

# Partnership for the Umpqua Rivers



## Appendix B: Field Data

Supplemental Data For  
Report

Water Temperature Variability on the  
Lower Umpqua River

December, 2010





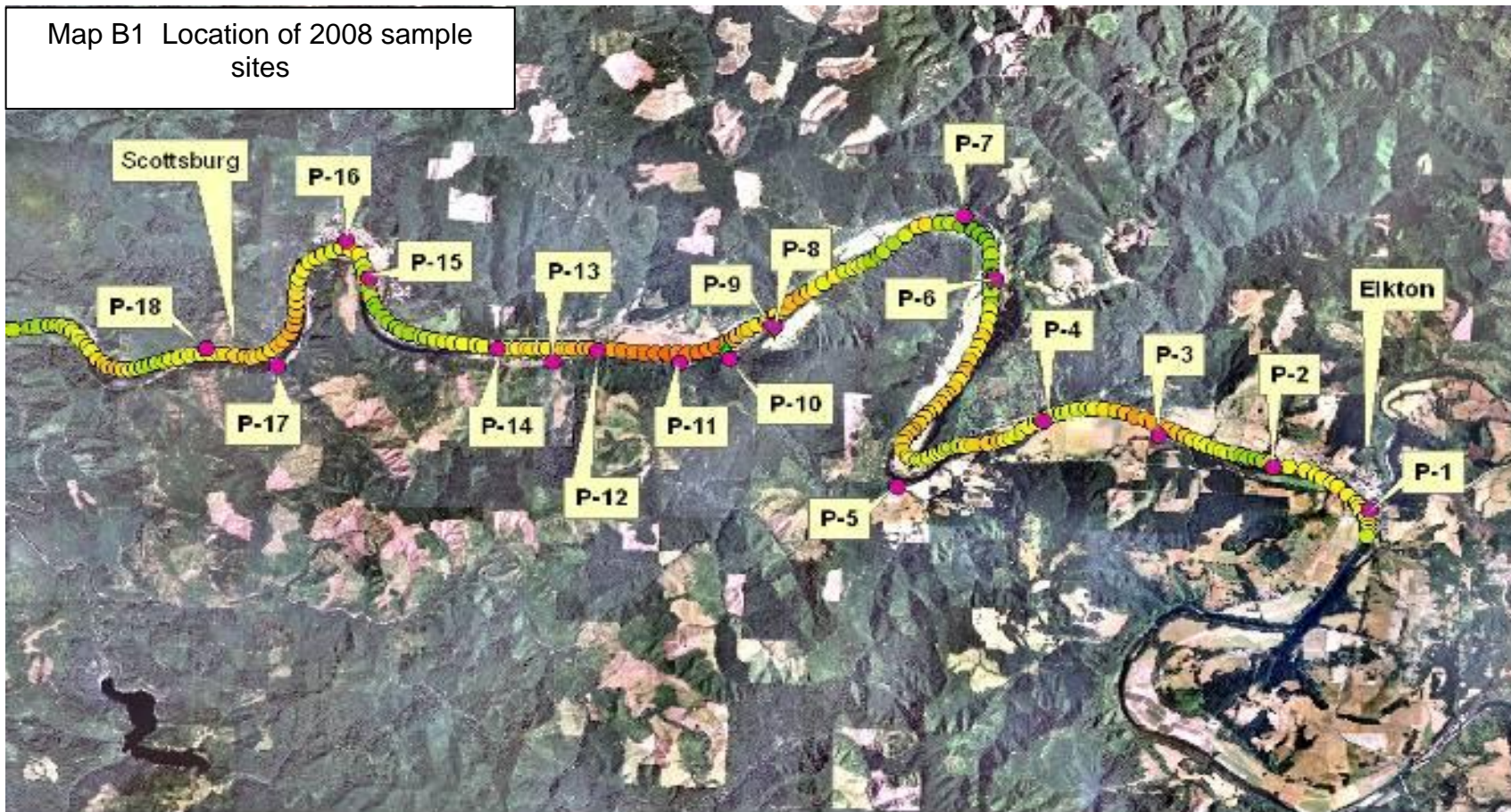
# Table of Contents

## Field data for the project sites

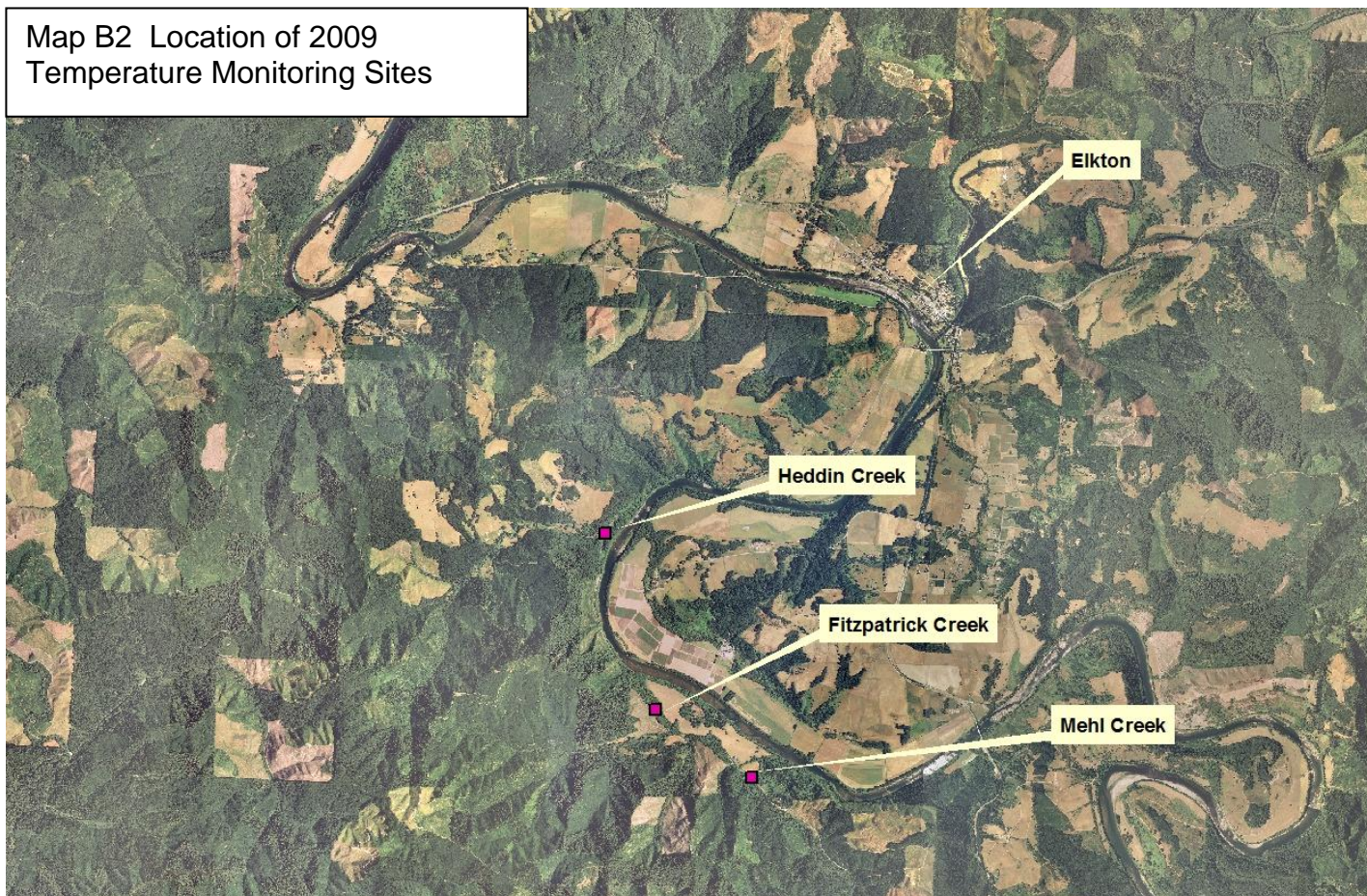
Appendix B: Field Data .....	1
Table of Contents .....	1
Appendix B: Field Data .....	1
Table B1 2008 Field Data Sheet 1 .....	3
P1 Elk Creek Boat Ramp Area .....	6
P-2 Umpqua River Below Elk Ck .....	8
P-3 Mouth of Hart Creek .....	9
P-4 Umpqua River below Hart Ck.....	11
P-5 Unnamed tributary.....	12
P-6 Umpqua River Below Elk Creek .....	14
P-7 Umpqua River Near Gold Creek .....	15
P- 8 Umpqua River .....	16
P- 9 Sawyer Creek.....	16
P-10 Paradise Creek Area .....	17
P-11 Stony Brook Area .....	21
P- 12 Scott Creek Boat Ramp.....	23
P- 13 Umpqua River below Scotts Creek .....	25
P-14 Butler Creek Area.....	27
P-15 Lutsinger Ck .....	31
P-16 Umpqua River below Lutsinger Creek.....	34
P-17 Weatherly Ck Area .....	36
P-18 Umpqua River near Unnamed Tributary.....	39
P-19 Burchard Ck Area.....	40
P-20 Golden Creek .....	42
P-21 Wells Creek.....	43
P-22 Deep Hole Umpqua River .....	45
P-23 Jimmy Creek .....	45
P-24 Little Mill Creek Area .....	46
P-25 Scottsburg Park Ramp Area.....	48
R-1 Upper Weatherly Creek.....	49
R-2 Camp Creek @ Mouth .....	50
2009 Temperature Sites .....	51

## Appendix B: Field Data

This appendix contains information about the individual sample sites as well as a table of the entire 2008 field measurements. In addition to the river temperature sampling, temperature and other water quality data were sampled on the river and at the mouth of selected tributaries. Map B1 shows the general location of the sample sites.



In the summer of 2009 temperature dataloggers were deployed at Butler Creek (P14), Lutsinger Creek (P15) and Weatherly Creek (P17). Also, new sites were measured at Heddin Creek, Fitzpatrick Creek and Mehl Creek as shown in Map B2.



**Table B1 2008 Field Data Sheet 1**

Map #	Site	DateTime	E. coli mpn/100ml	NIST Temp °F	Temp °C	SpCond uS/cm	Depth FT	pH	Turbidity NTU	ODO %	ODO Conc mg/l	Comments
1	Elk Creek	7/17/2008 9:31	13.4		21.41	139		7.75	0.5	93.3	8.25	100 yds upstream of mouth
2	Umpqua River Below Elk Ck Ramp	9/15/2008 9:10	3	69.76	20.68	74	0	7.76	-0.2	98.9	8.87	Umpqua River below Elk Creek Boat Ramp
3	Hart Creek	7/17/2008 10:15	435.2		13.67	76		7.53	33.3	93.7	9.73	near mouth
4	Umpqua River Surface	7/17/2008 10:36	2		23.5	68	0.348	7.82	1	99.3	8.44	Off of Hart Creek
4	Umpqua River Bottom	7/17/2008 10:38			23.51	68	6.386	7.83	0.9	98.9	8.41	Off of Hart Creek
4	Umpqua River - cross channel	9/15/08		69.94			2.80					near right upstream bank
4	spring on left upstream bank	9/15/08		57.40								
5	Unnamed Tributary	7/17/2008 11:06			15.04	51	0.181	7.78	14.2	88.6	8.93	John or Paper
5	Unnamed Trib left (ds) bank	9/15/2008 11:11	26		12.77	109		7.62	5.7	77.9	8.24	Unnamed trib left (looking downstream) bank, Vince called John, just a trickle
6	Umpqua River	9/15/2008 11:36	3		21.30	74		8.11	108	106.5	9.44	Umpqua River mid-channel
6	Umpqua River - cross channel	9/15/08		70.41			1.75					Right upstream shore
7	Umpqua River Surface	7/17/2008 12:34			23.82	68	0.193	7.91	0.8	100.2	8.46	Near Gould Creek
7	Umpqua River Bottom	7/17/2008 12:38			23.77	68	32.811	7.86	1	99.1	8.38	Near Gould Creek
7	Umpqua River Surface	7/17/2008 11:50	53.8		23.54	67	0.147	7.86	0.9	97.7	8.29	
7	Umpqua River Bottom	7/17/2008 11:53			23.54	68	5.983	7.86	0.9	98.1	8.33	
9	Sawyer Creek	7/17/2008 13:10	253.9		21.1	97	0.012	7.59	5.8	107.6	9.57	
10	Paradise Creek	7/17/2008 14:13	40.2		21.27	60	0.116	8.73	2.4	115.9	10.28	
10	Paradise Creek	7/17/2008 14:14	52.0		21.32	60	0.112	8.74	1.5	116.1	10.28	Duplicate
10	Umpqua River Above Paradise Creek	9/15/2008 14:00	1		20.91	74		8.08	-0.4	99.3	8.86	Umpqua River mid-channel above Paradise Creek
10	Umpqua River Below Paradise Creek	9/15/2008 14:40	6 & 54		21.34	74		8.08	-0.6	99.5	8.81	Umpqua River mid-channel below Paradise Creek
10	Umpqua River - cross channel	9/15/2008		70.20			3.7					Just below Paradise Creek
11	Stony Brook	7/17/2008 15:04			25.8	67	0.439	8.22	18	113.4	9.23	From boat at log where temperature logger placed
11	Stony Brook	7/17/2008 15:09			24.98	67	1.863	8.1	5	119.1	9.85	Middle of pool near far bank
11	Stony Brook	7/17/2008 15:23			16.47	45	-0.07	7.74	1.8	95.8	9.36	In little brook above creek
11	Umpqua River @ Stony Brook	7/17/2008 15:51	4.1		24.24	68	0.725	8.12	0.8	102.9	8.62	Off of Little Stony Brook
12	Umpqua off Scott Ramp - Surface	7/18/2008 8:58			22.69	68	0.288	7.64	0.8	102.2	8.82	
12	Umpqua off Scott Ramp - Bottom	7/18/2008 9:03			22.69	68	3.71	7.66	0.8	101.3	8.74	
12	Umpqua off Scott Ramp - Bottom	8/26/2008 9:29		71.42	21.6	75	3.52	7.93		100.4	8.84	2 data loggers placed
12	Umpqua at Scott Boat Ramp	7/18/2008 8:34			22.73	68	0.214	7.5	1	101.6	8.76	

