	Highest Maximum 7-day average temp. (°C) during monitoring period (Year)
Walupt Creek	At inlet to Walupt Lake	*	*	2002	0	10.0 (2002)
Walupt Creek	At outlet to Walupt Lake	23.1	22.7	2001-2003	3	22.7 (2003)
Walupt Creek	At confluence w/Cispus R	*	*	2001-2002	2	20.5 (2001)
Cispus River	At Walupt Ck Confluence	*	*	2002	0	13.3 (2002)
Cispus River	Above Muddy Fork confluence	14.1	13.7	2000,2003	0	13.7 (2003)
Chambers Creek	About 1.3 miles above confluence w/ Cispus River	15.1	14.4	1994,1995, 2003	1	16.0 (1994)
East Canyon Creek	About 5 miles above confluence w/ Cispus River	15.5	14.9	1994, 2003	1	16.1 (1994)
East Canyon Creek	About 1 mile from Cispus R. confluence	17.1	16.8	1994-97 1999-2003	5	17.9 (1994)
North Fork Cispus River	Near confluence w/ Cispus R	16.7	16.2	1991-95 1997-2003	1	16.2 (2003)
Cispus River	Above North Fork Cispus confluence	16.2	15.6	1994,2000, 2003	0	15.8 (2000)
Cispus River	At river mile 23	14.6	14.0	2003	0	14.0 (2003)



Cispus River Watershed Stream Temperatures

Stream Temperatures Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average exceeded 16.0°C (#)	Highest Maximum 7-day average temp. (°C) (Year)
Yellowjacket Creek	2.5 miles above Pinto Creek	*	*	1992, 1994, 1995, 1997	0	13.7 (1992)
Pumice Creek	At confluence w/Yellowjacket Creek	15.7	15.2	2001-2003	1	16.2 (2001)
Pinto Creek	At confluence w/Yellowjacket Creek	15.5	14.9	2001-2003	0	15.2 (2001)
Yellowjacket Creek	Above McCoy Creek	16.4	15.9	2001, 2003	0	15.9 (2003)
Yellowjacket Creek	At confluence w/ Cispus R	19.3	18.7	1996, 1999-2003	5	18.8 (2001)
Cispus River	Just above Greenhorn Cr Confluence	19.3	18.4	2000, 2003	2	18.4 (2003)
1918 Creek	Greenhorn Cr confluence	19.9	18.9	2001-2003	3	19.0 (2001)
Greenhorn Creek	Above 1918 Creek	17.6	16.8	2001, 2003	1	16.8 (2003)
Greenhorn Creek	At confluence w/ Cispus R	20.2	19.6	2000-2003	4	19.6 (2003)
Iron Creek	Above Big Creek	*	*	1999, 2001	0	13.2 (2001)
Iron Creek	At river mile 0.9	17.0	16.5	2001, 2003	1	16.5 (2003)
Iron Creek	At confluence w/ Cispus R	19.0	18.4	1996, 1999-2003	5	18.4 (2003)
Cispus River	4.5 miles above Quartz Creek confluence	17.5	18.3	1991-1992 1996-2003	8	19.1 (1996)
Quartz Creek	About 1 mile from Cispus	17.6	16.8	2000-2003	1	16.8 (2003)



Stream Temperatures Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average exceeded 16.0°C (#)	Highest Maximum 7-day average temp. (°C) (Year)
	R. confluence					
Woods Creek	About 1 mile from Cispus R. confluence	18.6	18.1	1999, 2003	1	18.1 (2003)
Woods Creek	About 3.6 miles from Cispus R confluence	16.3	15.7	2003	0	15.7 (2003)
Woods Creek	About 3.7 miles from Cispus R confluence	18.9	18.1	2003	1	18.1 (2003)

Bold denotes site exceeded temperature standard during 2003.



