

# Stream Monitoring Report

## Gualala-Salmon Assessment Area

229,990 Total Acres

Station	Year	Temperature	LWD Bank Full	Substrate	Streambed	Riparian Zone	Fish per Mile	Macroinvertebrates										
		Seasonal Daily Max	MWAT	> 6 " > 4 ' or > 10 CuFt														
			CuFt/ 1000'	Pieces/ 1000'	< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Cr.	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant

Hydrologic Unit NF Gualala

Planning Watershed Billings Creek 1113.810004

### Stream Bear Creek

693	2009	17.1	15.1
	<b>Avg</b>	<b>17.1</b>	<b>15.1</b>

### Stream Billings Cr

698	Bil	2004	25.2	21.6
698	Bil	2009	26.0	20.8
	<b>Avg</b>		<b>25.6</b>	<b>21.2</b>

### Stream Robinson Cr East

692	Rbn2	2004	20.6	17.9														
692	Rbn2	2009	21.0	18.2	153	8	44	1.64%	65		73%	77%						
697	Rbn1	2004			622	7	26	0.59%	23									
697	Rbn1	2009	23.0	18.7	690	11	33	0.61%	35	-0.4								
	<b>Avg</b>		<b>21.5</b>	<b>18.3</b>	<b>488</b>	<b>9</b>		<b>0.95%</b>	<b>41</b>	<b>-0.4</b>	<b>73%</b>	<b>77%</b>						
<b>Billings Creek</b>	<b>Avg</b>		<b>22.1</b>	<b>18.7</b>	<b>488</b>	<b>9</b>	<b>34</b>	<b>0.95%</b>	<b>41</b>	<b>-0.4</b>	<b>73%</b>	<b>77%</b>						
	<b>Min</b>		<b>17.1</b>	<b>15.1</b>	<b>153</b>	<b>7</b>	<b>26</b>	<b>0.59%</b>	<b>23</b>	<b>-0.4</b>	<b>73%</b>	<b>77%</b>						
	<b>Max</b>		<b>26.0</b>	<b>21.6</b>	<b>690</b>	<b>11</b>	<b>44</b>	<b>1.64%</b>	<b>65</b>	<b>-0.4</b>	<b>73%</b>	<b>77%</b>						

Planning Watershed Doty Creek 1113.810003

### Stream Doty Creek

256	Dot2	1993			16.2%
256	Dot2	1994	14.1	12.9	11.4%
256	Dot2	1995			16.9%
256	Dot2	1996			16.9%
256	Dot2	1997			17.0%

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates			
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index
281	Dot1	1998	14.8	13.7														
281	Dot1	2008	14.5	13.4														
		<b>Avg</b>	<b>14.5</b>	<b>13.3</b>														<b>15.7%</b>

**Stream Little North Fork Gualala**

201	LNF5	1992																	10.9%
201	LNF5	1993																	21.0%
201	LNF5	1994	15.8	14.7															20.4%
201	LNF5	1995	16.7	15.1															20.8%
201	LNF5	1996	15.9	14.6															15.4%
201	LNF5	1997	16.7	15.4															16.0%
201	LNF5	1998	16.3	15.0															
201	LNF5	2001	16.5	14.8															
201	LNF5	2003	16.1	15.0															
201	LNF5	2004	16.9	15.7															
201	LNF5	2005	15.6	14.5															
201	LNF5	2008	16.4	15.2															
201	LNF5	2009	15.8	14.8															
201	LNF5	2010	15.0	13.7															
201	LNF5	2011	15.1	14.0															
202	LNF2	1993																	11.5%
202	LNF2	1994	16.4	14.6															14.6%
202	LNF2	1995																	18.8%
202	LNF2	1996																	17.2%
202	LNF2	1997																	21.6%
202	LNF2	1998																	32
202	LNF2	2003																	0 322
202	LNF2	2004																	0 391

Station	Year	Temperature		LWD Bank Full			Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates						
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'	< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Cr. Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant				
203	LNF1	1993					17.1%															
203	LNF1	1994	15.1	13.6			20.4%															
203	LNF1	1995	15.8	14.2			11.6%															
203	LNF1	1996	15.3	13.7			19.6%															
203	LNF1	1997	15.8	14.5			18.8%															
203	LNF1	1998	15.2	13.9	3,010	65		25	1.54%	23				0								
203	LNF1	1999	15.1	13.8	3,632	73		43	1.52%	21	-0.2	87%	89%	298	100	0	285					
203	LNF1	2000	15.3	13.9	3,766	71		46	1.49%	21	-0.08					0	143	31	0.85	4.5	19	30
203	LNF1	2001	15.2	13.5	4,798	119		42	1.49%	20	-0.1					0	148					
203	LNF1	2002	14.5	13.0	4,964	138		65	1.41%	28	-0.3					0	169					
203	LNF1	2003	15.2	14.0	4,946	140		60	1.42%	30	-0.4					0	235					
203	LNF1	2004	15.6	14.2	4,907	139		42	1.54%	32	-0.7					0	666					
203	LNF1	2005	14.9	13.6	5,073	137		40	1.35%	31	-0.9						30		4.6			41
203	LNF1	2006			5,383	134		36	1.46%	28	-1.1											
203	LNF1	2007			5,391	132		31	1.49%	31	-0.4											
203	LNF1	2008	15.3	13.9	5,851	148		23	1.43%	34	-0.7	86%	88%	391	83		58					
203	LNF1	2009	15.1	13.7	5,957	149		48	1.45%	34	-0.7	89%	91%			0	803					
203	LNF1	2010	14.5	13.1	5,943	146		42	1.45%	33	-0.6											
203	LNF1	2011	14.6	13.4	5,871	148		43	1.44%	41	-0.5	77%	89%			0	433					
255	LNF6	1993					19.4%															
255	LNF6	1994	15.9	14.3			17.2%															
255	LNF6	1995					11.9%															
255	LNF6	1996					24.4%															
255	LNF6	1997					27.8%															
274	LNF8	1995	16.4	14.6																		
274	LNF8	1996	16.1	14.1																		
404	LNF3	1997																				
404	LNF3	1998														16						
404	LNF3	2001			5,250	83		34	0.57%	33		97%	96%	163	75							
404	LNF3	2003														0	589					
404	LNF3	2004			5,098	68		33	0.79%	57	-0.6					0	70					
408	LNF7	2005	14.9	13.7																		
		<b>Avg</b>	<b>15.6</b>	<b>14.2</b>	<b>4,990</b>	<b>118</b>	<b>17.8%</b>		<b>1.37%</b>	<b>31</b>	<b>-0.5</b>	<b>87%</b>	<b>91%</b>	<b>284</b>	<b>86</b>	<b>3</b>	<b>332</b>	<b>30</b>	<b>0.85</b>	<b>4.5</b>	<b>19</b>	<b>35</b>
<b>Doty Creek</b>		<b>Avg</b>	<b>15.5</b>	<b>14.2</b>	<b>4,990</b>	<b>118</b>	<b>17.6%</b>	<b>41</b>	<b>1.37%</b>	<b>31</b>	<b>-0.5</b>	<b>87%</b>	<b>91%</b>	<b>284</b>	<b>86</b>	<b>3</b>	<b>332</b>	<b>30</b>	<b>0.85</b>	<b>4.5</b>	<b>19</b>	<b>35</b>
		<b>Min</b>	<b>14.1</b>	<b>12.9</b>	<b>3,010</b>	<b>65</b>	<b>4.5%</b>	<b>23</b>	<b>0.57%</b>	<b>20</b>	<b>-1.1</b>	<b>77%</b>	<b>88%</b>	<b>163</b>	<b>75</b>	<b>0</b>	<b>58</b>	<b>30</b>	<b>0.85</b>	<b>4.5</b>	<b>5,340</b>	<b>30</b>
		<b>Max</b>	<b>16.9</b>	<b>15.7</b>	<b>5,957</b>	<b>149</b>	<b>36.1%</b>	<b>65</b>	<b>1.54%</b>	<b>57</b>	<b>-0.08</b>	<b>97%</b>	<b>96%</b>	<b>391</b>	<b>100</b>	<b>32</b>	<b>803</b>	<b>31</b>	<b>0.85</b>	<b>4.6</b>	<b>19</b>	<b>41</b>