**Table B1 2008 Field Data Sheet 2**

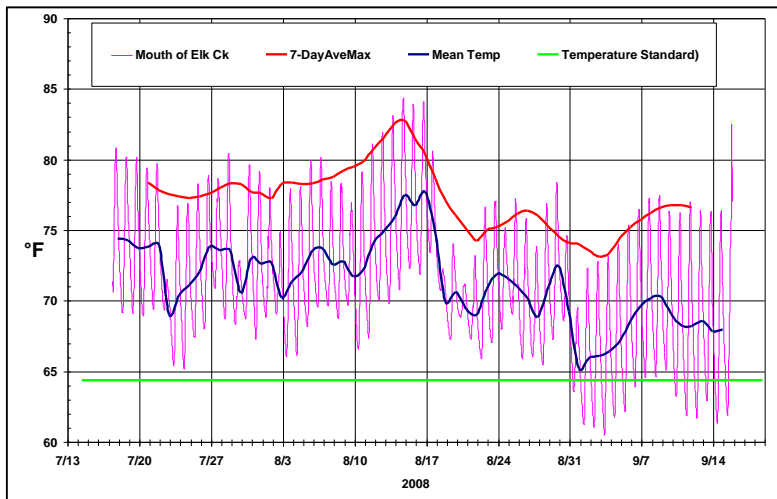
Map #	Site	DateTime	E. coli mpn/100ml	NIST Temp °F	Temp °C	SpCond uS/cm	Depth FT	pH	Turbidity NTU	ODO %	ODO Conc mg/l	Comments
13	UR below Scott Crk BR (X-Channel)	8/26/2008 9:41		71.35	21.5	75	4.62	7.94		99.1	8.75	Near Down Stream Left
13	UR below Scott Crk BR (X-Channel)	8/26/2008 9:46		71.30	21.57	75	4.20	7.95		96.8	8.53	
13	UR below Scott Crk BR (X-Channel)	8/26/2008 9:52		71.36	21.57	75	9.40	7.99		97.7	8.61	
13	UR below Scott Crk BR (X-Channel)	8/26/2008 9:59		71.47	21.63	75	10.84	8.05		98.3	8.65	Center Deep Channel
13	UR below Scott Crk BR (X-Channel)	8/26/2008 10:04		71.52	21.64	75	7.70	8.08		98.2	8.64	
13	UR below Scott Crk BR (X-Channel)	8/26/2008 10:23		71.88	21.77	75	1.45	8.22		100.7	8.85	
13	UR below Scott Crk BR (X-Channel)	8/26/2008 10:12		71.78	21.75	75	2.55	8.15		99	8.69	
13	UR below Scott Crk BR (X-Channel)	8/26/2008 10:20		72.10	21.97	75	1.60	8.28		104.4	9.13	Near Down Stream Right
14	Butler Creek	7/18/2008 10:09			22.5	68	1.422	7.62	0.5	104	9.01	Pond 50' from outflow outer edge along rocks
14	Butler Creek	7/18/2008 9:42	29.9		12.34	61	-0.027	7.58	1.4	97.8	10.46	Probe wiping took second sample
14	Butler Creek	7/18/2008 9:44	27.8		12.34	58	-0.024	7.56	1.8	97.9	10.47	Duplicate
14	Butler Creek	7/18/2008 9:58	22.1		12.36	62	0.114	7.51	2.3	98.1	10.48	
14	Butler Creek	7/18/2008 10:22			22.89	68	5.051	7.77	0.7	105.9	9.10	Far out edge of pond, drops off past
14	Butler Creek	7/18/2008 10:14			22.56	68	1.212	7.69	0.5	105	9.08	Pond 30' from outflow mid-pond
14	Umpqua off of Butler	7/18/2008 11:13	2		23.16	69	0.597	7.86	0.7	104	8.89	Surface
14	Umpqua off of Butler	7/18/2008 11:15			23.18	69	8.653	7.86	0.8	104	8.89	Bottom
14	Butler Creek Near Mouth	8/26/2008 10:49		55.91	13.03	0	0.40	8.08		90.4	9.52	Salmonid Smolts
14	Umpqua River at Butler Outlet	8/26/2008 11:01		65.44	18.4	73	1.90	7.69		90.9	8.54	Grid Start
14	Butler Creek Mouth	8/26/2008 10:48		55.66			0.20					
14	Umpqua River at Butler Outlet	8/26/2008 11:10		67.24	19.37	72	3.25	8.78		123.4	11.36	Heavy Algae Presence, Grid Point
14	Butler Creek Mouth 2	8/26/2008 10:51		55.79			0.20					
14	Umpqua River at Butler Outlet	8/26/2008 11:21		69.13	20.39	73	2.342	8.43		108.8	9.82	Grid Point
14	Umpqua River at Butler Outlet	8/26/2008 11:43		69.42	19.61	73	2.28	8.56		113	10.35	Heavy Algae Growth, Grid Point
14	Umpqua River at Butler Outlet	8/26/2008 11:27		70.03	21.36	72	3.27	8.51		109.8	9.72	Grid Point
14	Umpqua River at Butler Outlet	8/26/2008 11:40		69.53	20.71	73	3.40	8.47		110.3	9.89	Grid Point
14	Umpqua River at Butler Outlet	8/26/2008 11:46		68.65	19.35	73	2.40	8.63		118.3	10.89	Heavy Algae Growth, Grid Point
14	Umpqua River at Butler Outlet	8/26/2008 11:29		69.45	20.4	72	4.50	8.52		110.9	10.00	Grid Point
14	Umpqua River at Butler Outlet	8/26/2008 11:32		69.22	20.07	73	6.20	8.38		106.1	9.63	Grid Point
14	Umpqua River at Butler Outlet	8/26/2008 11:35		69.01	20.68	73	6.70	8.37		105.9	9.50	Grid Point
14	Umpqua River at Butler Outlet	8/26/2008 11:49		64.03	18.14	88	3.00	7.78		85.3	8.05	Grid Point
14	Umpqua River at Butler Outlet	8/26/2008 11:52		70.95	21.55	73	3.40	8.56		115.2	10.16	Grid End
14	Umpqua River at Butler Outlet	8/26/2008 12:25		72.76	22.35	76	7.50	8.45		106.9	9.28	Umpqua River Mid Channel

**Table B1 2008 Field Data Sheet 3**

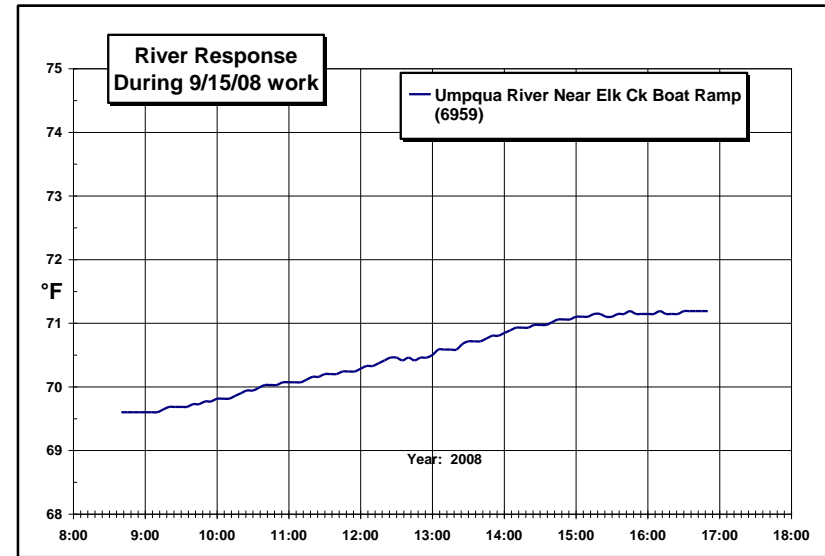
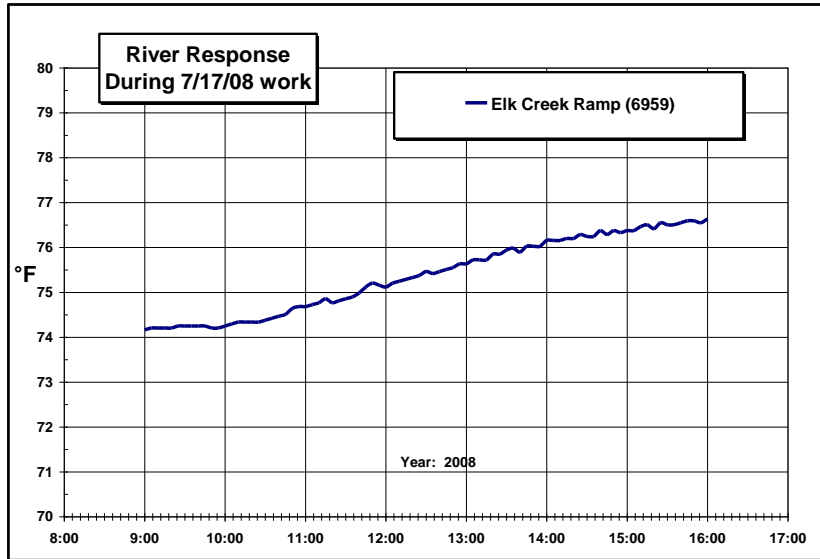
Map #	Site	DateTime	E. coli mpn/100ml	NIST Temp °F	Temp °C	SpCond uS/cm	Depth FT	pH	Turbidity NTU	ODO %	ODO Conc mg/l	Comments
15	Lutsinger Creek	7/18/2008 11:35	16		16.72	79	-0.032	7.63	1.1	102	9.92	
15	Mouth of Lutsinger	8/26/2008 15:02		74.48	23.31	76	3.40	8.65		109.8	9.37	Grid Point
15	Mouth of Lutsinger	8/26/2008 15:00		74.47	23.31	76	3.40	8.63		109.5	9.34	Grid Point
15	Mouth of Lutsinger	8/26/2008 15:09		67.87	18.63	85	0.60	8.07		94.7	8.85	Grid Point
16	.3 Mi Downstream of Lutsinger, DS-RB	8/26/2008 13:04		74.87	23.48	75	1.55	8.63		119.5	10.16	X-Section Begin
16	.3 Mi Downstream of Lutsinger	8/26/2008 13:14		73.58	22.81	76	6.00	8.6		108.5	9.34	X-Section Point
16	.3 Mi Downstream of Lutsinger	8/26/2008 13:18		73.49	22.79	76	6.55	8.58		108.2	9.32	X-Section End, Mid-Channel
16	.3 Mi Downstream of Lutsinger	8/26/2008 12:47		73.50	22.77	75	3.30	8.54		112	9.65	X-Section Point
16	.3 Mi Downstream of Lutsinger, DS-RB	8/26/2008 13:05										Data Logger in Mud Bank
17	Umpqua River, Chute Above Weatherly	8/26/2008 13:25		73.60	22.82	76	5.70	8.58		108.9	9.37	Begin Chute
17	Umpqua River, Chute Above Weatherly	8/26/2008 13:31		73.67	22.86	76	5.80	8.58		108.8	9.35	Chute Point
17	Umpqua River, Chute Above Weatherly	8/26/2008 13:36		73.77	22.91	76	7.40	8.6		109.1	9.37	Chute Point
17	Umpqua River, Chute Above Weatherly	8/26/2008 13:44		73.78	22.91	75	7.65	8.6		109.3	9.39	Chute Point
17	Weatherly	7/18/2008 12:11	980.4		18.89	73	0.581	7.59	5.8	104.4	9.70	40 yd upstream of mouth
17	Weatherly Creek	8/26/2008 14:22		69.33	20.49	75	-0.016	7.6		98.4	8.86	54 Ft from Mouth, 2nd Data Logger Placed
17	Umpqua River, Chute below Weatherly	8/26/2008 14:42			23.31	76	5.50	8.51		112.2	9.57	Chute Point
17	Umpqua River, Chute below Weatherly	8/26/2008 14:48		74.49	23.32	76	8.50	8.58		110.9	9.45	End Chute
18	Umpqua River off Unnamed Tribe	7/18/2008 13:16			23.95	69	0.411	8.03	1	107.7	9.07	Surface
18	Umpqua River off Unnamed Tribe	7/18/2008 13:19			24	69	8.155	8.03	0.9	107.9	9.08	Bottom
18	Unnamed Tribe	7/18/2008 12:47	143.9		15.18	64	0.122	7.73	1	101.4	10.18	below Weatherly
19	Burchard Creek	7/18/2008 13:36	547.5		15.91	52	0.014	7.71	1.4	99.8	9.87	
20	Golden Creek	7/18/2008 14:15	74.9		14.38	76	-0.091	7.66	9.3	88.3	9.02	
21	Wells Creek	7/18/2008 14:38	54.5		14.81	69	-0.037	7.45	1.3	95.3	9.65	
23	Jimmy Creek	7/18/2008 15:32	5.2		14.41	90	0.015	7.71	1.2	97.5	9.96	
24	Umpqua River off Little Mill	7/18/2008 16:15	1		24.5	68	0.447	8.08	0.6	110.4	9.20	Surface
24	Umpqua River off Little Mill	7/18/2008 16:18			24.52	68	6.332	8.19	0.6	112.1	9.35	Bottom
24	Little Mill Creek	7/18/2008 16:02	8.6		14.7	55	0.131	7.65	0.5	97.8	9.93	
25	Umpqua River at Scottburg Ramp	7/18/2008 0:00										



## P1 Elk Creek Boat Ramp Area



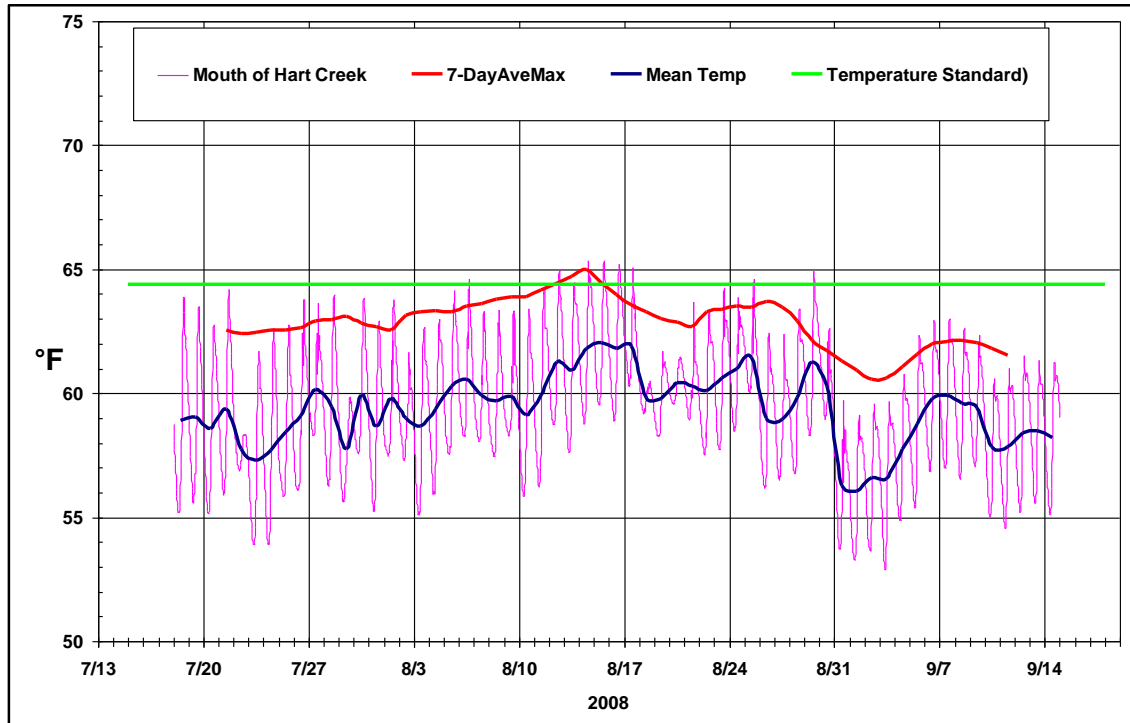
Data collected at 5-minute intervals during field sample to determine diurnal heating rate.