Middle Cowlitz Watershed Stream Temperatures

Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average temp. exceeded 16.0°C (#)	Highest Maximum 7-day average temp. during monitoring period (°C (Year))
North Fork Willame Creek	At confluence w/ West Fork Willame Creek	15.3	14.9	1978, 1983-1987, 1996, 1998-2003	0	15.9 (1996)
West Fork Willame Creek	At confluence w/ Willame Ck	*	*	1996,1998	0	13.8 (1996)
Lillian Creek	At confluence w/ Willame Ck	15.6	15.1	1998-2003	0	16.1 (1998)
South Fork Willame Creek	About 1 mile above Willame Creek	*	*	1975-1978, 1980-1988, 1994	0	14.2 (1994)
South Fork Willame Creek	At confluence w/ Willame Ck	*	*	1998, 2000-2002	0	15.6 (1998)
Willame Creek	About 2.5 miles above confluence w/ Cowlitz River	13.5	13.3	2003	0	13.3 (2003)
Willame Creek	0.5 mile above confluence w/ Cowlitz R	16.1	15.6	1999-2003	0	15.9 (2001)
Davis Creek	About 2 mile from Cowlitz R. confluence	16.5	16.0	2001, 2002-2003	0	16.0 (2003)
Silver Creek	About 2.5 miles above Lynx Ck	*	*	1995-1997	0	11.7 (1996)
Lynx Creek	Near confluence with Silver Ck	18.8	18.3	1999, 2003	2	18.3 (2003)
Silver Creek	Below Lake Creek confluence	16.5	16.0	1999, 2001, 2003	1	16.0 (2001,2003)



Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average temp. exceeded 16.0°C (#)	Highest Maximum 7-day average temp. during monitoring period (°C (Year))
Lake Creek	Near confluence with Silver Ck	17.5	16.9	1999, 2003	2	16.9 (2003)
Silver Creek	About 1 mile from Cowlitz R. confluence	17.5	16.9	1992, 1995, 1997-2003	9	18.3 (1998)
Siler Creek	About 2.5 miles from Cowlitz R.	*	*	1996,2002	0	15.3 (1996)

Upper Nisqually River Watershed Stream Temperatures

Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average temp. exceeded 16.0°C (#)	Highest Maximum 7-day average temp. during monitoring period (°C (Year))
Big Creek (Nisqually R trib)	3.5 miles above Catt Ck confluence	*	*	1997, 2002	0	14.6 (2002)
Berry Creek (Nisqually R trib)	At confl. w/ Nisaually R	15.8	15.2	1997, 2003	2	15.2 (2003)
Copper Creek	0.2 miles from Nisqually R	12.6	12.2	1997, 2003	0	12.6 (1997)



Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average temp. exceeded 16.0°C (#)	Highest Maximum 7-day average temp. during monitoring period (°C (Year))
	confluence					
Catt Creek (Big Ck trib)	3 miles above Big Ck confl.	17.8	17.1	1996,1999, 2001-03	4	17.1 (2003)
Catt Creek (Big Ck trib)	6 miles above Big Ck confl.	12.9	12.4	2000, 2003	0	12.5 (2000)
South Catt Creek	About river mile 0.3	15.5	14.8	2000, 2003	2	14.8 (2003)
East Creek (Nisqually R trib)	4.5 miles above Nisqually R. confluence	19.7	19.0	2002-2003	2	19.0 (2003)
Lake Creek	At confluence w/ W.F.Little Nisqually R	*	*	2002	1	13.9 (2002)
West Fork Little Nisqually River	At confluence w/ Lake Ck	*	*	2002	1	17.7 (2002)
Winston Creek	At confluence w/ W.F.Little Nisqually R	13.3	12.9	2003	1	13.5 (2002)



Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average temp. exceeded 16.0°C (#)	Highest Maximum 7-day average temp. during monitoring period (°C (Year))
West Fork Little Nisqually River	At confl. w/ Winston Ck	18.6	17.9	2002-2003	2	18.1 (2002)
West Fork Little Nisqually River	Above confl. w/ Hiawatha Ck	16.7	16.1	2003	1	16.1 (2003)
Hiawatha Creek	At confl. w/ Little Nisqually R	16.8	16.0	2001-2003	3	16.0 (2003)
Spencer Creek	At confluence w/ Little Nisqually R	13.8	13.3	2002-2003	2	13.5 (2002)
Little Nisqually River	At confluence w/ Wildcat Ck	17.9	17.3	2002-2003	2	17.3 (2003)
Wildcat Creek	At confluence w/ Little Nisqually R	14.9	14.5	2002-2003	2	14.7 (2002)



Upper Lewis River Watershed Stream Temperatures

Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average exceeded 16.0°C (#)	Highest Maximum 7-day ave. during monitoring period (°C (Year))
Lewis River	Above Quartz Creek	15.4	14.8	1999-2003	0	15.4 (2001)
Quartz Creek	Above Platinum Creek	18.5	17.9	2000-2003	3	17.9 (2003)
Quartz Creek	Below Platinum Creek	18.7	18.0	1997-2003	5	18.0 (2003)
Alec Creek	Above Lewis River	15.1	14.5	2000, 2003	0	14.5 (2003)
Lewis River	Above Cussed Hollow Ck	*	*	1996-1997	1	17.0 (1996)
Lewis River	Below Cussed Hollow Ck	18.9	18.1	1998-1999 2002-2003	2	18.1 (2003)
Lewis River	Above Big Creek	18.5	17.8	2001-2003	3	18.5 (2001)
Rush Creek	Above Meadows Creek	11.7	11.1	1996,1999-2000, 2003	0	14.7 (1996)
Lewis River	Below Rush Creek	*	*	1997	1	18.8 (1997)
Lewis River	Above Curly Creek	17.3	16.6	1997-2000 2002, 2003	5	19.3 (1998)



Muddy River and Swift Reservoir Watershed Stream Temperatures

Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years maximum 7-day average exceeded 16.0°C (#)	Highest Maximum 7-day ave. during monitoring period (°C (Year))
Clearwater Creek	8 miles above Muddy River	18.2	17.8	1996-1999 2001-2003	5	18.2 (1998)
Muddy River	Above Clear Creek confluence	21.0	20.0	1996-2003	8	21.9 (1996)
Clear Creek	Near confl. w/ Muddy River	18.2	17.9	1997-2003	7	18.0 (1998)
Muddy River	Below Clear Creek confluence	21.8	20.8	2001-2003	3	21.1 (2001)
Pine Creek	0.5 Mi. above Lewis River	15.0	14.7	2002, 2003	0	14.7 (2003)

East Fork Lewis River Watershed Stream Temperatures

Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average temp. exceeded 16.0°C (#)	Highest Maximum 7-day ave. during monitoring period (°C (Year))
East Fork Lewis River	Above Green Fork	18.1	17.3	1999-2003	4	17.3 (2003)
Green Fork	1 mile above East Fork	15.0	14.4	1996-1999 2001-2003	0	15.5 (1998)
East Fork Lewis River	Just Below Green Fork	*	*	2001-2002	0	15.9 (2002)
East Fork Lewis River	Below Little Creek	17.4	16.4	1999-2001 2003	2	17.2 (2000)
East Fork Lewis River	Below McKinley Creek	*	*	1996-1998	3	17.2 (1998)



Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average temp. exceeded 16.0°C (#)	Highest Maximum 7-day ave. during monitoring period (°C (Year))
East Fork Lewis River	Just Above Slide Creek	*	*	2001-2002	1	16.7 (2001)
Slide Creek	¼ Miles above East Fork	*	*	2001-2002	0	15.8 (2001)
East Fork Lewis River*	Below Slide Creek	*	*	2001-2002	2	17.6 (2001)
East Fork Lewis River	Below Sunset Falls Campground	19.7	18.8	2001-2003	2	18.8 (2003)
Copper Creek	Above Bolin Creek	*	*	1996-2002	4	17.2 (2002)
East Fork Lewis River	Above Niccolls Creek	20.7	19.8	1997, 1999-2003	6	19.8 (2003)