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates		
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson

Planning Watershed Robinson Creek 1113.810002

**Stream Abieta Springs**

752	2009	17.9	16.6																
	<b>Avg</b>	<b>17.9</b>	<b>16.6</b>																

**Stream Dry Creek**

211	Dry3	1995	17.7	15.7															
211	Dry3	1996	17.7	15.9															
211	Dry3	1997	16.9	15.2															
211	Dry3	1998			3,148	57	48	0.76%	22					16					
211	Dry3	1999			2,815	53	58	0.72%	20	-0.1	86%	87%	210	89	0	148			
211	Dry3	2000	16.5	14.8	2,834	49	60	0.74%	21	-0.07	84%	77%			0	48	32	0.79	4.4
211	Dry3	2001	16.4	14.1	5,375	85	56	0.69%	19	-0.1					0	127			
211	Dry3	2002	15.6	14.0	6,311	95	62	0.70%	17	-0.4					11	143			
211	Dry3	2003	16.1	14.9	7,238	93	43	0.74%	22	-0.3					0	174			
211	Dry3	2004	14.8	13.7	7,142	98	38	0.77%	29	-0.3					23	175			
211	Dry3	2005	16.4	15.0	7,109	97	36	0.75%	29	-0.2									
211	Dry3	2006			7,066	91	29	0.80%	21	0.52									
211	Dry3	2007			6,993	97	26	0.78%	20	0.54									
211	Dry3	2008	14.9	13.8	7,230	111	21	0.84%	21	0.42	93%	82%							
211	Dry3	2009	15.2	13.7	7,253	114	31	0.86%	23	0.42	88%	79%			0	407			
211	Dry3	2010	15.4	14.1	7,334	114	30	0.86%	21	0.56									
211	Dry3	2011	15.0	13.8	7,305	115	30	0.90%	21	0.39	89%	80%			0	63			
212	Dry2	1995	20.9	17.9															
212	Dry2	1996	20.7	17.8															
212	Dry2	1997	20.5	17.9															
212	Dry2	1998	20.6	17.6															
212	Dry2	2000			2,477	37		1.82%	13		76%	56%	81	60			41	0.92	4.5
212	Dry2	2004													0	500			
212	Dry2	2005	17.9	16.1															
212	Dry2	2008	16.8	15.9	2,185	28	36	1.89%	14	-0.4	87%	85%							
212	Dry2	2009	16.8	15.7															
212	Dry2	2011	16.7	15.3															
753		2009	16.5	15.7															

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates						
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant		
		Avg	17.1	15.4	5,613	83	14.2%	0.91%	21	0.07	86%	78%	146	75	5	198	37	0.86	4.5	19	30

**Stream McGann Gulch**

209	MGG2	1995	16.7	15.9			19.2%														
209	MGG2	1996	16.4	15.6			26.8%														
209	MGG2	1997	15.5	14.4			19.9%														
209	MGG2	2003												0	104						
210	MGG1	1995	20.4	16.4																	
210	MGG1	2002	14.2	13.9																	
210	MGG1	2003	14.8	14.6																	
210	MGG1	2004	14.9	14.5																	
210	MGG1	2008	14.1	13.5																	
210	MGG1	2011	13.9	13.8																	
		Avg	15.6	14.7			22.0%							0	104						

**Stream North Fork Gualala**

204	NFG3	1995	20.6	17.5																	
204	NFG3	1996	20.1	18.7																	
204	NFG3	1997	19.4	18.2																	
204	NFG3	1998	20.2	17.7										0							
204	NFG3	1999			2,326	46		19	0.37%	23		64%	46%	140	73	0	109				
204	NFG3	2000	19.9	17.0										0	698						
204	NFG3	2001	18.6	16.7	2,922	97		24	0.38%	26	-0.4			0	84						
204	NFG3	2002												0	317						
204	NFG3	2003												0	255						
204	NFG3	2007			3,174	57		15													
204	NFG3	2008	16.8	15.5	2,981	60		28	0.33%	31	-1	80%	69%		79						
204	NFG3	2009	17.7	15.9										0	1,484						
204	NFG3	2010	17.4	15.9																	
204	NFG3	2011	17.1	15.6																	
205	NFG	1995	21.4	17.7																	
205	NFG	1996	20.4	17.8																	
205	NFG	1997	21.1	18.1																	
205	NFG	2001	19.3	17.0																	

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed	Riparian Zone			Fish per Mile		Macroinvertebrates						
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'			< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index
251	NFG	1996	19.0	16.6															
251	NFG	1997	19.3	17.5															
251	NFG	2000	19.0	16.4															
258	NFG	1994	24.5	19.3															
258	NFG	2011	18.7	16.3															
406	NFG2	1997																	
406	NFG2	1998	21.4	18.6															
406	NFG2	2004												0	303				
473	NFG4	2001	19.3	16.6	2,518	64	26	0.26%	28		93%	84%	148	72					
473	NFG4	2003													0	291			
473	NFG4	2009	17.9	15.7															
474	NFG	2001	22.4	18.4															
474	NFG	2002	20.9	18.7															
474	NFG	2003	22.1	19.3															
474	NFG	2004	20.5	18.8															
474	NFG	2008	21.7	18.4															
474	NFG	2010	20.3	17.6															
474	NFG	2011	20.8	17.9															
		<b>Avg</b>	<b>19.9</b>	<b>17.4</b>	<b>2,784</b>	<b>65</b>		<b>0.34%</b>	<b>27</b>	<b>-0.7</b>	<b>79%</b>	<b>66%</b>	<b>144</b>	<b>72</b>	<b>0</b>	<b>402</b>			

**Stream Peaches Creek**

213	Pea2	1995	17.0	16.0															
213	Pea2	1996	17.3	16.1															
213	Pea2	1997	17.8	16.4															
269	Pea3	1994	16.2	15.7															
269	Pea3	1998	17.5	16.0															
269	Pea3	2008	16.8	15.5															
269	Pea3	2009	16.2	15.2															
		<b>Avg</b>	<b>17.0</b>	<b>15.9</b>															

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates			
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index
<b>Stream Robinson Cr West</b>																		
207	Rob2	1995	19.6	15.8														
207	Rob2	1996	19.6	15.7														
207	Rob2	1997	20.2	16.2														
207	Rob2	1998	18.5	15.4										12				
207	Rob2	1999			1,643	49	36	1.39%	13		66%	74%	246	95	0	113		
207	Rob2	2000	17.2	14.7										0	422			
207	Rob2	2001												0	13			
207	Rob2	2003												0	100			
207	Rob2	2004													361			
207	Rob2	2005	14.8	14.1														
207	Rob2	2008	15.8	14.6											21			
207	Rob2	2009	15.6	14.5														
207	Rob2	2010	14.7	13.6														
207	Rob2	2011	15.1	14.0	1,713	48	22	1.31%	25	-0.3	88%	72%						
208	Rob1	1995	16.6	14.9														
208	Rob1	1996	16.4	15.0														
208	Rob1	1997	16.7	14.9														
208	Rob1	1998	16.2	14.9														
208	Rob1	2003												0	76			
260	Rob	1994	14.6	13.8														
263	Rob	1994	17.7	15.5														
263	Rob	2003												0	101			
263	Rob	2004												0	317			
263	Rob	2011	14.9	14.0														
409	Rob	2005	16.0	14.6														
	<b>Avg</b>		<b>16.7</b>	<b>14.8</b>	<b>1,678</b>	<b>49</b>		<b>17.1%</b>		<b>1.35%</b>	<b>19</b>	<b>-0.3</b>	<b>77%</b>	<b>73%</b>	<b>246</b>	<b>95</b>	<b>1</b>	<b>169</b>