**P-2 Umpqua River Below Elk Ck**



### P-3 Mouth of Hart Creek



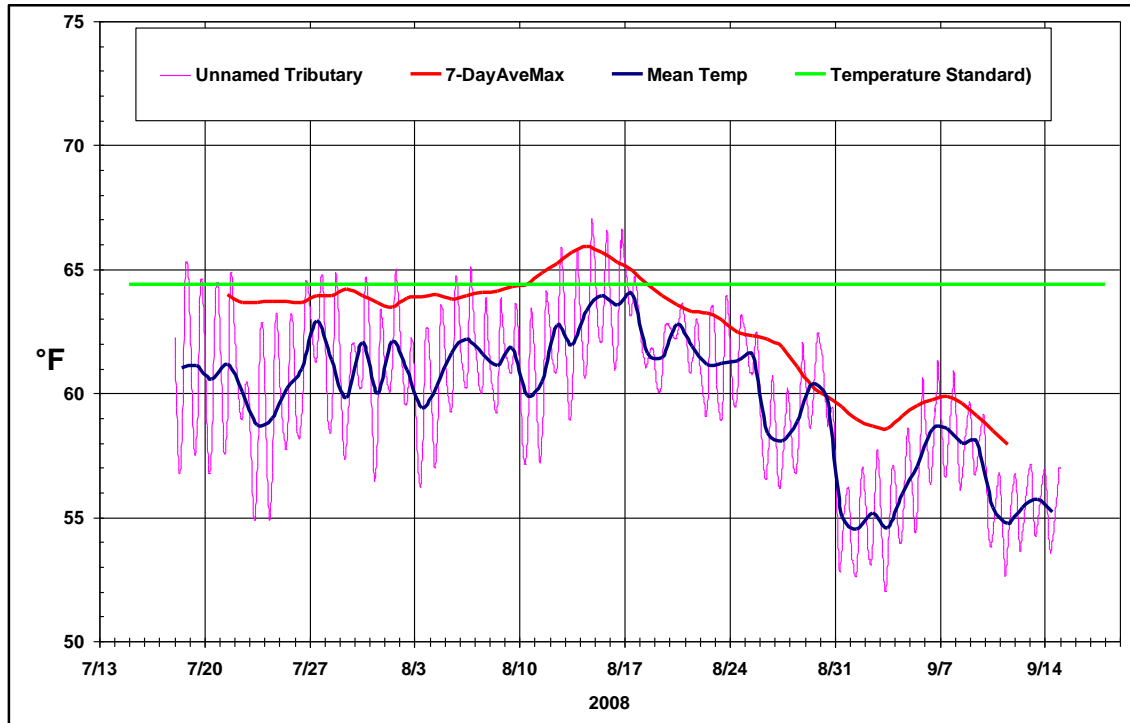


**P-4 Umpqua River below Hart Ck**



**Spring on DS Right Bank**

## P-5 Unnamed tributary





*Appendix B: Field Data*



**P-6 Umpqua River Below Elk Creek**  
**Photos taken 9/15/08**



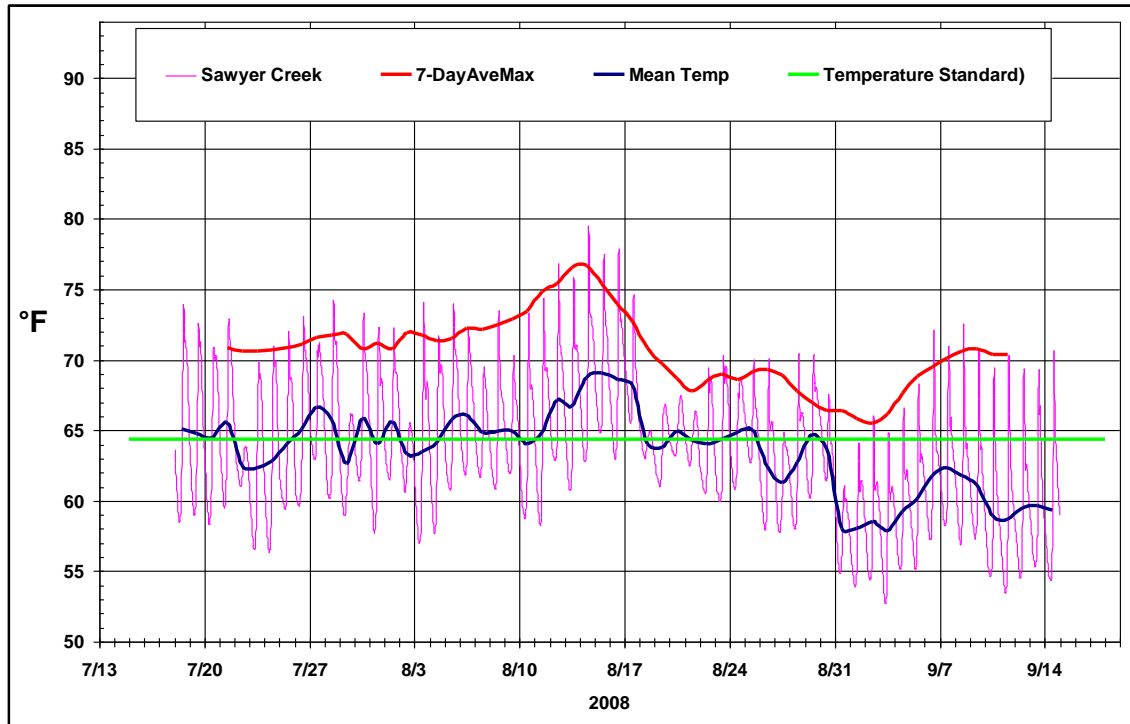
**P-7 Umpqua River Near Gold Creek**



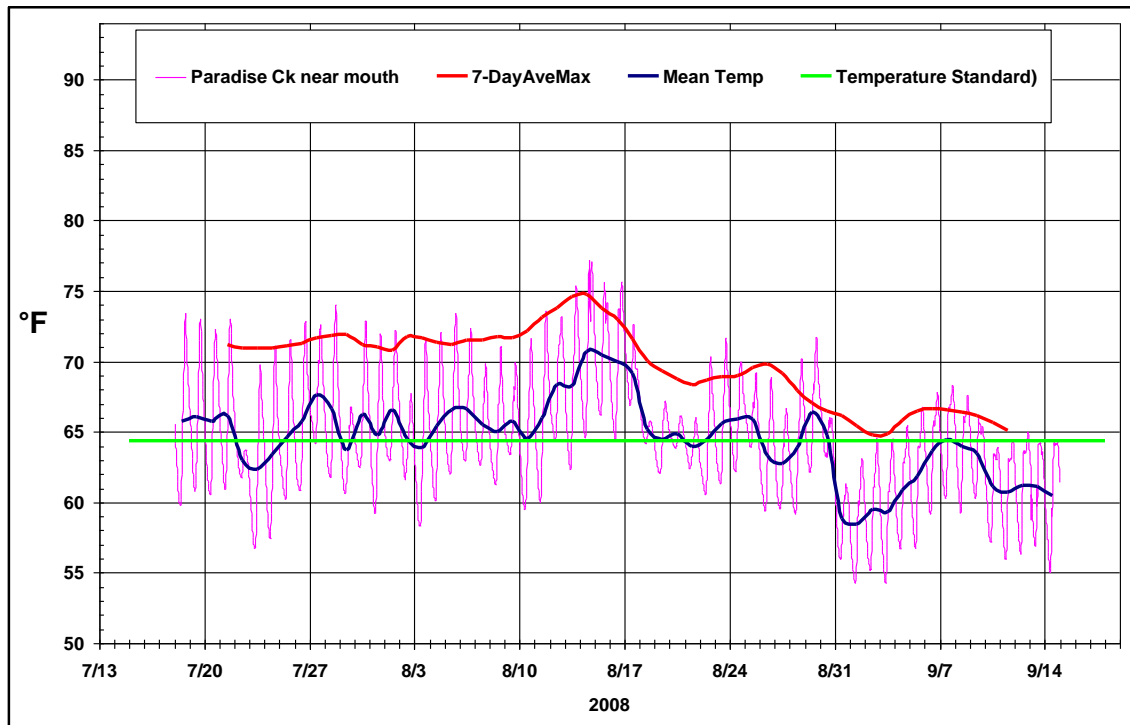
## P- 8 Umpqua River

No material

## P- 9 Sawyer Creek



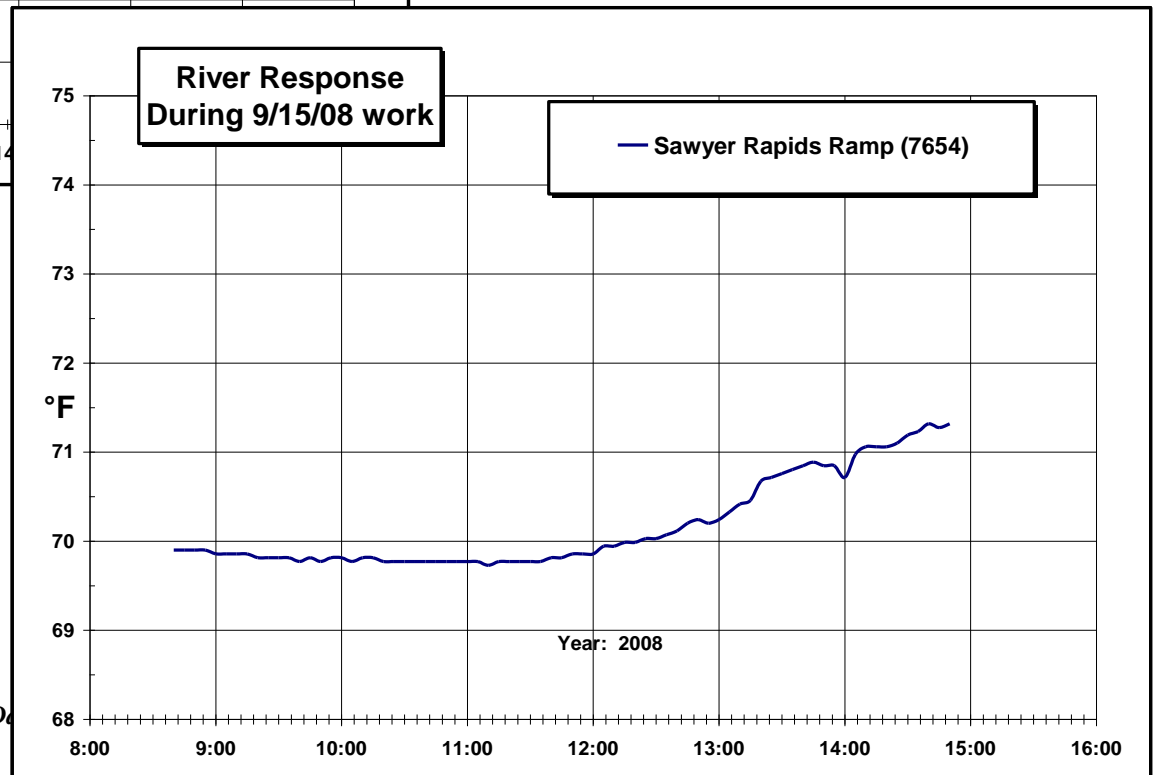
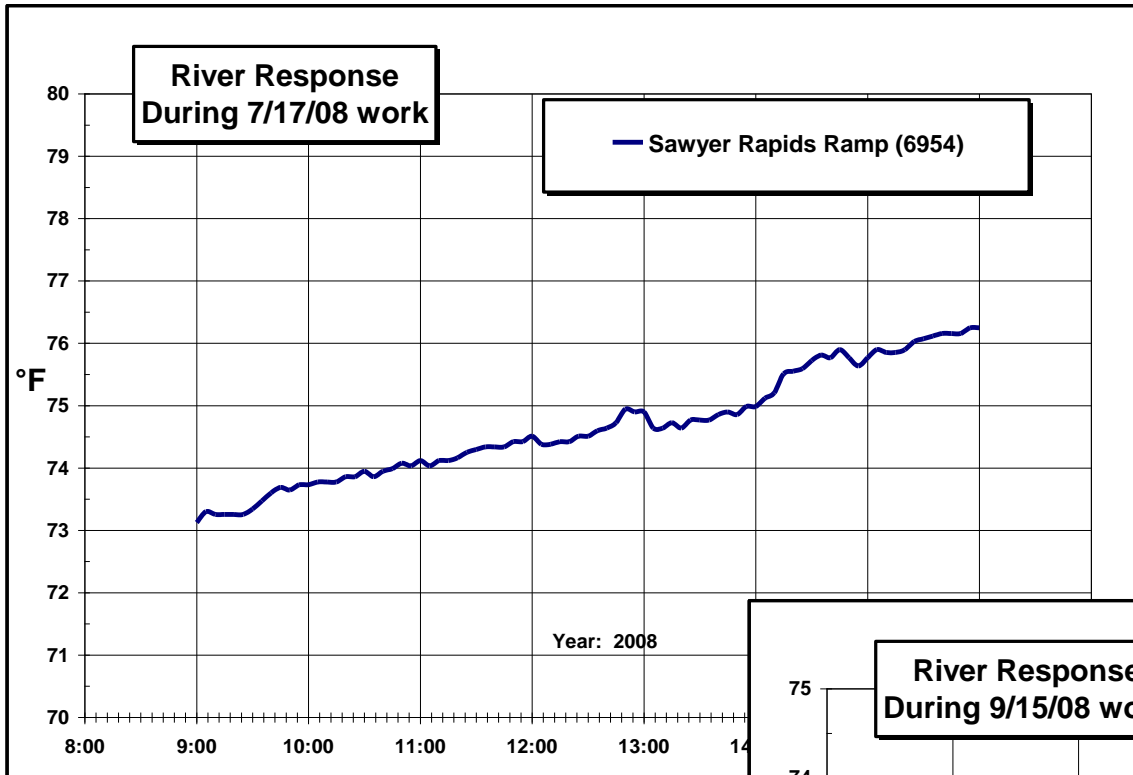
## P-10 Paradise Creek Area





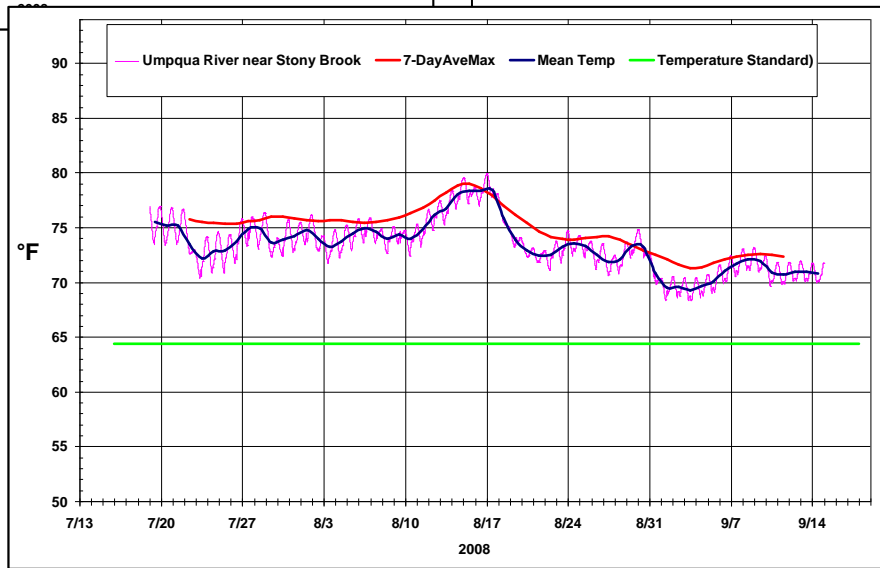
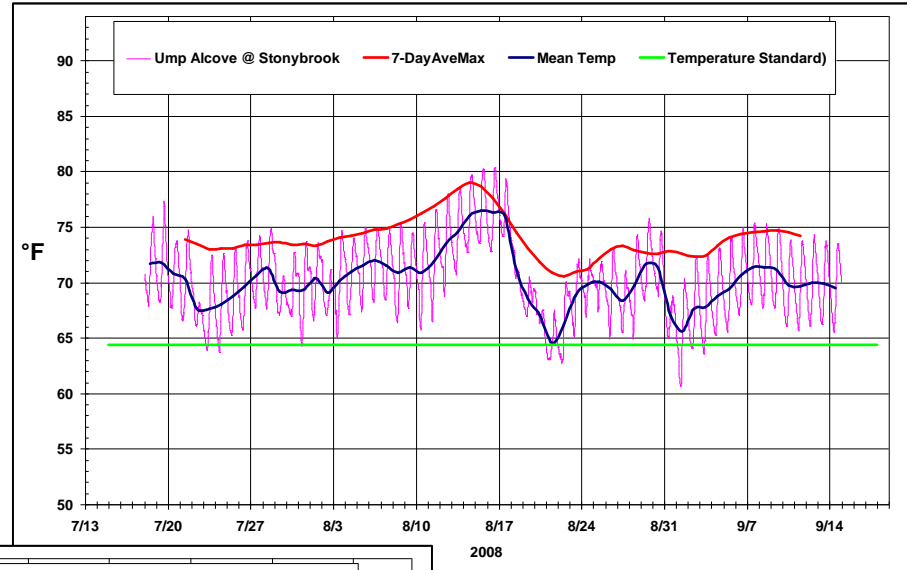
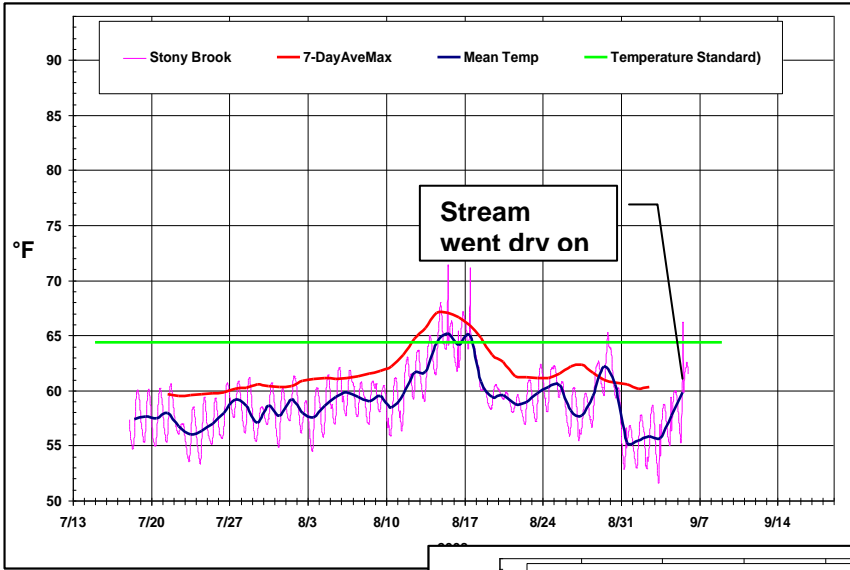
**Photo 7/17/08**

Sawyers Rapids Ramp is located across from paradise Creek and slightly downstream.