Yale Reservoir and Merwin Lake Watersheds Stream Temperatures

Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average temp. exceeded 16.0°C (#)	Highest Maximum 7-day ave. during monitoring period (°C (Year))
Siouxon Creek	Below West Creek	18.8	18.2	1996-2000 2003	5	18.2 (1997,2003)
Canyon Creek	Above Jake's Creek	*	*	2001-2002	0	12.4 (2001)
Canyon Creek	Above Big Rock Creek	16.5	15.9	1997-1998 2001-2003	0	15.9 (2003)



Wind River Watershed Stream Temperatures

Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average exceeded 16.0°C (#)	Highest Maximum 7-day ave. during monitoring period (°C (Year))
Wind River Headwaters	<i>Above Pete's Gulch</i>	*		1998-2002	0	16.0 (2002)
Pete's Gulch	<i>Above confl w/ Wind River</i>	*		1999-2002	0	15.3 (2001)
Wind River	<i>Below Paradise Creek</i>	*		1999-2002	3	16.8 (2001,2002)
Wind River	<i>Above Falls Creek</i>	*		1993 1999-2002	4	16.8 (2001)
Falls Creek	Above confl. w/ Wind River	15.1	14.3	1998-2003	1	16.2 (2001)
Trapper Creek	River mile 1.8	15.8	15.4	1995-1997 1999-2003	0	15.4 (2003)
Wind River Baseline	Below Trapper Creek	19.1	18.5	1995-2000 2002-2003	4	18.5 (2003)
Wind River	Above Trout Creek	18.7	18.4	2003	1	18.4 (2003)
Trout Creek	Above Crater Creek	8.0	8.0	2003	0	8.0 (2003)
Crater Creek	Above Trout Creek	19.2	18.6	2003	1	18.6 (2003)
Compass Creek	River mile 2.1	16.5	15.9	2002-03	0	15.9 (2003)
Compass Creek	Above Trout Creek	15.6	15.3	2003	0	15.3 (2003)
Trout Creek (East Fork)	Above Trout Creek	20.2	18.8	2003	1	18.8 (2003)
Layout Creek	River mile 2.0	15.6	15.2	2003	0	15.2 (2003)
Layout Creek	Above Trout Creek	22.9	22.4	2003	1	22.4 (2003)
Trout Creek	Below Layout Creek	18.4	17.9	2003	1	17.9 (2003)
Trout Creek	Below Planting Creek	21.0	20.3	2003	1	20.3 (2003)
Trout Creek Baseline	Above Hemlock Lake	20.6	19.8	1995-2000 2002-03	8	22.1 (1998)
Trout Creek	Below Hemlock Lake	24.8	23.8	2002-03	2	23.8 (2003)
Trout Creek	Above Martha	23.7	23.0	2002-03	2	23.0 (2003)



Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average exceeded 16.0°C (#)	Highest Maximum 7-day ave. during monitoring period (°C (Year))
	Creek					
Wind River	Below Trout Creek	18.3	17.5	2002-03	1	17.5 (2003)
Panther Creek Baseline	River mile 6.5	12.4	12.0	1996-2003	0	12.3 (2001)
Bear Creek Baseline	River mile 2.8	15.3	15.0	1977-2003	1	17.1 (1998)

Tilton River Watershed Stream Temperatures

Stream Name	Monitoring location	Maximum temp. in 2003 (°C)	Maximum 7-day average temp. in 2003 (°C)	Years monitored	Years Maximum 7-day average temp. exceeded 16.0°C (#)	Highest Maximum 7-day average temp. during monitoring period (°C (Year))
Tumble Creek	Near confluence of Wallanding Creek	16.4	16.1	1995, 1996, 1999-2003	3	16.3 (1995)