<b>Stream Sosueme Cr</b>																		
206	Sosu	1995	20.4	14.2														
206	Sosu	1996	16.9	14.2														
206	Sosu	1997	16.4	13.8														
206	Sosu	1998	16.5	14.4														
206	Sosu	2000	18.0	14.0														

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates						
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant		
	Avg	17.6	14.1																		
Robinson Creek	Avg	17.8	15.8	4,656	76	17.8%	35	0.85%	22	-0.05	83%	74%	165	78	2	251	37	0.86	4.5	19	30
	Min	13.9	13.5	1,643	28	8.0%	15	0.26%	13	-1	64%	46%	81	60	0	13	32	0.79	4.4	1,528	19
	Max	24.5	19.3	7,334	115	48.3%	62	1.89%	31	0.56	93%	87%	246	95	23	1,484	41	0.92	4.5	22	40

Planning Watershed      Stewart Creek      1113.810001

Stream      Lost Creek				
215	LCr	1995	16.4	15.3
215	LCr	1996	15.8	15.1
215	LCr	1998	17.0	15.9
	Avg		16.4	15.4

Stream      North Fork Gualala				
214	NFG	1995	23.9	21.0
214	NFG	1996	23.7	21.1
214	NFG	1997	24.0	21.2
214	NFG	1998	24.3	21.4
214	NFG	2004		
216	NFG1	1995	25.9	21.5
216	NFG1	1996	26.4	21.8
216	NFG1	1997	26.9	22.0
216	NFG1	2003		
272	NFG	1994	24.5	21.4
272	NFG	2001	24.1	21.0
272	NFG	2009	22.9	19.2
691	NFG5	2004	24.4	21.0
691	NFG5	2009	23.2	19.5
	Avg		22.7	21.0
Stewart Creek	Avg		22.9	19.9
	Min		15.8	15.1
	Max		26.9	22.0



Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates		
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson

Hydrologic Unit                      Rockpile

Planning Watershed                Lower Rockpile Creek                      1113.820003

**Stream            Dynamite Cr.**

478	Dyn1	2002	14.8	13.4														
478	Dyn1	2009	13.7	13.2														
<b>Avg</b>			<b>14.3</b>	<b>13.3</b>														

**Stream            Emily Creek**

276	Emy	1997	15.2	14.1														
276	Emy	1998	15.0	13.9														
276	Emy	2002	14.3	13.3														
<b>Avg</b>			<b>14.8</b>	<b>13.8</b>														

**Stream            Rockpile Creek**

221	Roc3	1995	23.1	19.6														
221	Roc3	1996	22.4	19.3														
221	Roc3	1997	22.4	19.7														
221	Roc3	1998	23.2	19.8	1,291	18	25	0.27%	17					0	677			
221	Roc3	1999			2,514	31	31	0.31%	10	-0.2	90%	37%	272	90	0	11		
221	Roc3	2000	22.7	18.8										0	169			
221	Roc3	2001	21.5	18.4										0	53			
221	Roc3	2002	22.7	17.5										0	48			
221	Roc3	2003	21.7	19.0	2,382	27	19	0.27%	13	-0.4				0	67			
221	Roc3	2004	21.7	18.6										0	20			
221	Roc3	2008	20.1	18.1											11			
221	Roc3	2009	20.6	17.3										0	1,552			
221	Roc3	2010																
221	Roc3	2011	19.8	17.5														
222	Roc	1994	21.9	19.4														
222	Roc	1995	23.5	19.7														
222	Roc	1997	22.4	19.8														

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates				
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant
275	Roc2	1997	20.1	19.5															
275	Roc2	1998	23.9	20.2										0	508				
275	Roc2	2004	20.2	18.7															
275	Roc2	2005	19.0	17.7															
401	Roc1	1998	23.7	20.8															
401	Roc1	2005														26	2.9	29	
401	Roc1	2006			5,416	56	24	0.16%	29	99%	58%	478	86						
401	Roc1	2008	20.6	19.1															
401	Roc1	2009	19.8	17.8															
		<b>Avg</b>	<b>21.7</b>	<b>18.9</b>	<b>2,901</b>	<b>33</b>		<b>0.25%</b>	<b>17</b>	<b>-0.3</b>	<b>95%</b>	<b>48%</b>	<b>375</b>	<b>88</b>	<b>0</b>	<b>312</b>	<b>26</b>	<b>2.9</b>	<b>29</b>
<b>Lower Rockpile Creek</b>	<b>Avg</b>	<b>20.5</b>	<b>18.0</b>	<b>2,901</b>	<b>33</b>	<b>25</b>	<b>0.25%</b>	<b>17</b>	<b>-0.3</b>	<b>95%</b>	<b>48%</b>	<b>375</b>	<b>88</b>	<b>0</b>	<b>312</b>	<b>26</b>	<b>2.9</b>	<b>29</b>	
	<b>Min</b>	<b>13.7</b>	<b>13.2</b>	<b>1,291</b>	<b>18</b>	<b>19</b>	<b>0.16%</b>	<b>10</b>	<b>-0.4</b>	<b>90%</b>	<b>37%</b>	<b>272</b>	<b>86</b>	<b>0</b>	<b>11</b>	<b>26</b>	<b>2.9</b>	<b>29</b>	
	<b>Max</b>	<b>23.9</b>	<b>20.8</b>	<b>5,416</b>	<b>56</b>	<b>31</b>	<b>0.31%</b>	<b>29</b>	<b>-0.2</b>	<b>99%</b>	<b>58%</b>	<b>478</b>	<b>90</b>	<b>0</b>	<b>1,552</b>	<b>26</b>	<b>2.9</b>	<b>29</b>	

Planning Watershed Middle Rockpile Creek 1113.820001

**Stream Horsethief Canyon**

681	Hor1	2004	17.5	17.0														
681	Hor1	2009	16.4	15.9														
		<b>Avg</b>	<b>16.9</b>	<b>16.4</b>														

**Stream Rockpile Creek**

680	Roc	2004	24.8	21.2														
680	Roc	2009	23.6	19.5														
683	Roc5	2004	24.0	20.6														
683	Roc5	2009	23.2	19.1														
		<b>Avg</b>	<b>23.9</b>	<b>20.1</b>														
<b>Middle Rockpile Creek</b>	<b>Avg</b>	<b>21.6</b>	<b>18.9</b>															
	<b>Min</b>	<b>16.4</b>	<b>15.9</b>															
	<b>Max</b>	<b>24.8</b>	<b>21.2</b>															

Planning Watershed Red Rock 1113.820002

**Stream Red Rock Creek**

678		2009	15.6	15.1														
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Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates	
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)

Avg 15.6 15.1

Stream		Rockpile Creek																		
701	Roc4	2005																26	3.0	39
701	Roc4	2006			2,961	36		34	0.24%	52	83%	60%	265	67						
701	Roc4	2008	21.3	19.5																
701	Roc4	2009	21.3	18.6																
		<b>Avg</b>	<b>21.3</b>	<b>19.0</b>	<b>2,961</b>	<b>36</b>		<b>34</b>	<b>0.24%</b>	<b>52</b>	<b>83%</b>	<b>60%</b>	<b>265</b>	<b>67</b>			<b>26</b>	<b>3.0</b>	<b>39</b>	
<b>Red Rock</b>		<b>Avg</b>	<b>19.4</b>	<b>17.7</b>	<b>2,961</b>	<b>36</b>		<b>34</b>	<b>0.24%</b>	<b>52</b>	<b>83%</b>	<b>60%</b>	<b>265</b>	<b>67</b>			<b>26</b>	<b>3.0</b>	<b>39</b>	
		<b>Min</b>	<b>15.6</b>	<b>15.1</b>	<b>2,961</b>	<b>36</b>		<b>34</b>	<b>0.24%</b>	<b>52</b>	<b>83%</b>	<b>60%</b>	<b>265</b>	<b>67</b>			<b>26</b>	<b>3.0</b>	<b>39</b>	
		<b>Max</b>	<b>21.3</b>	<b>19.5</b>	<b>2,961</b>	<b>36</b>		<b>34</b>	<b>0.24%</b>	<b>52</b>	<b>83%</b>	<b>60%</b>	<b>265</b>	<b>67</b>			<b>26</b>	<b>3.0</b>	<b>39</b>	