# P-11 Stony Brook Area

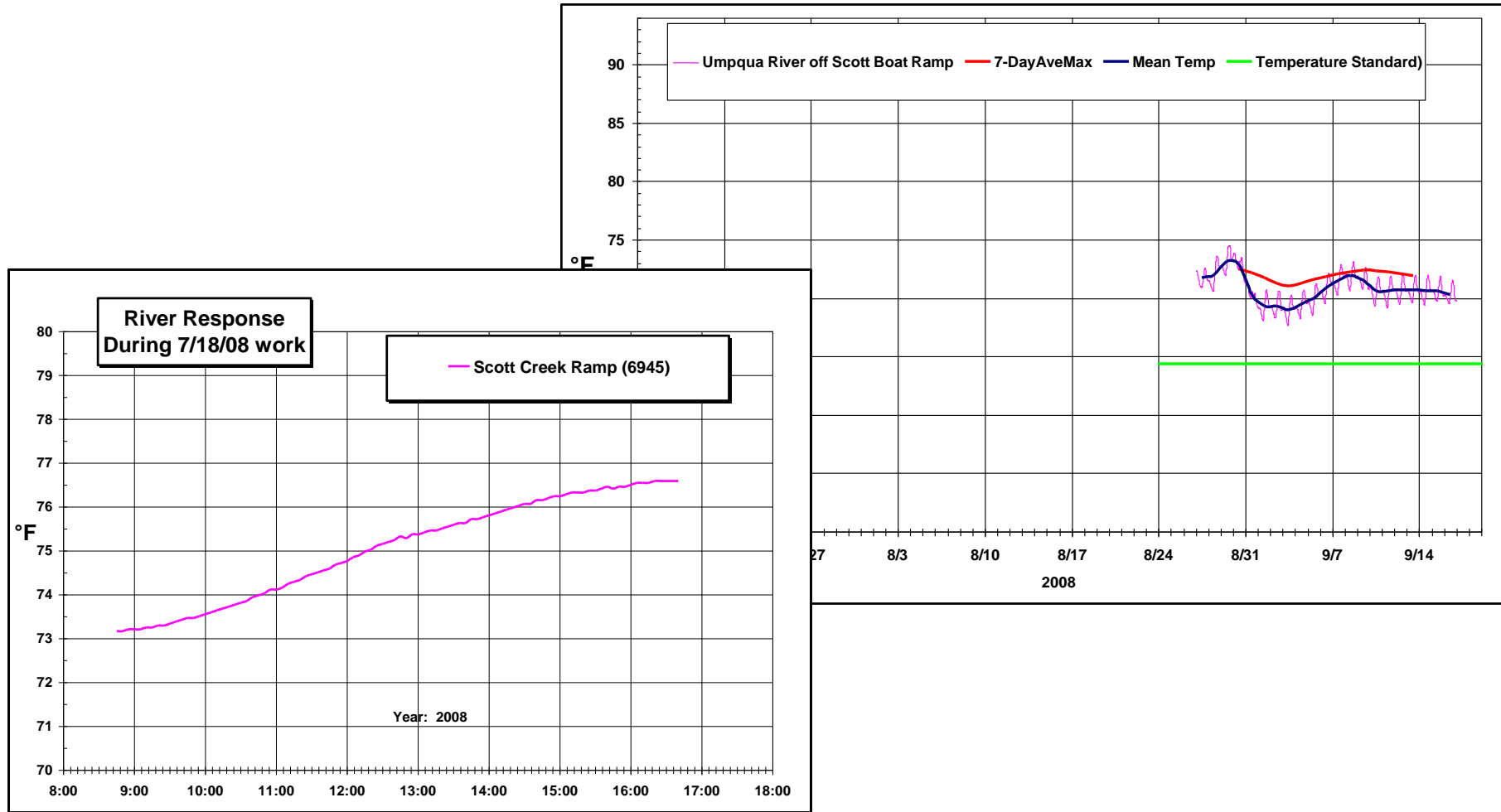






Umpqua River data

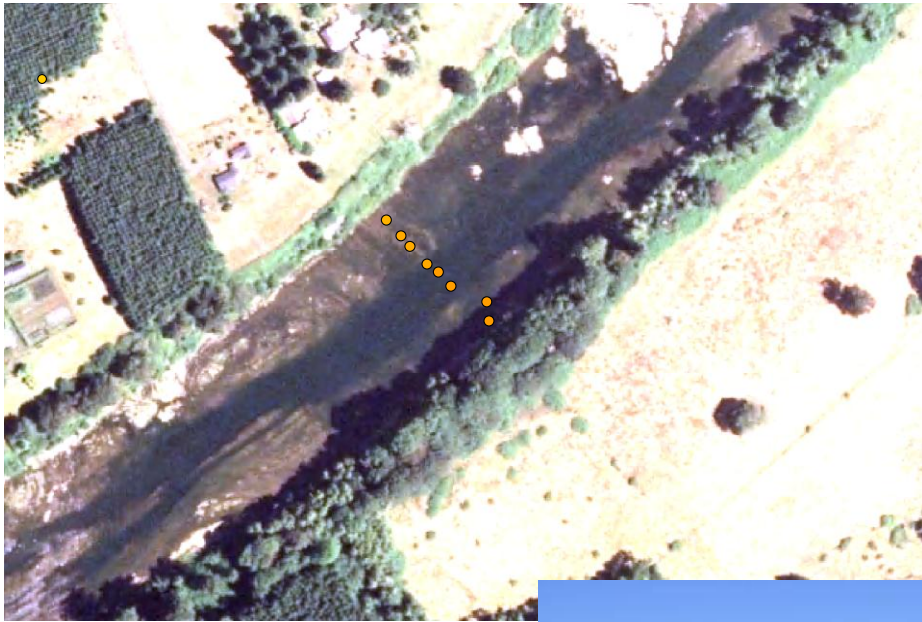
# P- 12 Scott Creek Boat Ramp

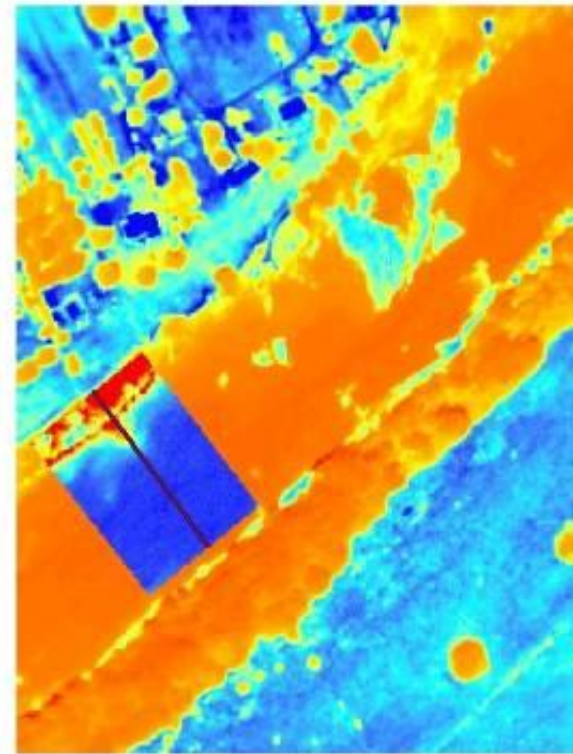
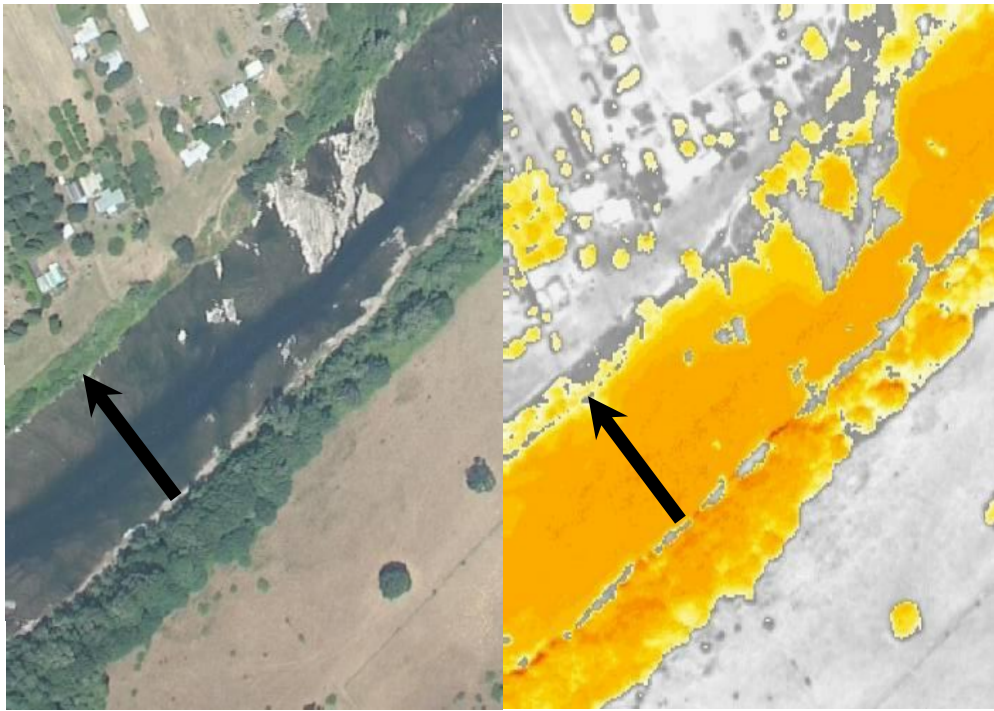




**Scott Ck Ramp data logger locations (2).**

**P- 13 Umpqua River below Scotts Creek**

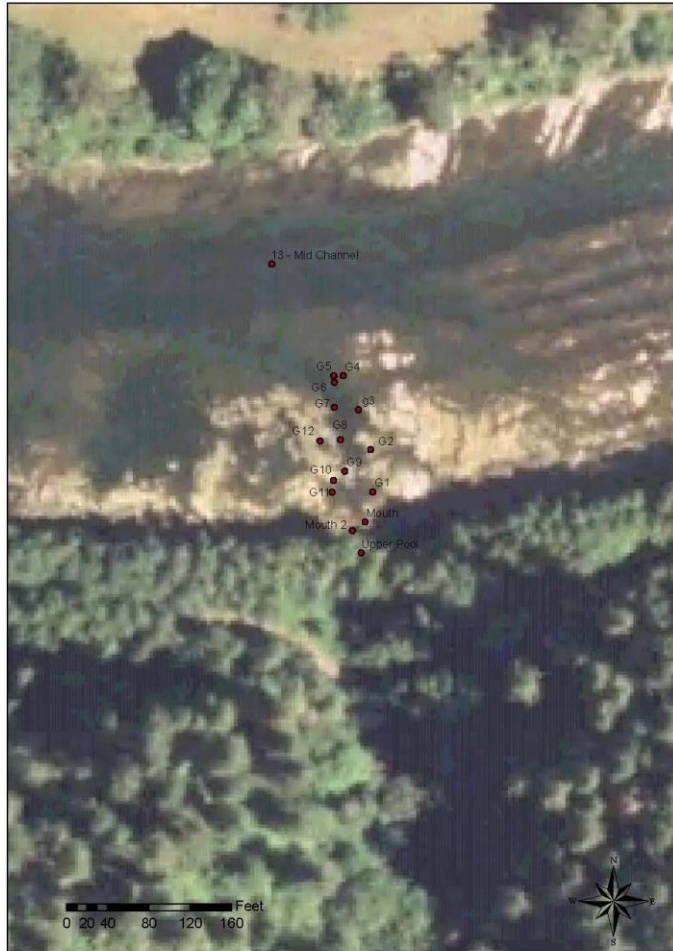




TIR photos and Grid data photo.  
Arrows and dots denote location of the cross-section data.

