

## **APPENDIX A FECAL COLIFORM AND *E. COLI***

### **SAMPLING DATA AND ANALYSIS**

#### **SAMPLING DATA**

CCAMP Fecal coliform Water Quality Data for Sampling Stations 305COR and 305COR2 (note: only data from 2003 to 2006 was used in data analysis for this Project Report)

<b>Sampling Location</b>	<b>Date</b>	<b>Fecal Coliform MPN/100 ml</b>
<b>305COR (Salsipuedes Creek at Riverside Dr. Bridge)</b>	12/18/97	5000
	01/19/98	900
	02/19/98	3000
	03/12/98	80
	05/27/98	80
	06/30/98	70
	07/31/98	300
	09/03/98	240
	09/30/98	2400
	10/21/98	110
	11/10/98	70
	12/16/98	70
	01/24/05	2400
	02/22/05	300
	03/23/05	2400
	04/19/05	30
	05/17/05	80
	06/14/05	220
	07/19/05	240
	08/17/05	300
	09/13/05	500
	10/12/05	110
	11/09/05	300
12/06/05	500	
01/10/06	2300	
02/21/06	80	
03/14/06	3000	
<b>305COR2 (Corralitos Creek at Browns Valley Bridge)</b>	01/24/05	30
	02/22/05	80
	03/23/05	240
	04/21/05	30
	05/19/05	30000
	06/16/05	500
	07/21/05	130
	12/08/05	80
	01/12/06	50
	02/23/06	130
03/16/06	300	

Santa Cruz County Water Quality Data for Sampling Stations SCC1 and SCC2  
(note: only data from 2003 to 2006 was used in data analysis for this Project Report)

Sampling Location	Date	Fecal Coliform MPN/100 ml	Sampling Location	Date	Fecal Coliform MPN/100 ml
SCC 1 (Corralitos Creek at Rider Creek)	11/19/75	15	SCC 1 (Corralitos Creek at Rider Creek)	09/14/93	220
	12/16/75	6		09/21/93	260
	01/28/76	110		09/28/93	155
	03/22/76	28		10/05/93	48
	06/29/76	475		10/13/93	3515
	09/07/76	175		10/19/93	92
	03/15/77	160		10/26/93	18
	09/08/77	266		11/03/93	38
	02/08/78	200		11/16/93	67
	09/11/78	198		11/23/93	7
	09/30/79	233		11/30/93	44
	11/12/86	0		12/08/93	130
	12/16/86	56		12/14/93	189
	01/27/87	20		12/21/93	3
	07/20/87	56		01/04/94	20
	08/24/87	40		01/11/94	30
	09/12/88	70		02/01/94	16
	11/08/88	50		02/08/94	7
	01/03/89	260		02/15/94	7
	06/12/89	260		03/01/94	8
	08/07/89	24		03/09/94	17
	10/30/89	644		03/15/94	19
	11/27/89	90		03/22/94	12
	01/22/90	100		03/29/94	57
	02/26/90	50		04/20/94	27
	03/26/90	35		04/26/94	141
	05/07/90	15		05/10/94	11
	06/04/90	180		05/17/94	288
	07/09/90	80		05/24/94	102
	08/07/90	40		06/07/94	94
	09/10/90	60		09/19/94	0
	10/15/90	50		09/05/95	40
12/03/90	145	10/02/95	60		
01/07/91	150	11/02/95	76		
08/27/91	45	11/27/95	20		
10/07/91	460	12/27/95	20		
10/15/91	200	05/02/96	398		
12/02/91	60	06/05/96	100		
02/24/92	60	06/17/96	40		
06/07/92	140	07/17/96	42		
06/29/92	1220	01/07/97	10		
08/03/92	60	03/17/98	10		
08/31/92	60	05/12/99	36		
10/19/92	80	06/01/99	150		
10/26/92	200	07/12/99	70		
01/04/93	200	08/09/99	48		