Hydrologic Unit Buckeye

Planning Watershed Flat Ridge Creek 1113.830001

Stream		Buckeye Creek																		
672	Buc8	2005	18.0	16.5	232	6		71	1.49%	69	33%	36%	76	84			35	4.1	22	
672	Buc8	2006	24.4	19.4																
673	Buc9	2005			325	20		60	1.64%	58	28%	29%	106	82			38	3.6	18	
673	Buc9	2006	26.7	22.8																
709	Buc	2008	23.6	20.3																
		<b>Avg</b>	<b>23.2</b>	<b>19.7</b>	<b>278</b>	<b>13</b>		<b>63</b>	<b>1.57%</b>	<b>63</b>	<b>31%</b>	<b>33%</b>	<b>91</b>	<b>83</b>			<b>37</b>	<b>3.9</b>	<b>20</b>	

Stream		Flat Ridge Creek																		
602	FLR2	2000	25.6	20.9																
602	FLR2	2001	25.2	20.5																
602	FLR2	2005			1,173	16		47	1.14%	89	12%	11%	155	88			38	3.2	25	
602	FLR2	2006	25.8	22.6																
602	FLR2	2009	26.3	20.7																
674	FLT	2005	19.5	16.7																
		<b>Avg</b>	<b>24.5</b>	<b>20.3</b>	<b>1,173</b>	<b>16</b>		<b>59</b>	<b>1.14%</b>	<b>89</b>	<b>12%</b>	<b>11%</b>	<b>155</b>	<b>88</b>			<b>38</b>	<b>3.2</b>	<b>25</b>	
<b>Flat Ridge Creek</b>		<b>Avg</b>	<b>23.9</b>	<b>20.0</b>	<b>577</b>	<b>14</b>		<b>59</b>	<b>1.42%</b>	<b>72</b>	<b>24%</b>	<b>25%</b>	<b>112</b>	<b>85</b>			<b>37</b>	<b>3.6</b>	<b>22</b>	
		<b>Min</b>	<b>18.0</b>	<b>16.5</b>	<b>232</b>	<b>6</b>		<b>47</b>	<b>1.14%</b>	<b>58</b>	<b>12%</b>	<b>11%</b>	<b>76</b>	<b>82</b>			<b>35</b>	<b>3.2</b>	<b>18</b>	
		<b>Max</b>	<b>26.7</b>	<b>22.8</b>	<b>1,173</b>	<b>20</b>		<b>71</b>	<b>1.64%</b>	<b>89</b>	<b>33%</b>	<b>36%</b>	<b>155</b>	<b>88</b>			<b>38</b>	<b>4.1</b>	<b>25</b>	



Station	Year	Temperature		LWD Bank Full		Substrate		Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates		
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'	< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Cr.	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index
	Avg	17.9	16.2	2,391	102			2.22%	68		100%	94%	251	74		34	3.6	21
Grasshopper Creek	Avg	20.0	17.6	3,990	113		35	2.12%	37		89%	92%	302	65		30	4.1	30
	Min	14.2	13.9	944	8		15	0.58%	24		75%	88%	228	59		27	3.6	21
	Max	26.3	22.2	8,000	190		66	3.47%	68		100%	97%	406	74		34	4.6	38

Planning Watershed Harpo Reach 1113.830002

Stream		North Fork Buckeye Creek																	
702	NFB2	2005			771	12		40	0.62%	62		96%	82%	318	59		31	3.9	27
702	NFB2	2008	21.0	18.6															
702	NFB2	2009	19.5	17.3															
	Avg		20.2	17.9	771	12		40	0.62%	62		96%	82%	318	59		31	3.9	27
Harpo Reach	Avg		20.2	17.9	771	12		40	0.62%	62		96%	82%	318	59		31	3.9	27
	Min		19.5	17.3	771	12		40	0.62%	62		96%	82%	318	59		31	3.9	27
	Max		21.0	18.6	771	12		40	0.62%	62		96%	82%	318	59		31	3.9	27

Planning Watershed Little Creek 1113.830004

Stream		Buckeye Creek																					
223	Buc3	1996	21.4	18.8																			
223	Buc3	1997	22.4	19.5																			
223	Buc3	1998	22.7	19.7											0	459							
223	Buc3	1999	21.1	18.0											0	0							
223	Buc3	2000			2,960	55		33	0.32%	46		81%	56%	143	99		0	194	32	0.88	4.0	19	26
223	Buc3	2001	21.1	18.0											0	67							
223	Buc3	2002													0	137							
223	Buc3	2003													0	315							
223	Buc3	2004	21.3	17.9											0	46							
223	Buc3	2008	20.6	17.0	2,195	69		22	0.20%	58	-0.7	80%	54%				258						
223	Buc3	2009	19.4	16.5																			
223	Buc3	2010	18.0	16.2																			
223	Buc3	2011	18.8	16.6																			

Station	Year	Temperature		LWD Bank Full		Substrate		Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates						
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'	< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area Cr.	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant				
224	Buc2	1995	23.9	19.9																		
224	Buc2	1996	22.1	19.3																		
224	Buc2	1997	22.7	19.8																		
224	Buc2	2000	20.9	18.1																		
224	Buc2	2003											0	287								
231	Buc1	1994	21.7	19.7																		
231	Buc1	1995	24.4	20.9																		
231	Buc1	1996	23.7	20.8																		
231	Buc1	1997	23.7	21.1																		
231	Buc1	1998	24.0	21.0	273	11		25	0.36%	27												
231	Buc1	2001	24.3	20.5																		
231	Buc1	2002	21.2	17.8																		
231	Buc1	2011	20.6	18.8																		
235	Buc	1994	21.1	18.3																		
		<b>Avg</b>	<b>21.8</b>	<b>18.9</b>	<b>1,809</b>	<b>45</b>			<b>0.29%</b>	<b>44</b>	<b>-0.7</b>	<b>80%</b>	<b>55%</b>	<b>143</b>	<b>99</b>	<b>0</b>	<b>196</b>	<b>32</b>	<b>0.88</b>	<b>4.0</b>	<b>19</b>	<b>26</b>

Stream		Little Creek																				
666	LiCr	2009	13.7	12.9																		
666	LiCr	2010	13.7	13.0																		
666	LiCr	2011	14.2	13.4																		
		<b>Avg</b>	<b>13.9</b>	<b>13.1</b>																		

Stream		Meg Creek																				
286	Meg	1998	15.1	14.3																		
286	Meg	2002	15.0	13.3																		
		<b>Avg</b>	<b>15.0</b>	<b>13.8</b>																		

<b>Little Creek</b>	<b>Avg</b>	<b>20.5</b>	<b>17.9</b>	<b>1,809</b>	<b>45</b>		<b>27</b>	<b>0.29%</b>	<b>44</b>	<b>-0.7</b>	<b>80%</b>	<b>55%</b>	<b>143</b>	<b>99</b>	<b>0</b>	<b>196</b>	<b>32</b>	<b>0.88</b>	<b>4.0</b>	<b>19</b>	<b>26</b>
	<b>Min</b>	<b>13.7</b>	<b>12.9</b>	<b>273</b>	<b>11</b>		<b>22</b>	<b>0.20%</b>	<b>27</b>	<b>-0.7</b>	<b>80%</b>	<b>54%</b>	<b>143</b>	<b>99</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>0.88</b>	<b>4.0</b>	<b>5,713</b>	<b>26</b>
	<b>Max</b>	<b>24.4</b>	<b>21.1</b>	<b>2,960</b>	<b>69</b>		<b>33</b>	<b>0.36%</b>	<b>58</b>	<b>-0.7</b>	<b>81%</b>	<b>56%</b>	<b>143</b>	<b>99</b>	<b>0</b>	<b>459</b>	<b>32</b>	<b>0.88</b>	<b>4.0</b>	<b>19</b>	<b>26</b>