## P-14 Butler Creek Area

### Umpqua Temperature Study Mouth of Butler Creek





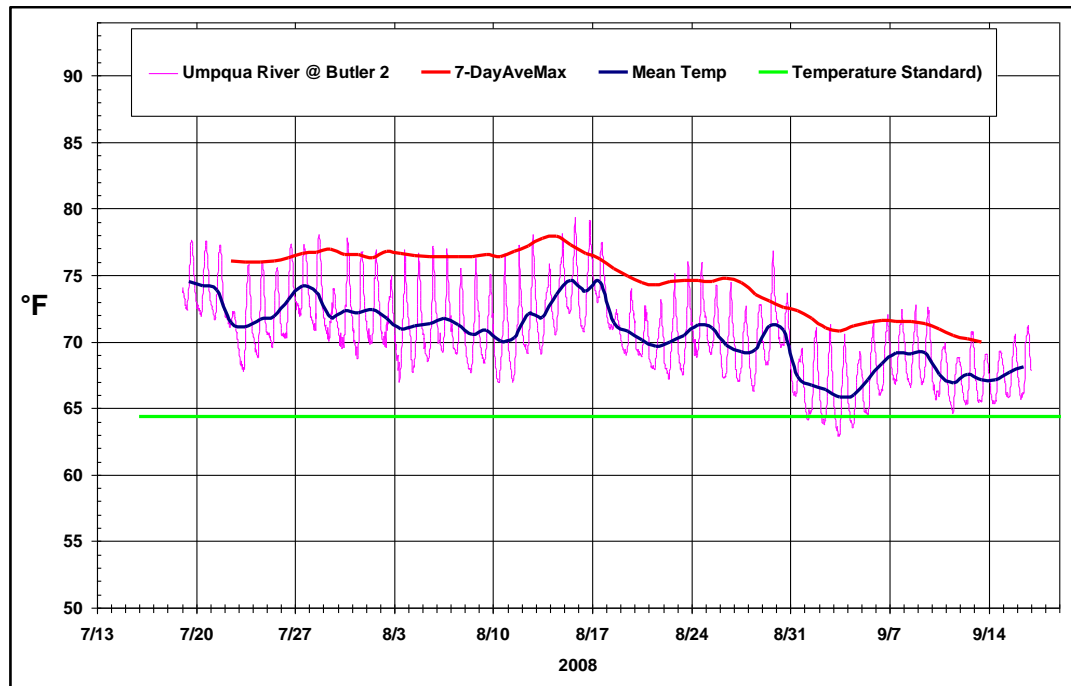
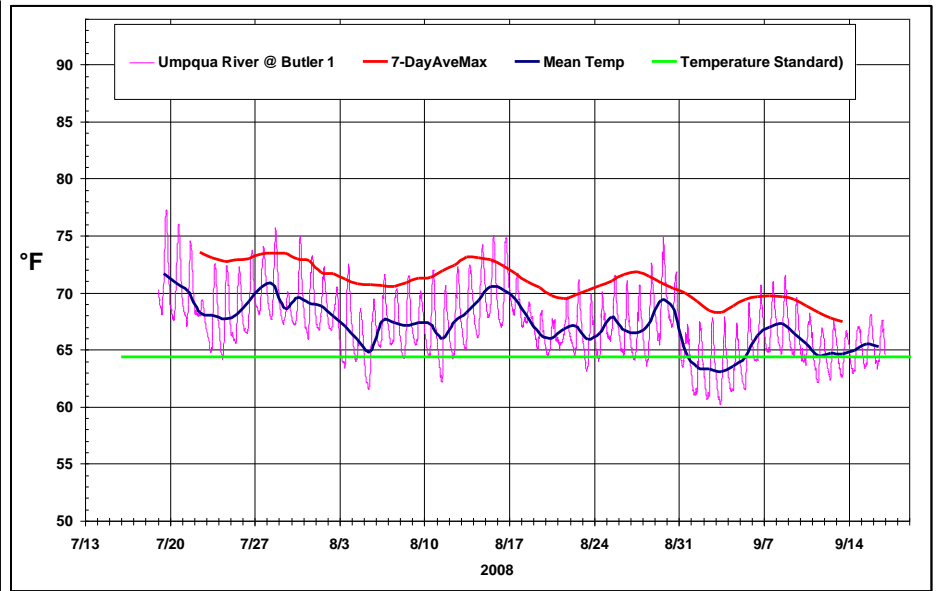
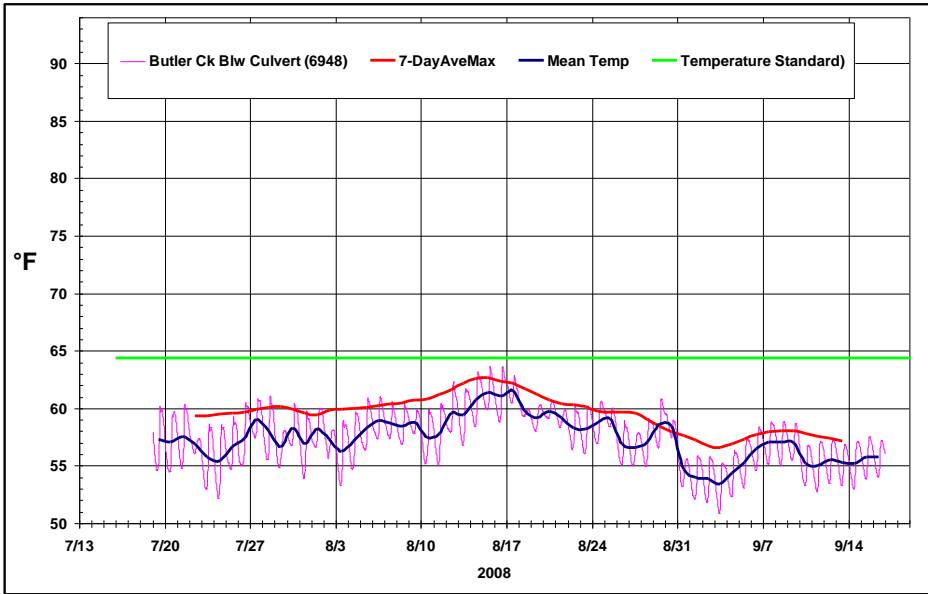
Butler Ck data logger location



Butler 1 data logger location

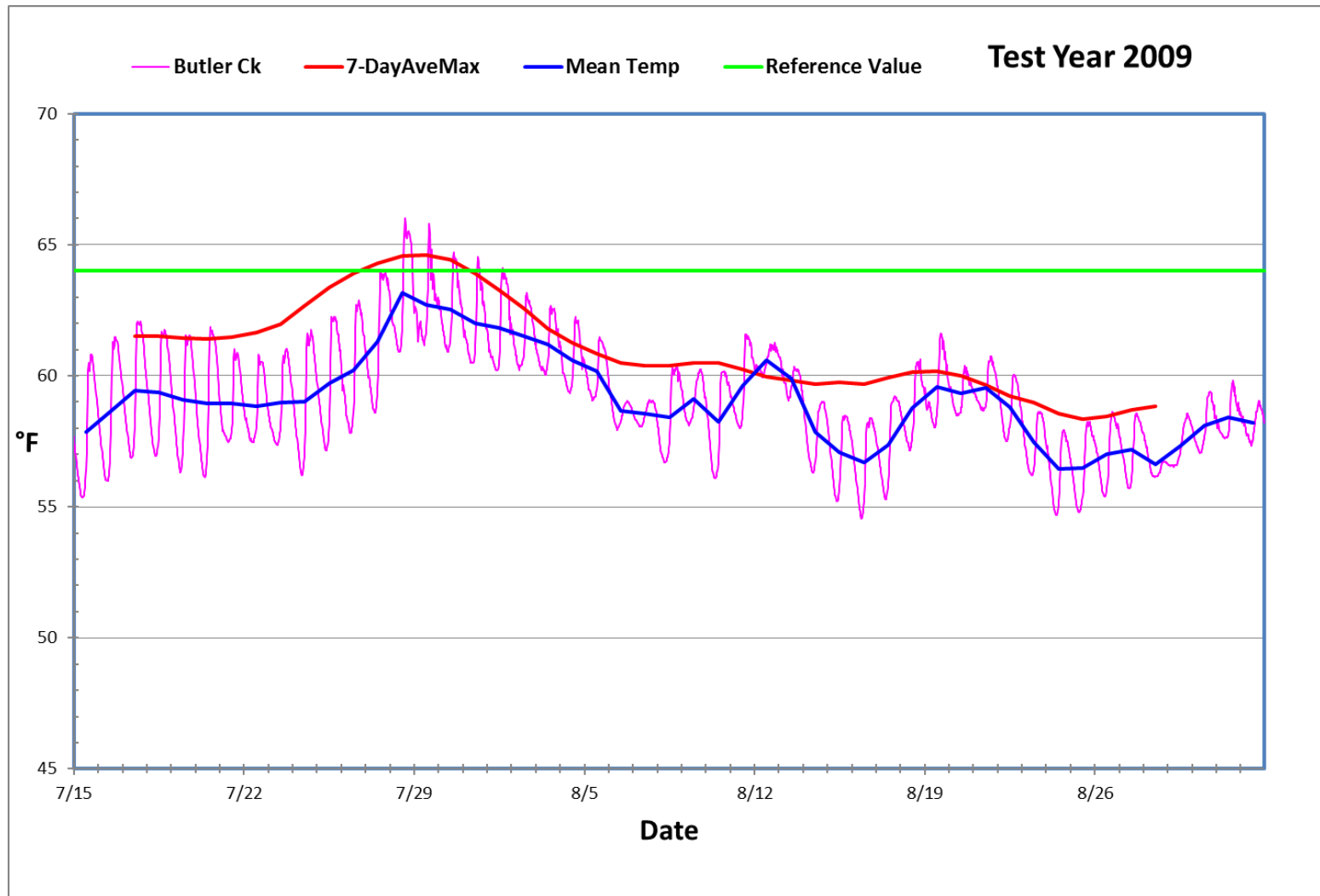
Photo 8/26/08





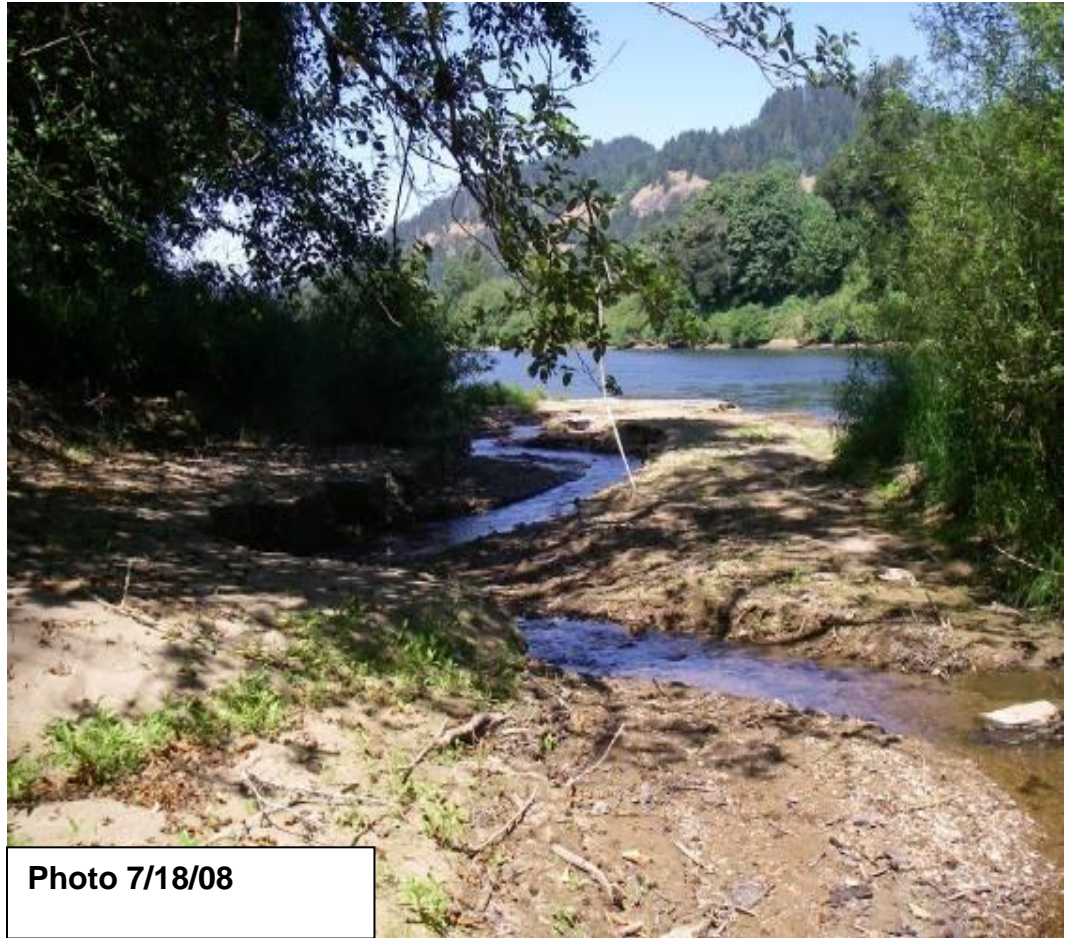
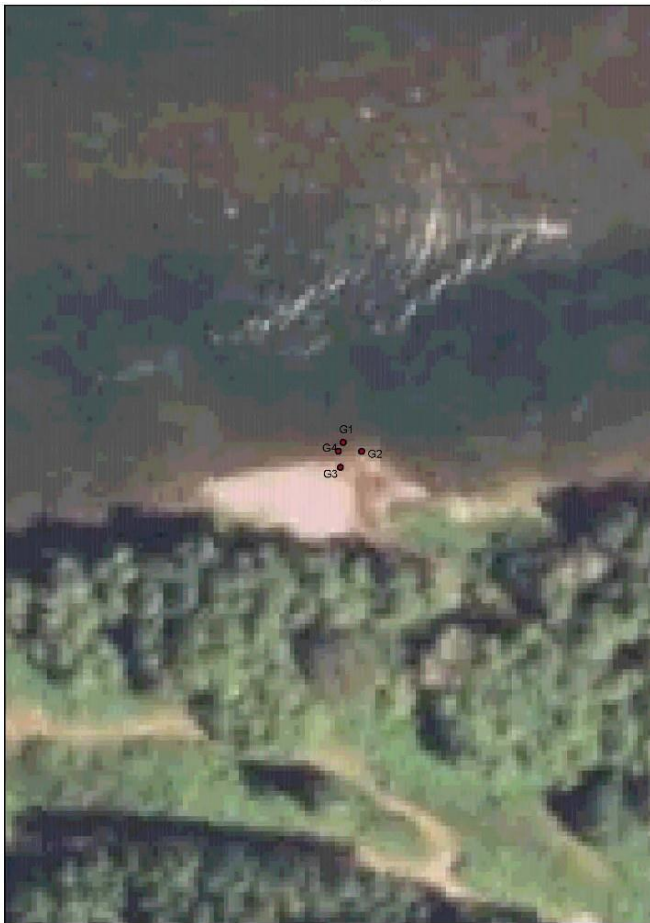