Sampling Location	Date	Fecal Coliform MPN/100 ml	Sampling Location	Date	Fecal Coliform MPN/100 ml
SCC 1 (Corralitos Creek at Rider Creek)	09/14/99	30	SCC 1 (Corralitos Creek at Rider Creek)	05/10/04	80
	10/12/99	20		06/08/04	160
	11/18/99	120		06/17/04	68
	02/14/00	340		07/12/04	16
	03/13/00	10		08/09/04	36
	04/04/00	10		09/14/04	75
	05/09/00	100		10/12/04	40
	06/14/00	410		11/09/04	5
	07/11/00	90		12/13/04	5
	07/13/00	90		01/10/05	20
	08/08/00	60		02/07/05	155
	09/07/00	76		03/08/05	5
	11/13/00	10		04/12/05	35
	12/05/00	10		05/10/05	25
	01/29/01	30		06/13/05	50
	02/26/01	20		07/12/05	150
	03/26/01	30		09/13/05	88
	04/30/01	110		09/23/05	88
	07/02/01	230		10/11/05	70
	08/07/01	60		11/14/05	150
	09/05/01	10		12/12/05	295
	10/09/01	50		01/10/06	10
	10/22/01	30		02/13/06	460
	10/23/01	30		03/15/06	65
	11/05/01	80		04/10/06	40
	12/12/01	20		05/08/06	20
	01/15/02	60		05/09/06	15
	02/11/02	20		06/12/06	50
	03/11/02	20		07/10/06	40
	04/08/02	10		08/15/06	10
	05/14/02	12		09/05/06	5
	06/11/02	190			
	07/09/02	24			
	08/14/02	52			
	09/19/02	30			
	11/12/02	60			
	12/10/02	100			
	01/13/03	20			
	02/10/03	80			
	03/12/03	30			
04/03/03	30				
04/08-03	30				
09/08-03	30				
10/14/03	620				
11/12/03	40				
12/10/03	310				
01/12/04	20				
02/09/04	50				
03/08/04	40				
04/13/04	40				

Sampling Location	Date	Fecal Coliform MPN/100 ml	Sampling Location	Date	Fecal Coliform MPN/100 ml
	04/14/04	30			
SCC 2 (Corralitos Creek below Browns Valley Bridge)	03/17/87	76	SCC 2 (Corralitos Creek below Browns Valley Bridge)	08/09/99	64
	10/19/87	44		09/14/99	260
	09/12/88	40		10/12/99	220
	11/08/88	402		11/18/99	50
	11/15/88	120		02/14/00	640
	06/12/89	50		03/13/00	50
	08/07/89	60		04/04/00	40
	10/30/89	70		05/09/00	120
	11/27/89	40		06/14/00	90
	01/22/90	40		07/11/00	240
	02/26/90	35		07/13/00	240
	02/27/90	20		08/08/00	50
	03/26/90	16		09/07/00	60
	05/07/90	56		11/13/00	110
	06/04/90	240		12/05/00	20
	07/09/90	100		01/29/01	10
	08/07/90	120		02/26/01	40
	10/15/90	80		03/26/01	40
	12/03/90	20		04/30/01	60
	01/07/91	16		06/04/01	40
	08/27/91	112		12/12/01	70
	10/07/91	676		02/11/02	20
	10/15/91	36		03/11/02	20
	12/02/91	32		04/08/02	40
	06/29/92	800		05/14/02	344
	07/07/92	60		06/11/02	100
	08/03/92	60		11/12/02	140
	10/26/92	120		12/10/02	70
	01/04/93	200		01/13/03	30
	09/14/93	260		02/10/03	50
	02/28/94	6		03/12/03	10
	03/22/94	25		04/03/03	40
04/20/94	92	11/12/03	50		
04/26/94	231	12/10/03	140		
05/10/94	81	01/12/04	40		
05/17/94	460	02/09/04	40		
05/24/94	108	03/08/04	5		
06/07/94	52	04/13/04	40		
09/05/95	30	04/13/04	70		
10/02/95	40	05/10/04	20		
11/02/95	52	09/14/04	25		
11/27/95	3.6	11/09/04	40		
12/27/95	25	12/13/04	40		
05/02/96	20	01/10/05	36		
06/05/96	20	02/07/05	195		
07/17/96	120	03/08/05	30		
01/07/97	70	04/12/05	25		
03/25/99	230	04/21/05	45		
05/12/99	24	05/10/05	220		