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates		
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson

Hydrologic Unit Wheatfield

Planning Watershed Annapolis 1113.840303

**Stream Jennifer Creek**

228	Jen	1995	14.5	13.9														
228	Jen	1996	14.0	13.4														
228	Jen	1997	14.8	14.2														
228	Jen	1998	14.1	13.6														
228	Jen	2002	16.3	13.1														
<b>Avg</b>			<b>14.7</b>	<b>13.6</b>														

**Stream Palchett Creek**

901	97-3	1999	15.7	14.5														
<b>Avg</b>			<b>15.7</b>	<b>14.5</b>														

**Stream Wheatfield Fork Gualala River**

29	62	2009						0.15%	22											
30	70	2009						0.14%	19											
32	WFGGr	2009						0.15%	21											
226	Wfg3	1995	25.5	20.9																
226	Wfg3	1996	23.8	20.3																
226	Wfg3	1997	23.1	21.9																
226	Wfg3	1998	24.7	21.7									0	981						
226	Wfg3	2000			1,828	22	27			86%	40%	158	101			32	0.85	4.3	15	32
226	Wfg3	2001	23.2	20.0																
226	Wfg3	2002											0	60						
226	Wfg3	2003			1,310	18	21	0.07%	21				0	182						
226	Wfg3	2008	21.0	18.9	1,637	29	16	0.08%	29	0.05	81%	15%		137						
226	Wfg3	2009																		
226	Wfg3	2010	20.8	19.1																
226	Wfg3	2011	22.5	19.5																

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates						
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant		
227	Wfg2	1996	24.0	21.2																	
227	Wfg2	1997	25.3	22.2																	
227	Wfg2	1998	24.3	21.5																	
227	Wfg2	2000	25.3	21.2																	
227	Wfg2	2003												0	286						
273	WFG	1995	26.4	22.0																	
403	WFG1	1997																			
403	WFG1	1998	26.4	22.9																	
403	WFG1	2000																			
603	WFG	2001																			
603	WFG	2002	24.0	21.6																	
		<b>Avg</b>	<b>24.0</b>	<b>21.0</b>	<b>1,592</b>	<b>23</b>		<b>0.12%</b>	<b>22</b>	<b>0.05</b>	<b>84%</b>	<b>27%</b>	<b>158</b>	<b>101</b>	<b>0</b>	<b>329</b>	<b>32</b>	<b>0.85</b>	<b>4.3</b>	<b>15</b>	<b>32</b>
<b>Annapolis</b>		<b>Avg</b>	<b>21.4</b>	<b>18.9</b>	<b>1,592</b>	<b>23</b>	<b>21</b>	<b>0.12%</b>	<b>22</b>	<b>0.05</b>	<b>84%</b>	<b>27%</b>	<b>158</b>	<b>101</b>	<b>0</b>	<b>329</b>	<b>32</b>	<b>0.85</b>	<b>4.3</b>	<b>15</b>	<b>32</b>
		<b>Min</b>	<b>14.0</b>	<b>13.1</b>	<b>1,310</b>	<b>18</b>	<b>16</b>	<b>0.07%</b>	<b>19</b>	<b>0.05</b>	<b>81%</b>	<b>15%</b>	<b>158</b>	<b>101</b>	<b>0</b>	<b>60</b>	<b>32</b>	<b>0.85</b>	<b>4.3</b>	<b>7,312</b>	<b>32</b>
		<b>Max</b>	<b>26.4</b>	<b>22.9</b>	<b>1,828</b>	<b>29</b>	<b>27</b>	<b>0.15%</b>	<b>29</b>	<b>0.05</b>	<b>86%</b>	<b>40%</b>	<b>158</b>	<b>101</b>	<b>0</b>	<b>981</b>	<b>32</b>	<b>0.85</b>	<b>4.3</b>	<b>15</b>	<b>32</b>

Planning Watershed Fuller Creek 1113.840302

Stream		Fuller Creek		
606	Ful	2001	23.2	18.5
606	Ful	2002	22.9	18.4
606	Ful	2004	21.7	18.2
606	Ful	2005	20.6	18.0
606	Ful	2006	23.6	19.8
606	Ful	2009	20.6	16.8
606	Ful	2011	19.6	17.0
608	Ful1	2001	21.0	17.8
608	Ful1	2002	20.6	17.5
608	Ful1	2009	20.6	16.5
608	Ful1	2010	18.6	16.2
608	Ful1	2011	19.6	16.7
609	Ful3	2008	19.4	17.5
902	Ful	1999	24.0	18.9
		<b>Avg</b>	<b>21.1</b>	<b>17.7</b>



Station	Year	Temperature		LWD Bank Full		Substrate		Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates		
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'	< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant

Stream		North Fork Fuller Creek																	
619	NFU	2000	22.7	18.8															
619	NFU	2001	22.7	18.3															
619	NFU	2002	22.1	17.9															
619	NFU	2004	20.3	17.4															
619	NFU	2005	20.1	16.9															
619	NFU	2006	23.2	19.6															
619	NFU	2009	21.0	16.6															
665	NFu2	2004	18.1	16.3															
		<b>Avg</b>	<b>21.3</b>	<b>17.7</b>															

Stream		South Fork Fuller Creek																	
618	SFU	2000	22.5	19.1															
618	SFU	2001	22.5	18.7															
618	SFU	2002	22.1	18.2															
618	SFU	2004	19.1	17.4															
618	SFU	2005	21.0	18.3															
618	SFU	2006	23.2	20.1															
618	SFU	2009	19.4	16.7															
662	SFu2	2004	21.8	18.4															
663	SFu1	2005			4,273	59	61	2.05%	24		129	44			32	3.2		26	
663	SFu1	2009	15.2	14.2															
		<b>Avg</b>	<b>20.8</b>	<b>17.9</b>	<b>4,273</b>	<b>59</b>		<b>2.05%</b>	<b>24</b>		<b>129</b>	<b>44</b>			<b>32</b>	<b>3.2</b>		<b>26</b>	
<b>Fuller Creek</b>		<b>Avg</b>	<b>21.1</b>	<b>17.8</b>	<b>4,273</b>	<b>59</b>	<b>61</b>	<b>2.05%</b>	<b>24</b>		<b>129</b>	<b>44</b>			<b>32</b>	<b>3.2</b>		<b>26</b>	
		<b>Min</b>	<b>15.2</b>	<b>14.2</b>	<b>4,273</b>	<b>59</b>	<b>61</b>	<b>2.05%</b>	<b>24</b>		<b>129</b>	<b>44</b>			<b>32</b>	<b>3.2</b>		<b>26</b>	
		<b>Max</b>	<b>24.0</b>	<b>20.1</b>	<b>4,273</b>	<b>59</b>	<b>61</b>	<b>2.05%</b>	<b>24</b>		<b>129</b>	<b>44</b>			<b>32</b>	<b>3.2</b>		<b>26</b>	

Planning Watershed      Haupt Cr      1113.840301

Stream		Haupt Cr																	
637		2009																	
637		2011	19.2	17.4															
		<b>Avg</b>	<b>19.2</b>	<b>17.4</b>															

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates			
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index
Haupt Cr	Avg	19.2	17.4															
	Min	19.2	17.4															
	Max	19.2	17.4															

Planning Watershed Tobacco Creek 1113.840304

Stream		Elk Creek			
706	Elk	2005	18.4	16.3	
706	Elk	2006	21.0	18.4	
706	Elk	2009	21.0	17.2	
		<b>Avg</b>	<b>20.1</b>	<b>17.3</b>	