**2009 Temperature Data**  
Butler Creek Below Culvert

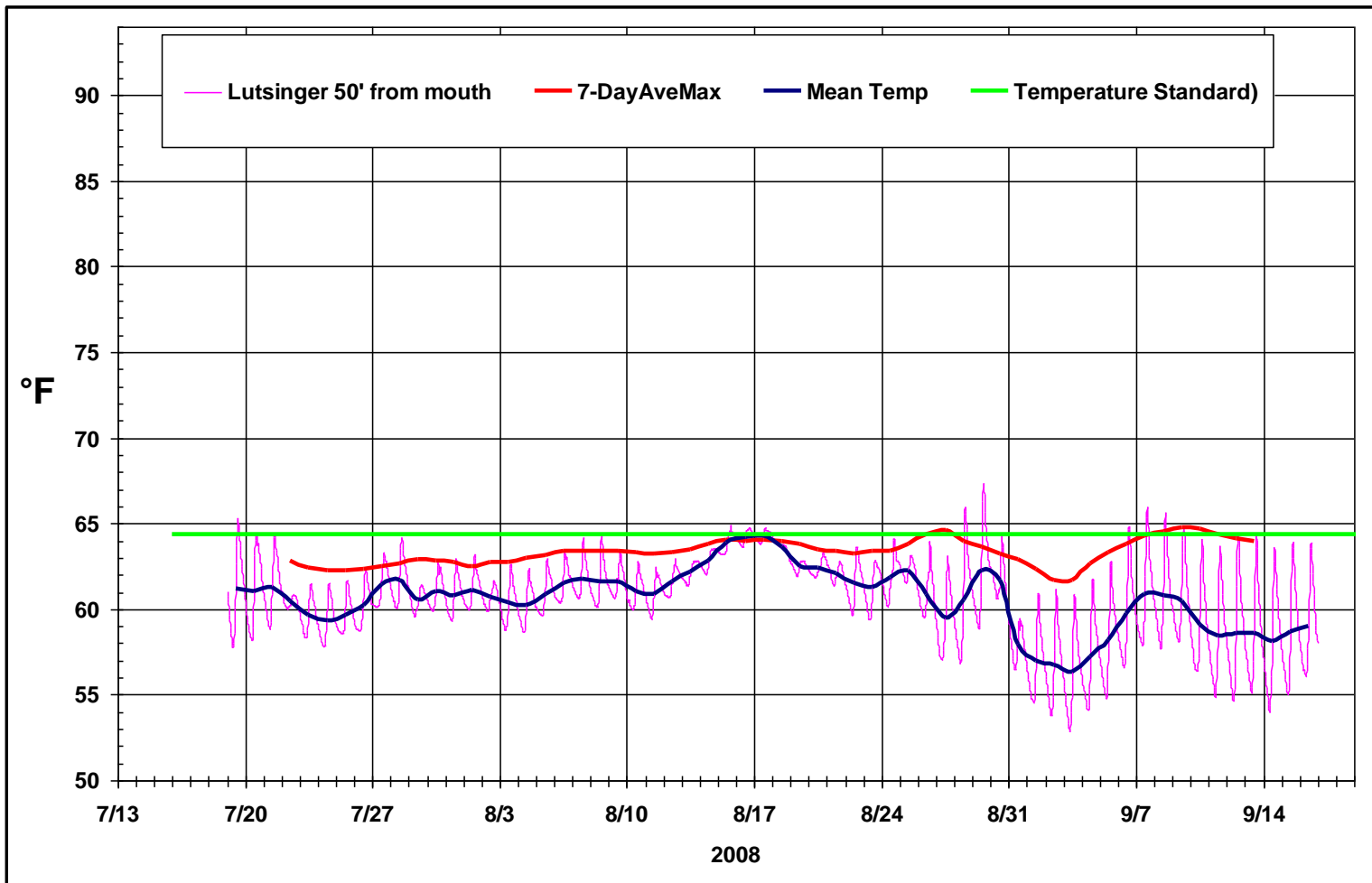


**P-15 Lutsinger Ck**

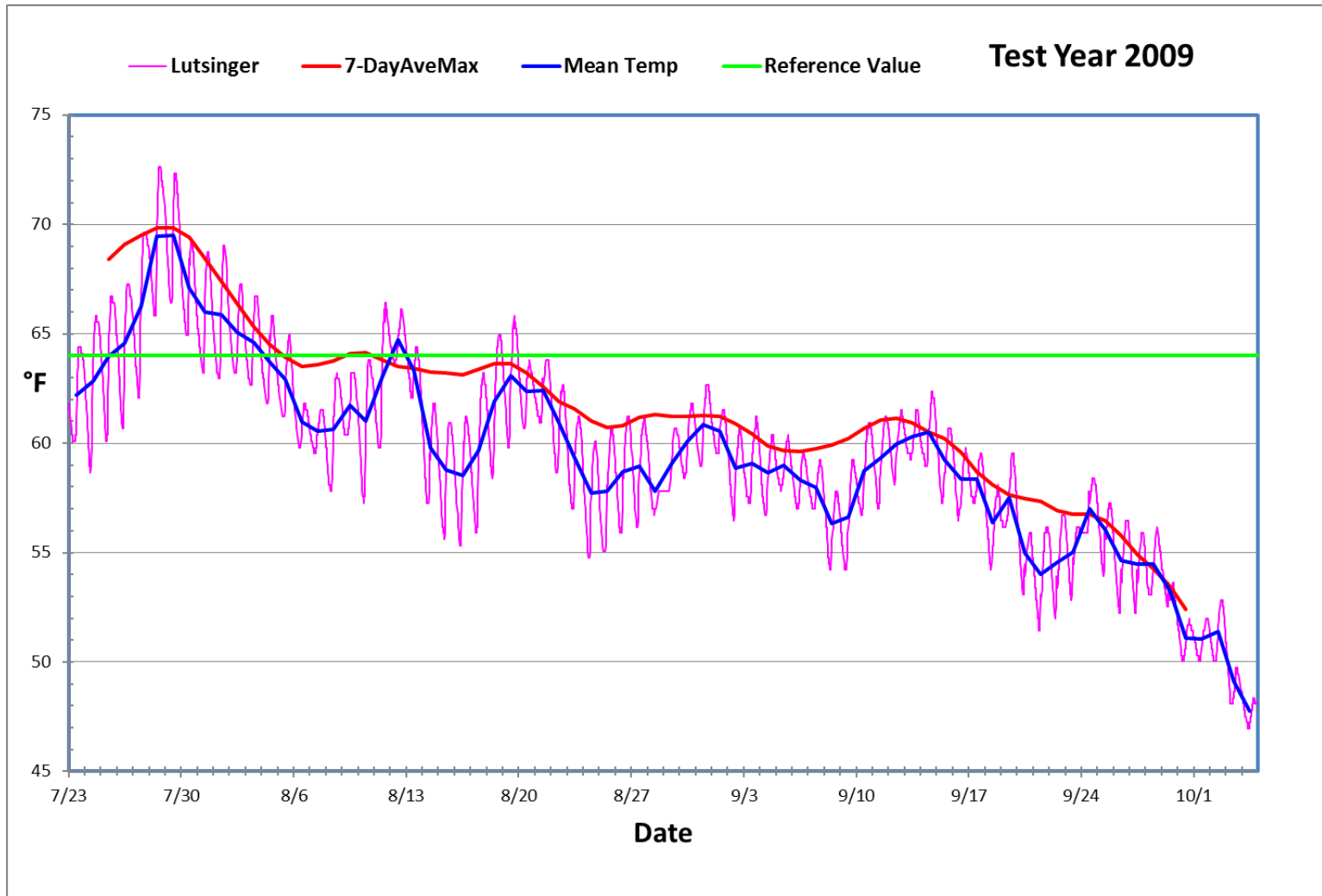
**UmpquaTempStudy  
Mouth Of Lutsinger Creek**



**Photo 7/18/08**

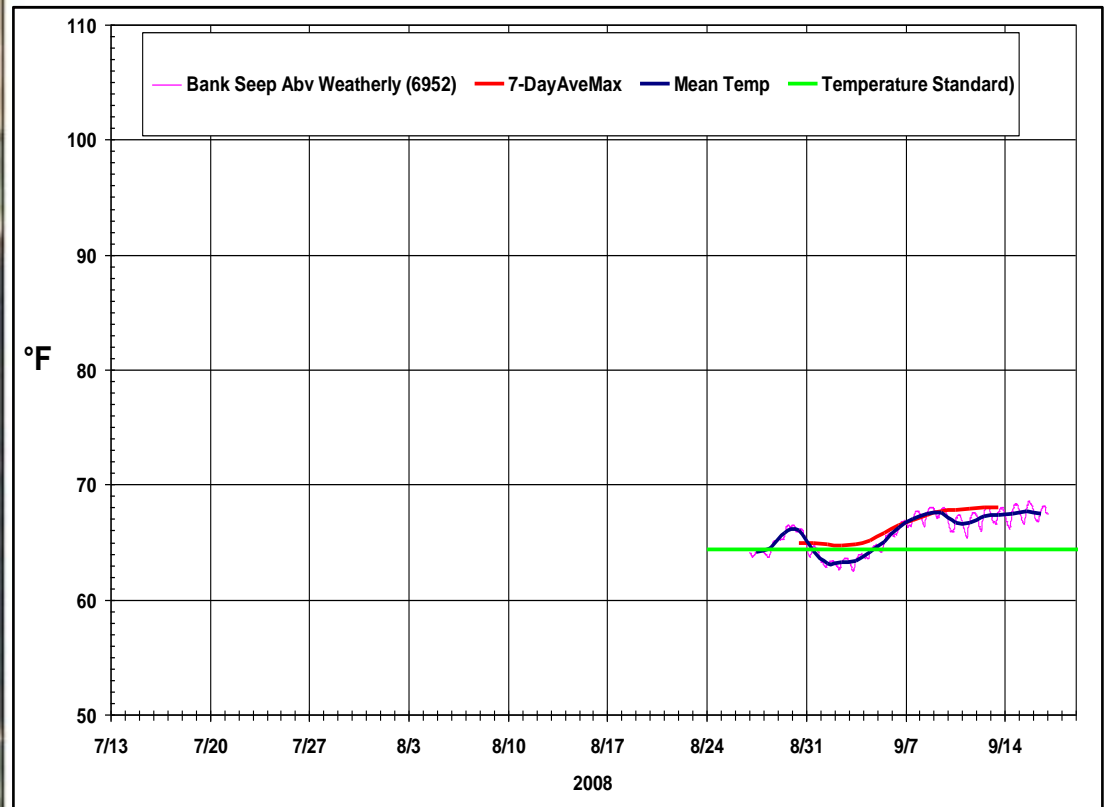


**2009 Temperature Data**  
Lutsinger Creek at access road t



# P-16 Umpqua River below Lutsinger Creek

Umpqua Temperature Study  
Below Lutsinger

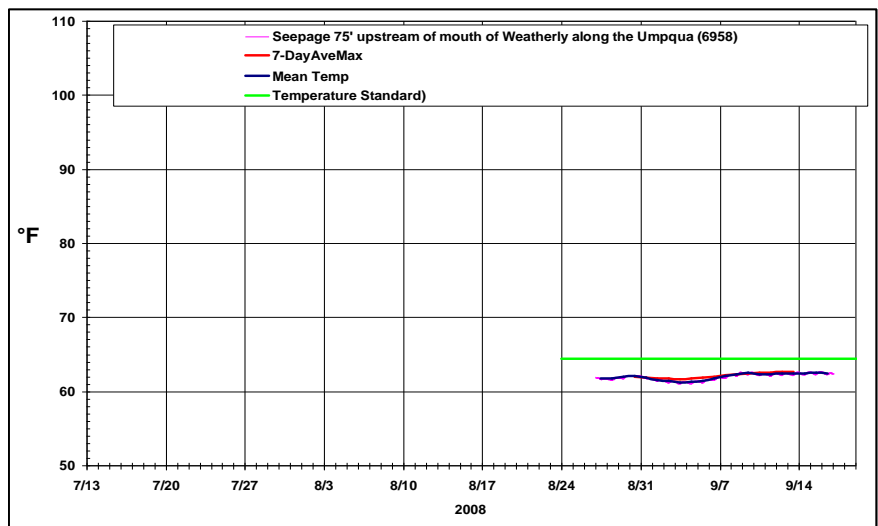
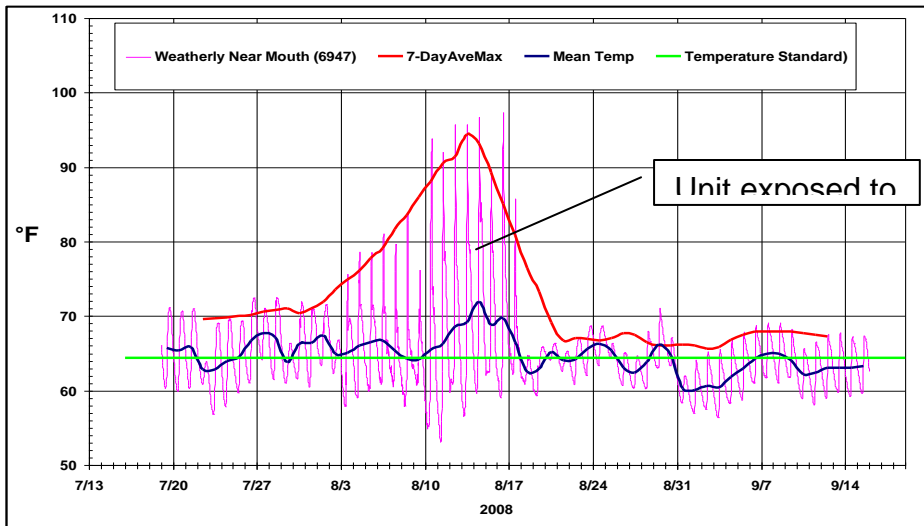
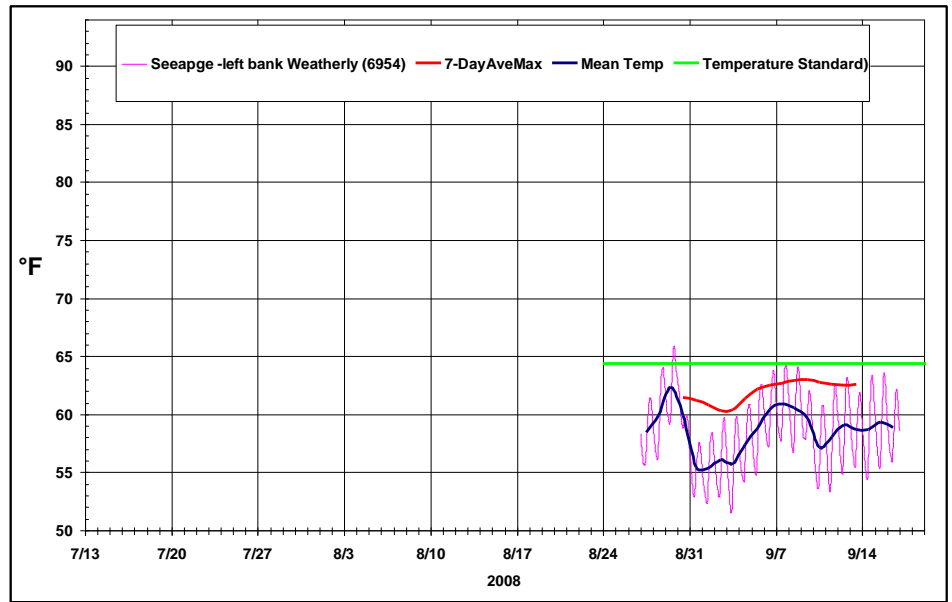
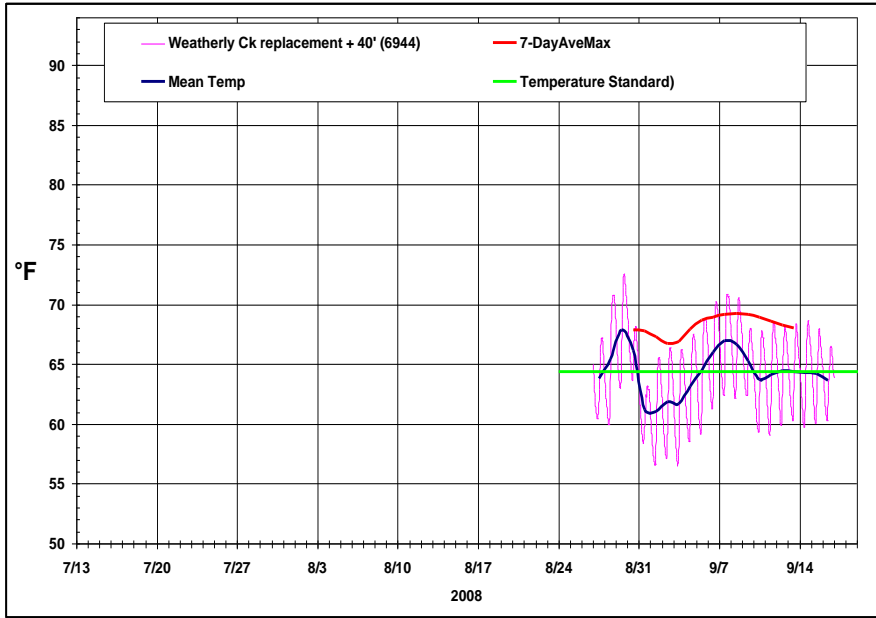