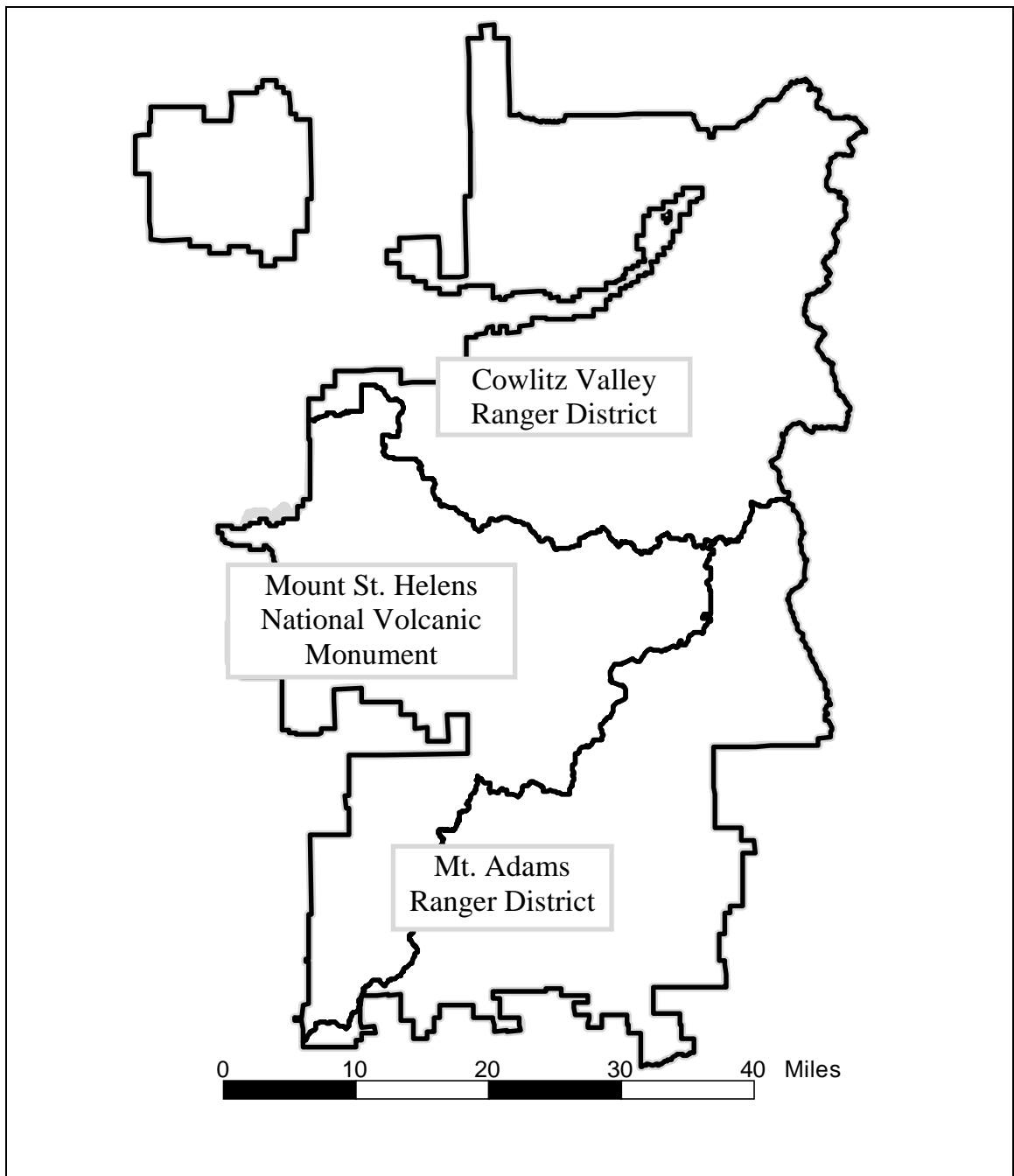
Bold denotes site exceeded temperature standard during 2003.



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