Stream		Wheatfield Fork Gualala River			
612	WFG	2001	25.6	22.4	
612	WFG	2002	25.6	22.4	
620	WFG4	2000	27.8	23.1	
620	WFG4	2001	26.0	23.1	
620	WFG4	2002	26.3	23.0	
620	WFG4	2004	25.7	21.9	
620	WFG4	2008	26.3	21.8	
707	WFG	2006	24.4	22.0	
707	WFG	2008	26.7	22.8	
707	WFG	2009	28.7	23.4	
708	WFG	2006	26.3	24.3	
708	WFG	2008	22.9	19.4	
708	WFG	2009	29.5	23.4	
708	WFG	2011	22.5	19.5	
		<b>Avg</b>	<b>26.0</b>	<b>22.3</b>	

Tobacco Creek	<b>Avg</b>	<b>25.0</b>	<b>21.4</b>
	<b>Min</b>	<b>18.4</b>	<b>16.3</b>
	<b>Max</b>	<b>29.5</b>	<b>24.3</b>

Planning Watershed Tombs Creek 1113.840101

Stream		Tombs Creek			
656		2009	26.0	20.4	

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates			
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index
		Avg	26.0	20.4														
Tombs Creek		Avg	26.0	20.4														
		Min	26.0	20.4														
		Max	26.0	20.4														

Planning Watershed      Wolf Creek      1113.840102

Stream		Redwood Creek																		
704	Rdw1	2005																30	4.2	25
704	Rdw1	2006	20.6	19.7	4,799	146		26	6.90%	20	79%	97%	125	52						
		Avg	20.6	19.7	4,799	146			6.90%	20	79%	97%	125	52				30	4.2	25

Stream		Wheatfield Fork Gualala River																		
651	WFG6	2005																24	4.0	20
651	WFG6	2006	27.0	23.5	10	1		49	0.63%	38	66%	18%	82	40						
651	WFG6	2009	21.8	19.9																
652	WFG7	2005																29	3.7	24
652	WFG7	2006	27.9	25.8	107	1		22	0.55%	26	87%	63%	188	44						
652	WFG7	2009	25.2	20.9																
		Avg	25.5	22.5	59	1			0.59%	32	76%	40%	135	42				26	3.8	22
Wolf Creek		Avg	24.5	22.0	1,639	49		32	2.69%	28	77%	59%	132	45				28	4.0	23
		Min	20.6	19.7	10	1		22	0.55%	20	66%	18%	82	40				24	3.7	20
		Max	27.9	25.8	4,799	146		49	6.90%	38	87%	97%	188	52				30	4.2	25

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates		
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson

Hydrologic Unit

SF Gualala

Planning Watershed

Big Pepperwood Creek

1113.850201

**Stream Big Pepperwood**

218	Ppw3	1994	15.9	14.4																	
218	Ppw3	1995	16.5	15.0																	
218	Ppw3	1996	16.2	14.3																	
218	Ppw3	1997	17.3	15.6																	
218	Ppw3	1998	17.2	15.2	2,490	88	41	1.37%	14					0	153						
218	Ppw3	1999	15.9	14.4	2,324	84	30	1.46%	13	-0.3	90%	88%	348	87	0	132					
218	Ppw3	2000	16.2	14.5											0	21	32	0.79	4.7	15	39
218	Ppw3	2001													0	48					
218	Ppw3	2002	15.6	14.1	6,534	150	45	1.40%	13	-0.7	96%	87%	563	58	0	37					
218	Ppw3	2003	15.5	14.1	7,303	152	35	1.40%	16	-1.2											
218	Ppw3	2004	16.0	14.7	8,154	152	28	1.43%	15	-1.0					0	28					
218	Ppw3	2005	15.6	14.2	8,112	150	37	1.43%	17	-1.1											
218	Ppw3	2006			10,221	178	22	1.56%	16	-1.2											
218	Ppw3	2007			10,268	183	35	1.50%	15	-1.1											
218	Ppw3	2008	15.9	14.8	10,246	197	31	1.52%	17	-1.3	90%	87%				5					
218	Ppw3	2009	15.4	14.3	10,625	203	38	1.52%	16	-1.1					0	84					
218	Ppw3	2010	14.6	13.2	10,777	207	33	1.53%	15	-1.1											
218	Ppw3	2011	14.8	13.5	11,095	215	38	1.51%	16	-1.4	88%	87%			0	153					
219	Ppw2	1995	17.0	14.9																	
219	Ppw2	1996	16.7	14.7																	
219	Ppw2	1997	17.8	15.0																	
219	Ppw2	1998	17.3	14.9																	
219	Ppw2	2009	14.3	13.5																	
219	Ppw2	2011	14.1	13.1																	
248	PPW	1994	17.2	14.6																	
<b>Avg</b>			<b>16.0</b>	<b>14.4</b>	<b>8,179</b>	<b>163</b>		<b>1.47%</b>	<b>15</b>	<b>-1.0</b>	<b>91%</b>	<b>87%</b>	<b>455</b>	<b>72</b>	<b>0</b>	<b>74</b>	<b>32</b>	<b>0.79</b>	<b>4.7</b>	<b>15</b>	<b>39</b>

**Stream Groshong Gulch**

250	Gros	1996	14.1	13.1																	
250	Gros	2002	16.2	13.3																	

Station	Year	Temperature		LWD Bank Full		Substrate		Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates		
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'	< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant
277	GrG	1998	13.9	13.4														
277	GrG	2000	17.8	14.5														
277	GrG	2011	13.4	12.9														
		<b>Avg</b>	<b>15.1</b>	<b>13.5</b>														

Stream		Gualala River																	
614	Gua8	2000	22.9	18.4															
614	Gua8	2001																	
614	Gua8	2009	21.7	18.1															
750		2009	22.5	19.2															
750		2011	23.2	19.7															
751		2009																	
		<b>Avg</b>	<b>22.6</b>	<b>18.8</b>															

Stream		Little Pepperwood																	
220	Lpw	1994	15.8	14.3															
220	Lpw	1995	19.4	16.0															
220	Lpw	1996	17.8	15.0															
220	Lpw	1997	16.7	16.0															
220	Lpw	1998	17.8	15.6															
220	Lpw	2002	15.1	13.8															
220	Lpw	2003	15.9	14.8									0	121					
220	Lpw	2004	14.8	14.3									0	8					
220	Lpw	2005	16.0	14.6															
220	Lpw	2008	14.7	14.3															
220	Lpw	2009	14.4	13.7															
		<b>Avg</b>	<b>16.2</b>	<b>14.8</b>									<b>0</b>	<b>65</b>					