## P-17 Weatherly Ck Area

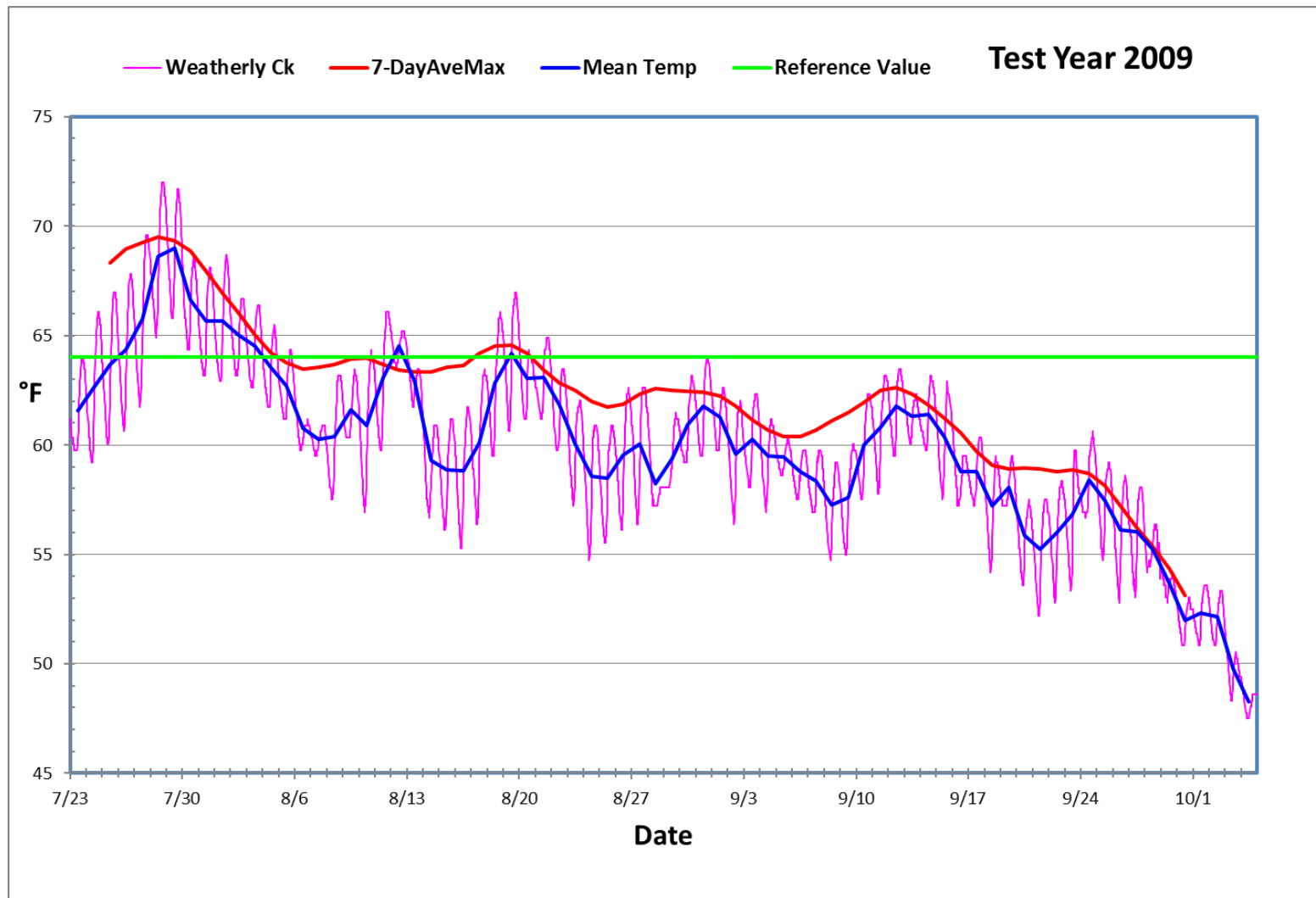
Umpqua Temperature Study  
Chute Below Lustsinger