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates						
		Seasonal Daily Max	MWAT	CuFt/1000'	Pieces/1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant		
<b>Stream South Fork Gualala River</b>																					
217	Gua1	1994	22.7	19.2																	
217	Gua1	1995	25.3	20.6																	
217	Gua1	1996	24.4	20.1																	
217	Gua1	1997	24.6	22.4																	
217	Gua1	1998			934	17	24	0.11%	23		93%	16%									
217	Gua1	1999												0	32						
217	Gua1	2000	23.2	19.2	804	15	25	0.03%	22	-0.1	96%	17%	239	90	0	21	28	0.87	4.4	16	28
217	Gua1	2001	23.3	19.1	1,639	34	20	0.07%	20	0.19					0	11					
217	Gua1	2002			1,479	28	22	0.10%	27	0.008					0						
217	Gua1	2003			1,084	24	12	0.11%	22	0.1					0	149					
217	Gua1	2004	23.2	20.0	1,254	27	19	0.09%	26	0.18					0	97					
217	Gua1	2006			1,016	20	20														
217	Gua1	2007			1,087	22	15	0.13%	21	-0.2											
217	Gua1	2008	24.5	19.8	1,110	29	19	0.10%	23	-0.2						26					
217	Gua1	2009	23.2	18.9	1,109	30	16	0.06%	22	-0.1					0	166					
217	Gua1	2010	22.4	18.3																	
217	Gua1	2011	22.5	18.8											0	465					
		<b>Avg</b>	<b>23.6</b>	<b>19.7</b>	<b>1,152</b>	<b>24</b>		<b>0.09%</b>	<b>23</b>	<b>-0.03</b>	<b>95%</b>	<b>17%</b>	<b>239</b>	<b>90</b>	<b>0</b>	<b>121</b>	<b>28</b>	<b>0.87</b>	<b>4.4</b>	<b>16</b>	<b>28</b>
<b>Big Pepperwood Creek</b>		<b>Avg</b>	<b>18.0</b>	<b>15.8</b>	<b>4,985</b>	<b>100</b>	<b>28</b>	<b>0.88%</b>	<b>19</b>	<b>-0.6</b>	<b>92%</b>	<b>64%</b>	<b>383</b>	<b>78</b>	<b>0</b>	<b>93</b>	<b>30</b>	<b>0.83</b>	<b>4.6</b>	<b>16</b>	<b>33</b>
		<b>Min</b>	<b>13.4</b>	<b>12.9</b>	<b>804</b>	<b>15</b>	<b>12</b>	<b>0.03%</b>	<b>13</b>	<b>-1.4</b>	<b>88%</b>	<b>16%</b>	<b>239</b>	<b>58</b>	<b>0</b>	<b>5</b>	<b>28</b>	<b>0.79</b>	<b>4.4</b>	<b>4,961</b>	<b>28</b>
		<b>Max</b>	<b>25.3</b>	<b>22.4</b>	<b>11,095</b>	<b>215</b>	<b>45</b>	<b>1.56%</b>	<b>27</b>	<b>0.19</b>	<b>96%</b>	<b>88%</b>	<b>563</b>	<b>90</b>	<b>0</b>	<b>465</b>	<b>32</b>	<b>0.87</b>	<b>4.7</b>	<b>16</b>	<b>39</b>

**Planning Watershed** Lower Marshall Creek 1113.850102

<b>Stream Marshall Creek</b>																				
607	Mar	2004	22.5	19.7																
		<b>Avg</b>	<b>22.5</b>	<b>19.7</b>																
<b>Lower Marshall Creek</b>		<b>Avg</b>	<b>22.5</b>	<b>19.7</b>																
		<b>Min</b>	<b>22.5</b>	<b>19.7</b>																
		<b>Max</b>	<b>22.5</b>	<b>19.7</b>																

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates		
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'	< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index

**Planning Watershed** Mouth of the Gualala River 1113.850202

**Stream South Fork Gualala River**

16	280	2009						0.10%	22									
17	295	2009						0.18%	25									
18	310	2009						0.23%	32									
19	SFG	2009						0.13%	28									
20	370	2009						0.31%	20									
225	SFG	1995	24.8	20.8														
225	SFG	1997	22.1	20.6														
229	SFG	1995	23.4	19.9														
229	SFG	1996	22.1	19.0														
229	SFG	1997	25.6	20.5														
230	SFG	1995	22.9	18.9														
230	SFG	1996	21.8	18.4														
230	SFG	1997	24.4	22.3														
230	SFG	1998	22.6	19.5														
230	SFG	2009	20.6	17.6														
230	SFG	2011	20.2	17.6														
402	SFG	1998	22.1	19.7									0	961				
402	SFG	1999			1,473	33	18	0.33%	29		76%	26%	197	108	0	400		
402	SFG	2000	22.4	18.9											0	268		
402	SFG	2001													0	153		
402	SFG	2002													0	121		
402	SFG	2008			1,391	31	19	0.41%	31	-0.1						1,327		
<b>Avg</b>			<b>22.7</b>	<b>19.5</b>	<b>1,432</b>	<b>32</b>		<b>0.24%</b>	<b>27</b>	<b>-0.1</b>	<b>76%</b>	<b>26%</b>	<b>197</b>	<b>108</b>	<b>0</b>	<b>539</b>		
<b>Mouth of the Gualala Ri</b>	<b>Avg</b>		<b>22.7</b>	<b>19.5</b>	<b>1,432</b>	<b>32</b>	<b>19</b>	<b>0.24%</b>	<b>27</b>	<b>-0.1</b>	<b>76%</b>	<b>26%</b>	<b>197</b>	<b>108</b>	<b>0</b>	<b>539</b>		
	<b>Min</b>		<b>20.2</b>	<b>17.6</b>	<b>1,391</b>	<b>31</b>	<b>18</b>	<b>0.10%</b>	<b>20</b>	<b>-0.1</b>	<b>76%</b>	<b>26%</b>	<b>197</b>	<b>108</b>	<b>0</b>	<b>121</b>		
	<b>Max</b>		<b>25.6</b>	<b>22.3</b>	<b>1,473</b>	<b>33</b>	<b>19</b>	<b>0.41%</b>	<b>32</b>	<b>-0.1</b>	<b>76%</b>	<b>26%</b>	<b>197</b>	<b>108</b>	<b>0</b>	<b>1,327</b>		

**Planning Watershed** Upper Marshall Creek 1113.850101

**Stream Camper Creek**

699	Cmp	2004	17.9	16.5														
699	Cmp	2005	17.9	16.3														

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates			
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index
		<b>Avg</b>	<b>17.9</b>	<b>16.4</b>														
<b>Stream</b>		<b>Carson Cr</b>																
605	Car	2004	16.8	15.6														
605	Car	2005	18.1	16.8														
631	Car1	2004			2,724	39		39	1.45%	42	88%	98%	143	106				
		<b>Avg</b>	<b>17.4</b>	<b>16.2</b>	<b>2,724</b>	<b>39</b>			<b>1.45%</b>	<b>42</b>	<b>88%</b>	<b>98%</b>	<b>143</b>	<b>106</b>				
<b>Stream</b>		<b>McKenzie Creek</b>																
615	McK1	2000	16.0	15.1														
615	McK1	2001	20.6	17.5														
615	McK1	2004	19.8	17.5	997	8		38	1.24%	27	95%	95%	262	133				
615	McK1	2005	20.2	17.8														
617	McK1	2000	20.7	18.3														
617	McK1	2001	20.2	17.5														
617	McK1	2003	20.6	18.7														
617	McK1	2004	18.7	17.2														
617	McK1	2005	20.6	18.1														
		<b>Avg</b>	<b>19.7</b>	<b>17.5</b>	<b>997</b>	<b>8</b>			<b>1.24%</b>	<b>27</b>	<b>95%</b>	<b>95%</b>	<b>262</b>	<b>133</b>				
<b>Stream</b>		<b>Palmer Creek</b>																
621	Plm	2000	23.6	19.3														
621	Plm	2001																
621	Plm	2003	20.5	18.2														
621	Plm	2004	20.6	17.5														
621	Plm	2005	20.6	17.9														
		<b>Avg</b>	<b>21.3</b>	<b>18.2</b>														
<b>Stream</b>		<b>Wild Hog Creek</b>																
604	Whg	2004	14.9	14.6														
604	Whg	2005	17.9	17.2														
		<b>Avg</b>	<b>16.4</b>	<b>15.9</b>														
<b>Upper Marshall Creek</b>		<b>Avg</b>	<b>19.3</b>	<b>17.2</b>	<b>1,861</b>	<b>24</b>		<b>39</b>	<b>1.35%</b>	<b>34</b>	<b>92%</b>	<b>97%</b>	<b>202</b>	<b>120</b>				
		<b>Min</b>	<b>14.9</b>	<b>14.6</b>	<b>997</b>	<b>8</b>		<b>38</b>	<b>1.24%</b>	<b>27</b>	<b>88%</b>	<b>95%</b>	<b>143</b>	<b>106</b>				
		<b>Max</b>	<b>23.6</b>	<b>19.3</b>	<b>2,724</b>	<b>39</b>		<b>39</b>	<b>1.45%</b>	<b>42</b>	<b>95%</b>	<b>98%</b>	<b>262</b>	<b>133</b>				



Station	Year	Temperature		LWD Bank Full		Substrate		Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates		
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'	< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Cr.	Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index