**2009 Temperature Data**  
Weatherly Creek at mouth

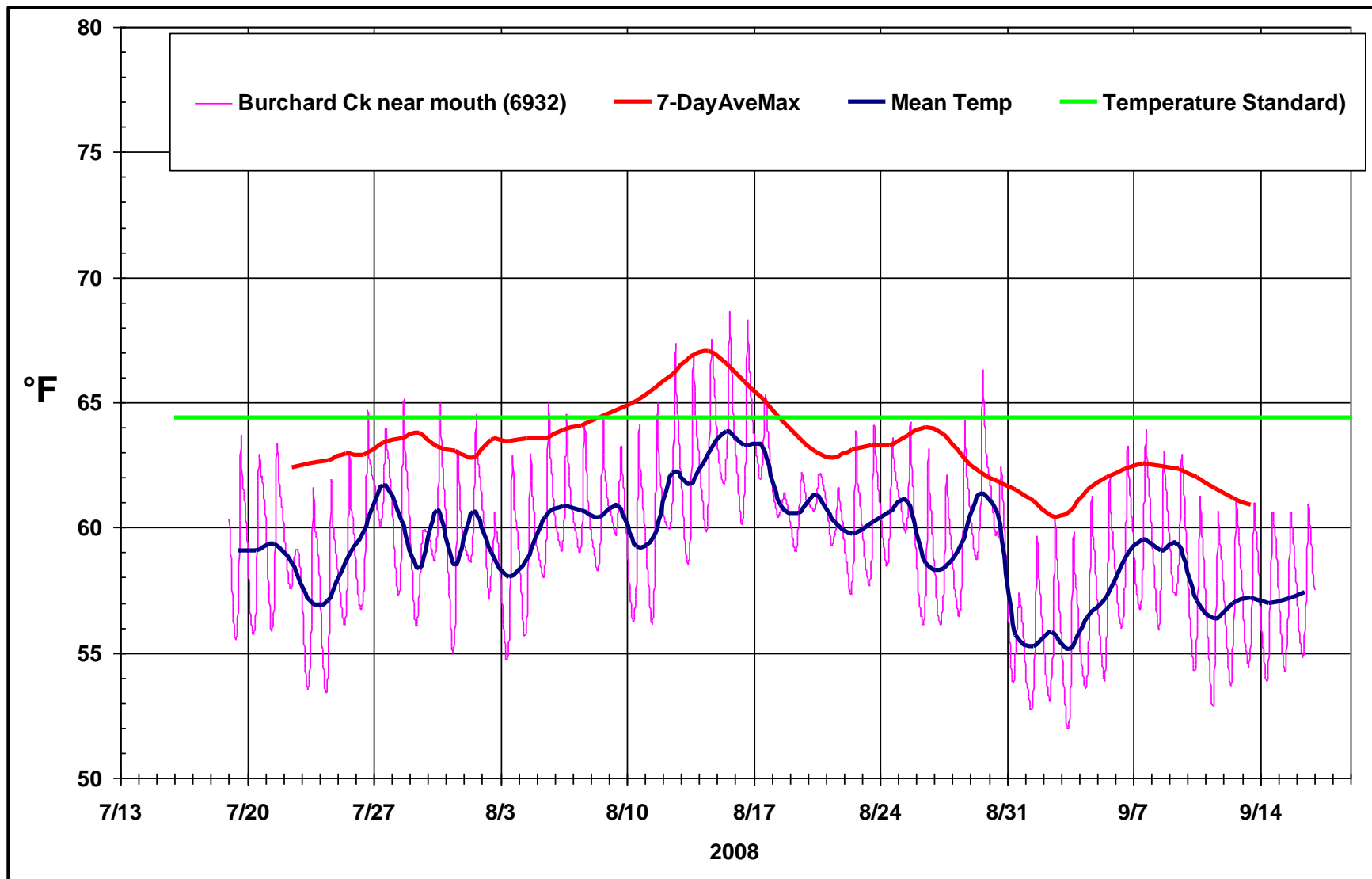


**P-18 Umpqua River near Unnamed Tributary**

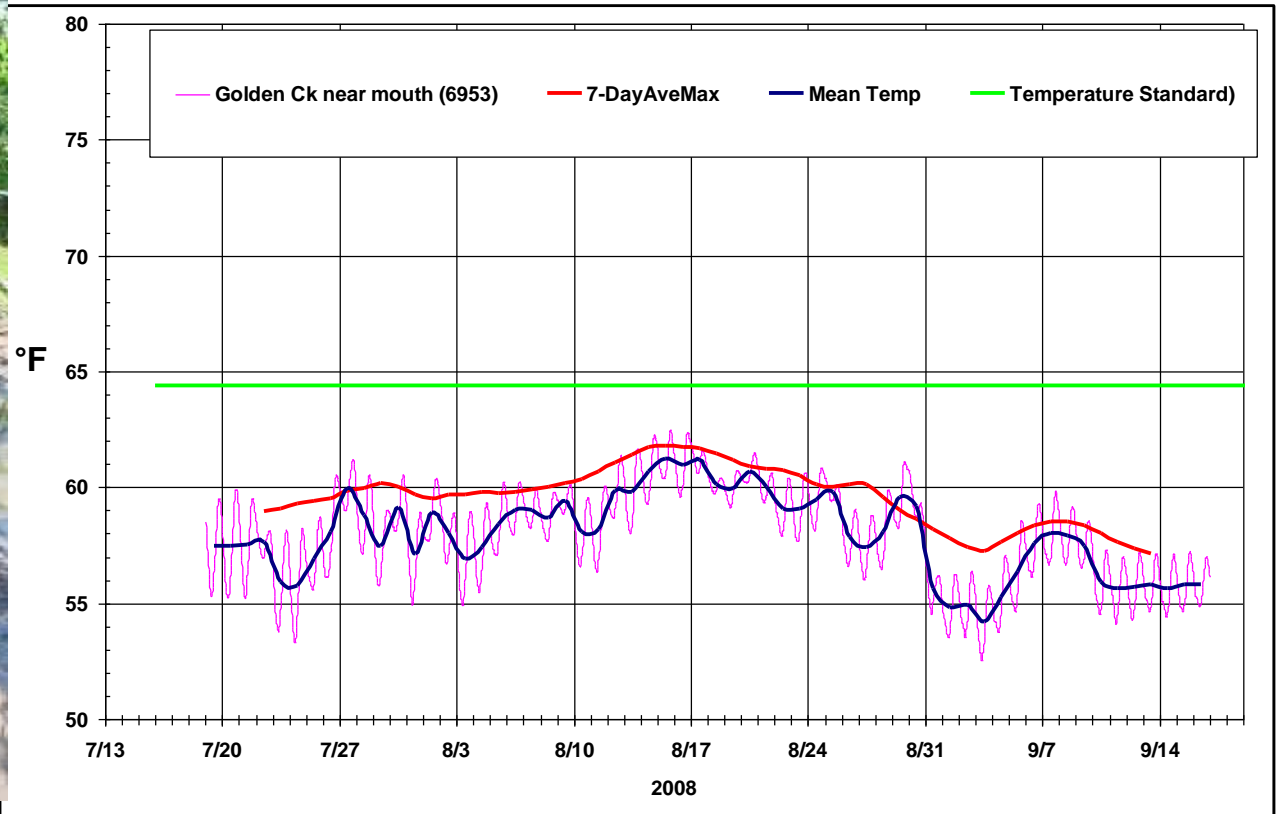


**P-19 Burchard Ck Area**



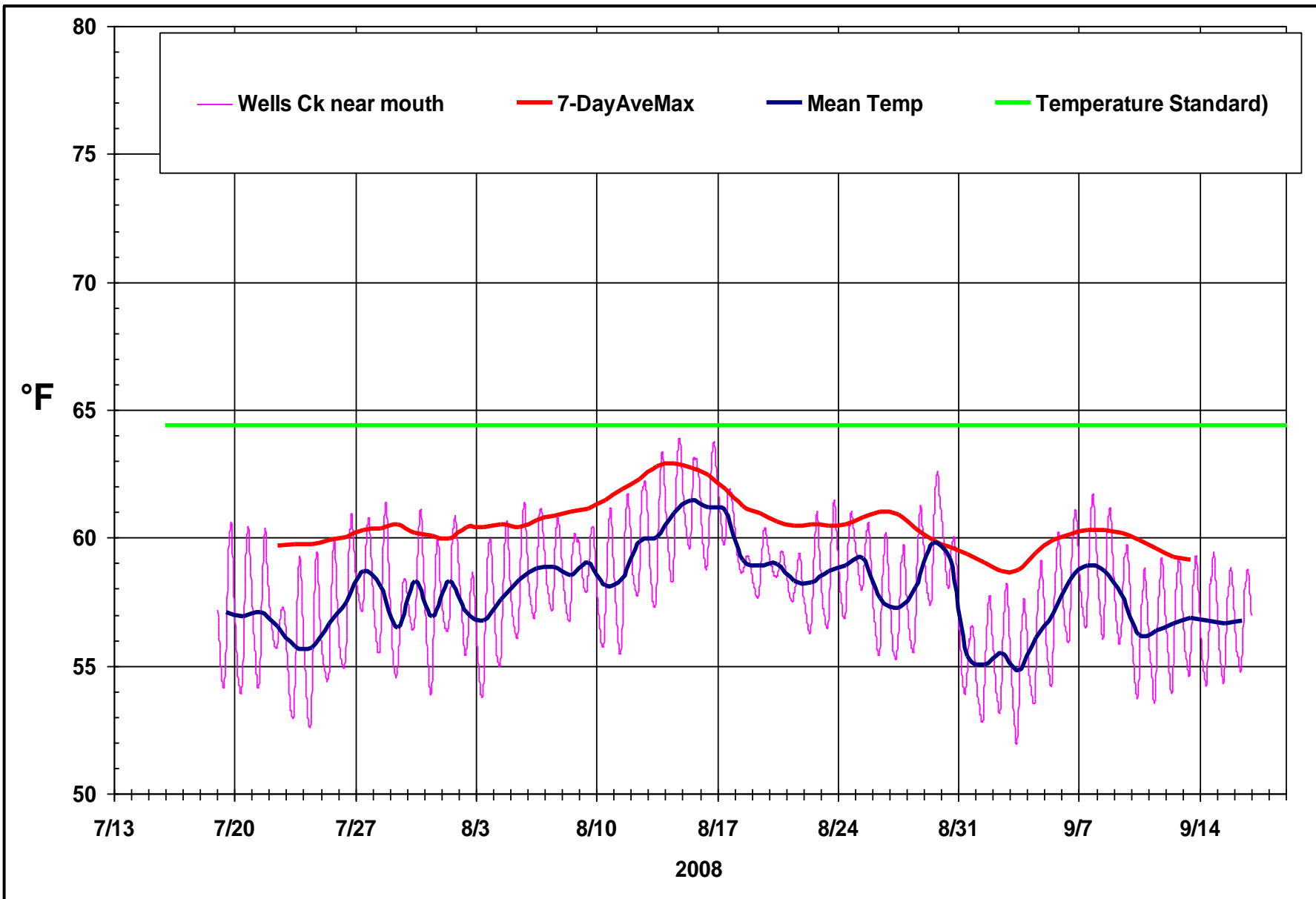


# P-20 Golden Creek



**P-21 Wells Creek**

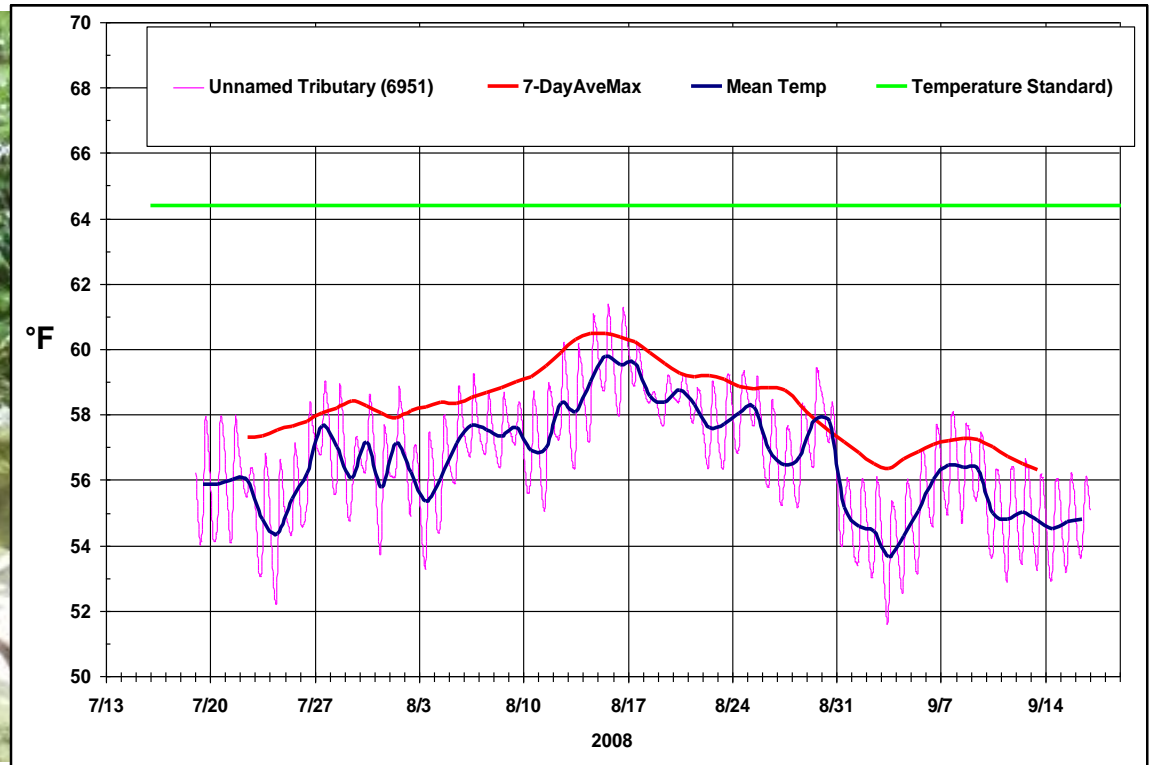




**P-22 Deep Hole Umpqua River**

No Material

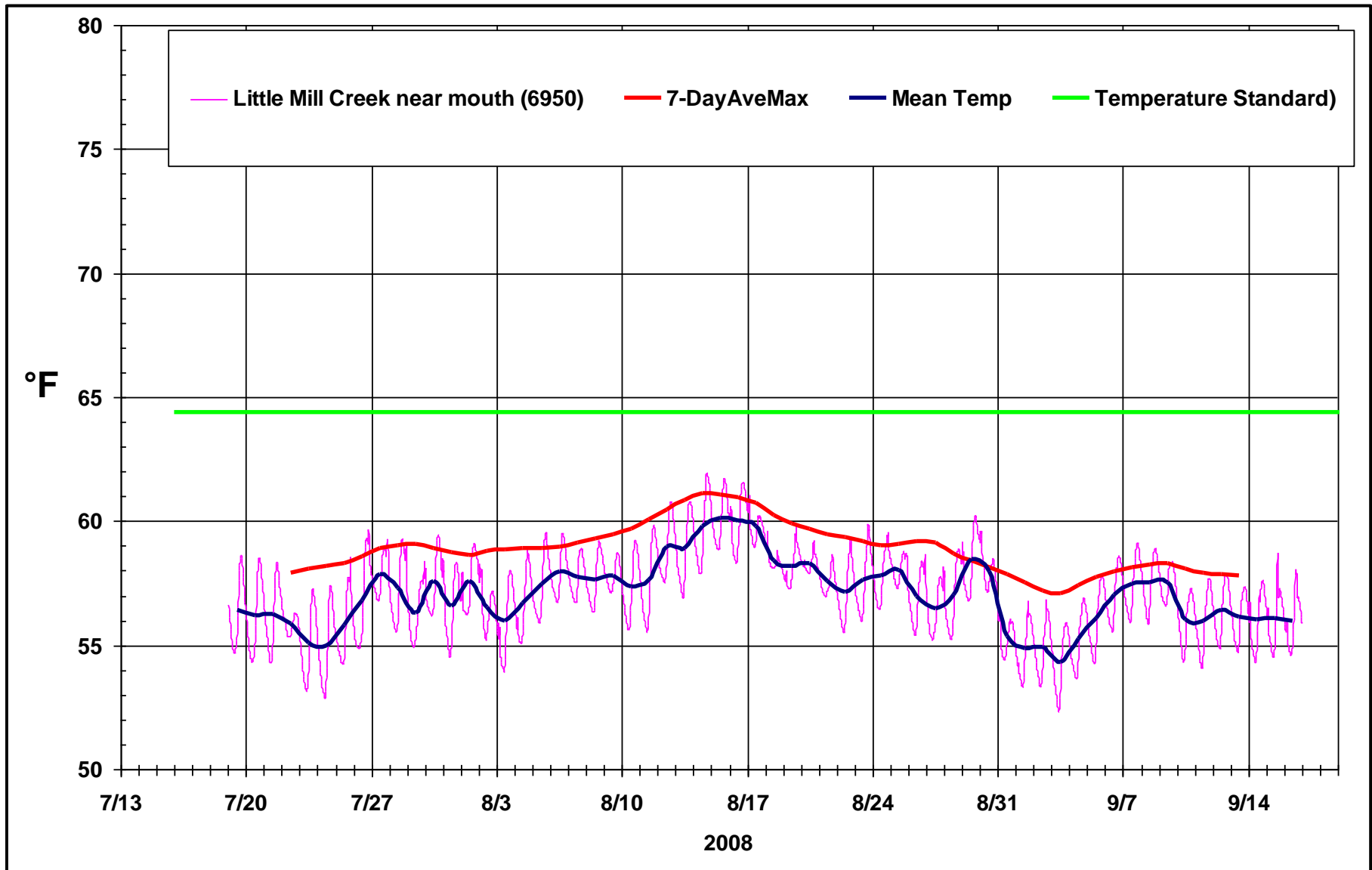
**P-23 Jimmy Creek**



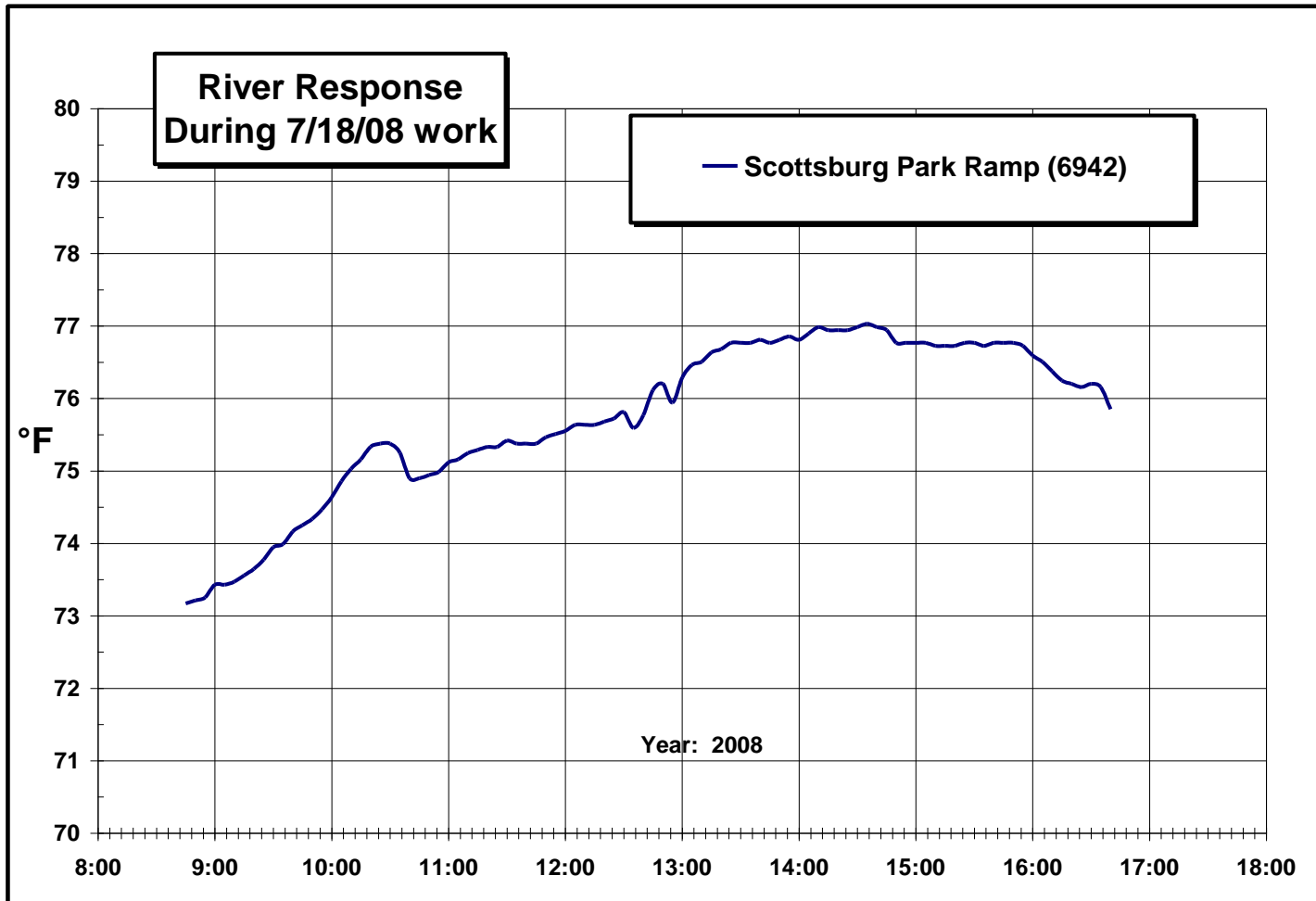


**P-24 Little Mill Creek Area**

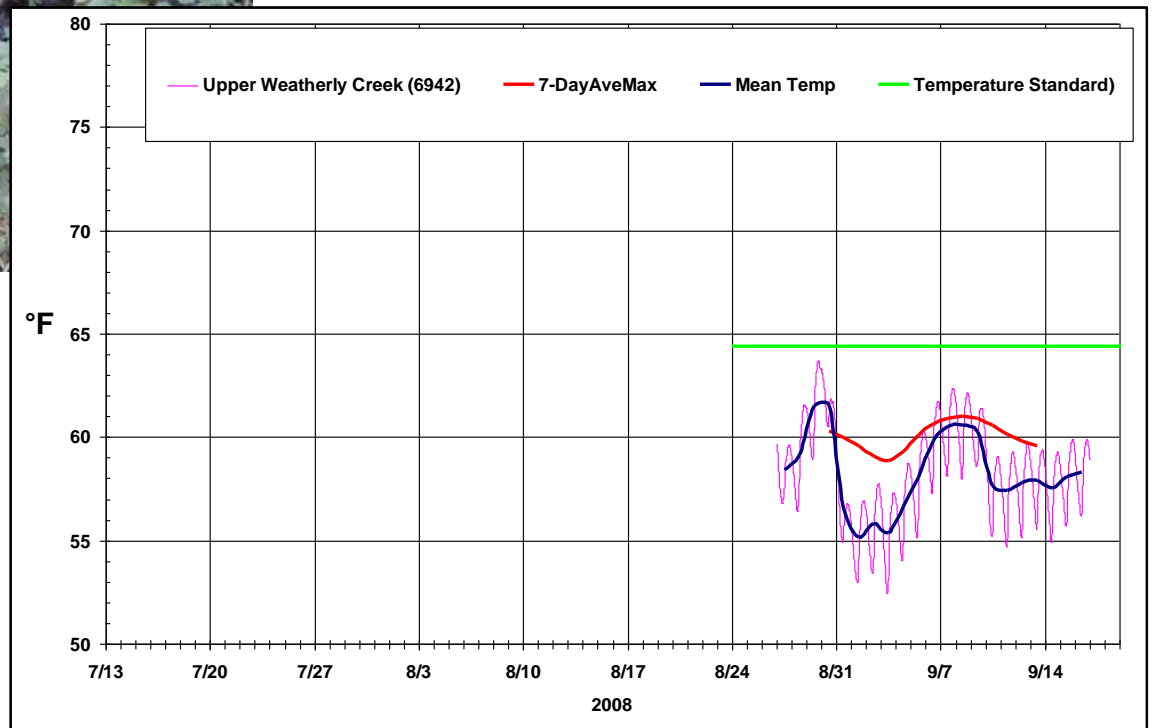


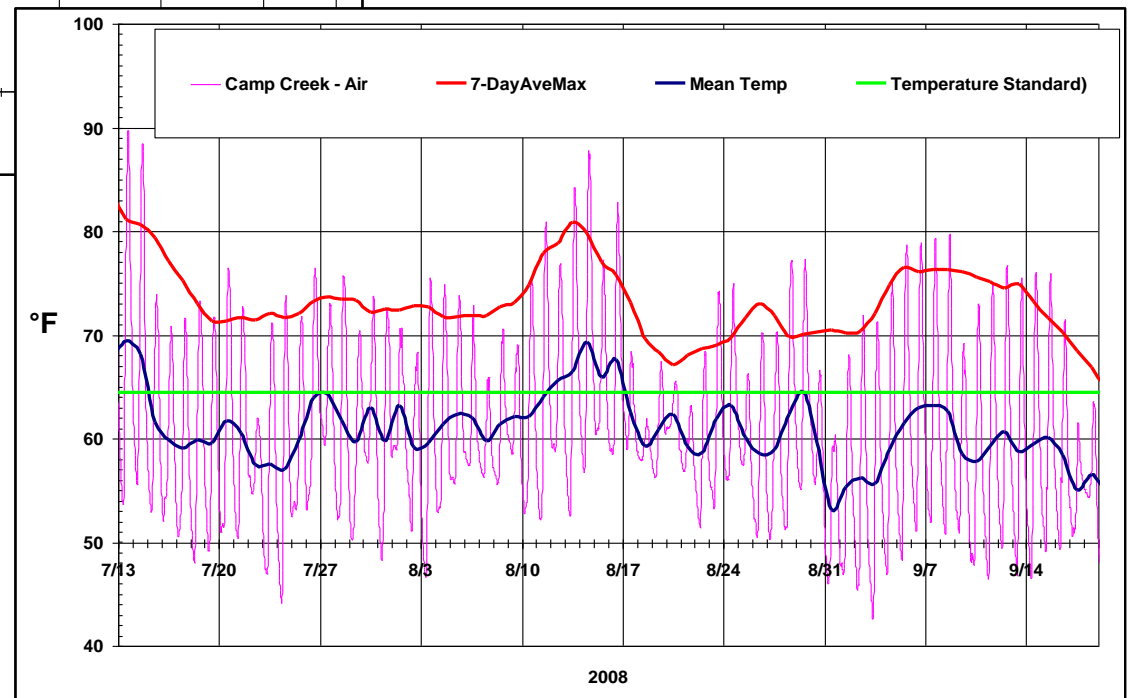
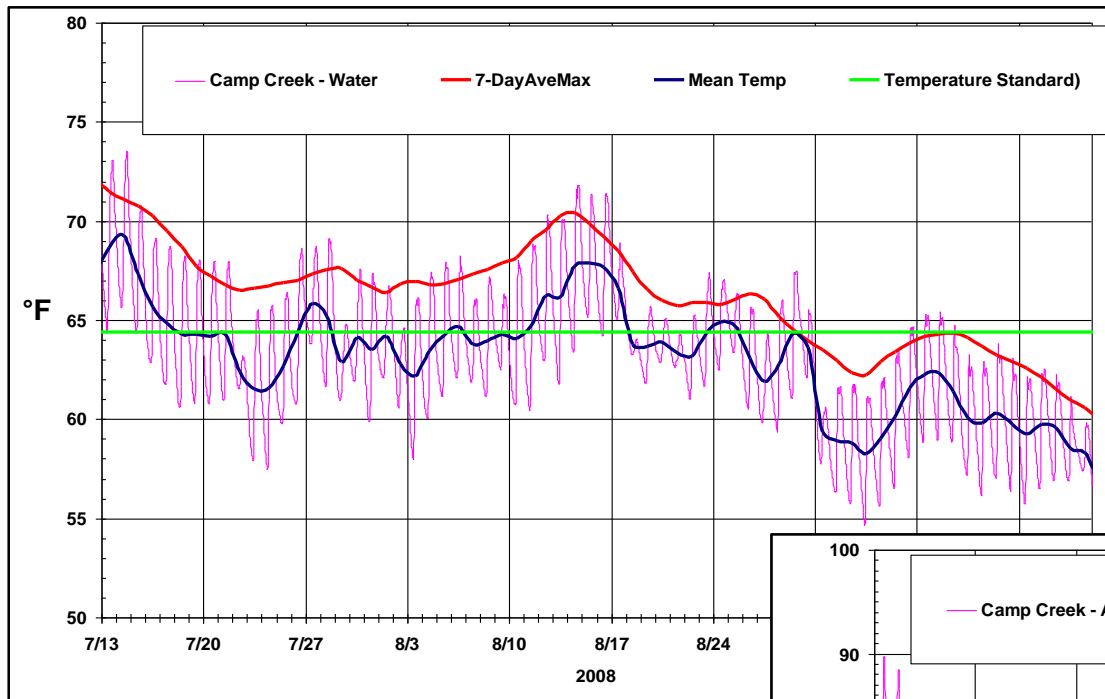


P-25 Scottsburg Park Ramp Area



# R-1 Upper Weatherly Creek





**R-2 Camp Creek @ Mouth**

# 2009 Temperature Sites

(See Map 2 and P14, P15, and P17.)