Planning Watershed Upper South Fork Gualala Ri 1113.850104

**Stream South Fork Gualala River**

616	SFG4	2000	19.4	16.7															
616	SFG4	2001	19.8	16.4															
616	SFG4	2003	19.5	17.4															
616	SFG4	2004	18.7	16.7															
616	SFG4	2005	19.0	17.2															
		<b>Avg</b>	<b>19.3</b>	<b>16.9</b>															
<b>Upper South Fork Gual</b>		<b>Avg</b>	<b>19.3</b>	<b>16.9</b>															
		<b>Min</b>	<b>18.7</b>	<b>16.4</b>															
		<b>Max</b>	<b>19.8</b>	<b>17.4</b>															

Hydrologic Unit Coastal Gualala

Planning Watershed Black Mtn. 1113.900002

**Stream East Branch Russian Gulch**

469	ERuG	2010							59										
		<b>Avg</b>							<b>59</b>										

**Stream Russian Gulch**

471	RuG1	2000	17.5	14.9	8,615	169		0.85%	34	77%	40%	153	44		27	0.81	4.9	11	38
471	RuG1	2002	21.6	15.8															
471	RuG1	2010							27										
		<b>Avg</b>	<b>19.5</b>	<b>15.3</b>	<b>8,615</b>	<b>169</b>		<b>0.85%</b>	<b>30</b>	<b>77%</b>	<b>40%</b>	<b>153</b>	<b>44</b>		<b>27</b>	<b>0.81</b>	<b>4.9</b>	<b>11</b>	<b>38</b>
<b>Black Mtn.</b>		<b>Avg</b>	<b>19.5</b>	<b>15.3</b>	<b>8,615</b>	<b>169</b>		<b>0.85%</b>	<b>40</b>	<b>77%</b>	<b>40%</b>	<b>153</b>	<b>44</b>		<b>27</b>	<b>0.81</b>	<b>4.9</b>	<b>11</b>	<b>38</b>
		<b>Min</b>	<b>17.5</b>	<b>14.9</b>	<b>8,615</b>	<b>169</b>		<b>0.85%</b>	<b>27</b>	<b>77%</b>	<b>40%</b>	<b>153</b>	<b>44</b>		<b>27</b>	<b>0.81</b>	<b>4.9</b>	<b>8,467</b>	<b>38</b>
		<b>Max</b>	<b>21.6</b>	<b>15.8</b>	<b>8,615</b>	<b>169</b>		<b>0.85%</b>	<b>59</b>	<b>77%</b>	<b>40%</b>	<b>153</b>	<b>44</b>		<b>27</b>	<b>0.81</b>	<b>4.9</b>	<b>11</b>	<b>38</b>

Planning Watershed Black Point 1113.850304

**Stream Salal Creek**

470	Sal1	2000	15.3	13.5	2,048	127	9	4.69%	11	87%	89%	158	92		33	0.86	2.9	20	29
470	Sal1	2001	13.7	13.4															

Station	Year	Temperature		LWD Bank Full		Substrate		Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates				
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'	< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Cr.	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson	Hilsenhoff Russian R Index	% Dominant	
		Avg	14.5	13.4	2,048	127		4.69%	11		87%	89%	158	92		33	0.86	2.9	20	29
<b>Stream School House Creek</b>																				
472	ScH	2000			829	66		0	5.86%	54	97%	97%	474	93						
					Avg	829	66		5.86%	54	97%	97%	474	93						
Black Point			Avg	14.5	13.4	1,438	97	5	5.28%	32	92%	93%	316	92		33	0.86	2.9	20	29
			Min	13.7	13.4	829	66	0	4.69%	11	87%	89%	158	92		33	0.86	2.9		29
			Max	15.3	13.5	2,048	127	9	5.86%	54	97%	97%	474	93		33	0.86	2.9	20	29

Station	Year	Temperature		LWD Bank Full		Substrate	Streambed			Riparian Zone			Fish per Mile		Macroinvertebrates		
		Seasonal Daily Max	MWAT	CuFt/ 1000'	Pieces/ 1000'		< 0.85 mm	D50	Slope	VI	A/D	Canopy % WLPZ	Basal Area	Tree Ht.	Coho	SH (1+)	Richness Simpson

**Summary for Assessment Are Gualala-Salmon**

(990 detail records)

Avg	19.6	17.2	3,882	78	17.6%	33	1.04%	28	-0.4	81%	68%	233	78	1	263	31	0.85	4.0	17	29
Min	13.4	12.9	10	1	4.5%	0	0.03%	10	-1.4	12%	11%	76	40	0	0	24	0.79	2.9	11	18
Max	29.5	25.8	11,095	215	48.3%	71	6.90%	89	0.56	100%	98%	563	133	32	1,552	41	0.92	4.9	22	41
Old Growth Watersheds (HRSP)	18.5	16.6			21.6%	62										26.2	0.89			
Poor-Normal-Good									>20							26-35	.8-.89	4.6-3.1	12-17	39-15
NCWQCB Target	18.3	16.8			<14%															

<p><b>Temperature</b></p> <ul style="list-style-type: none"> <li>Seasonal Maximum – The highest water temperature recorded during the summer.</li> <li>Maximum weekly average temperature (MWAT) - The highest average temperature for any seven day rolling average</li> </ul>	<p><b>Large Woody Debris (LWD)</b></p> <ul style="list-style-type: none"> <li>LWD must be at least 8 inches on the small end and longer than 4 feet.</li> <li>Cubic Feet per 1,000 feet – The cubic volume of LWD located between the bankfull lines.</li> <li>Pieces per 1,000' – The number of LWD pieces per 1000'</li> </ul>	<p><b>Stream Substrate</b></p> <ul style="list-style-type: none"> <li>&lt;0.85mm – The percent fines less than 0.85 millimeters in a McNeal sample.</li> <li>D50- The pebble size of the median pebble of a 100 pebble sample. Three sample sites on each reach are averaged.</li> </ul>	<p><b>Fish Surveys</b></p> <ul style="list-style-type: none"> <li>Presence/absence snorkel surveys were conducted. Rough estimates were made of fish numbers per mile.</li> <li>Coho – Coho salmon any age.</li> <li>SH (1+) – Steelhead one year old or older.</li> </ul>
<p><b>Streambed (Thalweg) Survey</b></p> <ul style="list-style-type: none"> <li>Slope – the slope of the channel</li> <li>VI – The variation index is the [(SD of residual depth/bank full depth) *100]. This is a way of quantifying roughness and hence suitability for fish. Greater than 20 is a good indication of recovery.</li> <li>A/D – The change in elevation of the channel (aggradation or degradation) relative to the first year of measurement.</li> </ul>	<p><b>Riparian Condition</b></p> <ul style="list-style-type: none"> <li>Canopy Cover percent as measured with a spherical densiometer. Every 200', canopy percent is measured in the center of the channel. And at bank full and 50' into the riparian zone from bankfull on both sides of the channel. Four measurements are averaged at each point.</li> <li>WLPZ (Watercourse and Lake Protection Zone) – The average of all the measurements taken on either side of the channel 50' into the riparian zone.</li> <li>Cr. – The average of all the measurements taken in the center of the channel.</li> <li>Riparian inventory plots were locate both sides of the channel every 200'</li> <li>Basal Area – Is the average basal area in square feet of all the riparian plots</li> <li>Tree Ht. – Is the average height of the 100 tallest trees per acre.</li> </ul>		<p><b>Macroinvertebrates</b></p> <ul style="list-style-type: none"> <li>Richness – Total number of Genuses represented.</li> <li>Simpson Diversity Index – Measures the evenness of species diversity</li> <li>Hilsenhoff – This is a locally modified Hilsenhoff index. It indicates levels of organic pollution</li> <li>Russian River Index – A localized index that combines several standard metrics.</li> <li>Percent Dominant Taxon – this is a species distribution index</li> </ul>
<ul style="list-style-type: none"> <li>The information presented in this report is the result of data collected by variety of organizations. Release of the underlying data is by permission of the organization that collected it.</li> </ul>			