Sampling Location	Date	Fecal Coliform MPN/100 ml	Sampling Location	Date	Fecal Coliform MPN/100 ml
		06/01/99		50	
	07/12/99	60		07/12/05	305
Sampling Location	Date	Fecal Coliform MPN/100 ml	Sampling Location	Date	Fecal Coliform MPN/100 ml
SCC 2 (Corralitos Creek below Browns Valley Bridge)	09/13/05	64			
	12/12/05	150			
	01/10/06	55			
	02/13/06	965			
	03/15/06	95			
	04/10/06	120			
	05/08/06	120			
	05/09/06	75			
	06/12/06	80			
	07/10/06	80			
	08/15/06	85			
	09/05/06	1340			
	10/11/06	5			

Coastal Watershed Council *E. coli* Water Quality Data for Sampling Locations  
SALSI 21 and CORRA 23

<b>Sampling Location</b>	<b>Date</b>	<b><i>E. coli</i> MPN/100 ml</b>
SALSI 21	11/05/03	662
	03/08/04	161
	05/26/04	185
	07/06/04	226
	08/12/04	285
	09/22/04	243
	10/07/04	437
	11/08/04	20
CORRA 23	11/05/03	322
	03/08/04	20
	05/26/04	441
	07/06/04	1333
	08/12/04	201
	09/22/04	855
	10/07/04	4611
	11/08/04	187

City of Watsonville Fecal coliform Water Quality Data for Corralitos and Salsipuedes Creeks

Sampling Location	Date	Fecal Coliform MPN/100 ml	Sampling Location	Date	Fecal Coliform MPN/100 ml
ECI (Eureka Canyon Intake)	01/03	80	BVI (Browns Valley Intake)	04/03	140
	02/03	110		05/03	240
	03/03	170		06/03	80
	04/03	130		07/03	50
	05/03	240		08/03	50
	06/03	500		09/03	50
	07/03	300		10/03	30
	08/03	80		11/03	1600
	09/03	170		12/03	50
	10/03	170		01/04	23
	11/03	240		02/04	170
	12/03	23		03/04	30
	01/04	140		04/04	50
	02/04	2400		05/04	80
	03/04	110		06/04	240
	04/04	130		07/04	30
	05/04	130		08/04	30
	06/04	500		09/04	240
	07/04	110		10/04	70
	08/04	110		11/04	30
	09/04	500		12/04	140
	10/04	130		01/05	75
	11/04	130		02/05	107
	12/04	23		03/05	31
	01/05	54		04/05	187
	02/05	88		05/05	147
	03/05	58		06/05	51
	04/05	79		07/05	43
	05/05	142		08/05	74
	06/05	173		09/05	29
	07/05	582		10/05	49
	08/05	81		11/05	11
09/05	55	12/05	34		
10/05	119	01/06	22		
11/05	23	02/06	32		
12/05	40	03/06	525		
01/06	10	04/06	576		
02/06	11				
03/06	134				
04/06	273				
BVI (Browns Valley Intake)	01/03	50			
	02/03	110			
	03/03	80			

City of Watsonville *E. coli* Water Quality Data for Corralitos and Salsipuedes Creeks

Sampling Location	Date	<i>E. coli</i> MPN/100 ml
CC-1 (Corralitos Creek at Green Valley Rd)	01/04/05	55
CC-2 (Corralitos Creek just upstream of Salsipuedes Cr.)	01/04/05	64
CC-3 (Salsipuedes Creek at Lake Ave.)	01/04/05	109
CC-4 (Salsipuedes Creek at Riverside Drive Bridge)	01/04/05	234
CC-5 (Salsipuedes Creek just upstream of Pajaro River Confluence)	01/04/05	203
CC-1 (Corralitos Creek at Green Valley Rd)	01/12/05	38
CC-2 (Corralitos Creek just upstream of Salsipuedes Cr.)	01/12/05	75
CC-3 (Salsipuedes Creek at Lake Ave.)	01/12/05	58
CC-4 (Salsipuedes Creek at Riverside Drive Bridge)	01/12/05	171
CC-5 (Salsipuedes Creek just upstream of Pajaro River Confluence)	01/12/05	226
CC-1 (Corralitos Creek at Green Valley Rd)	01/19/05	39
CC-2 (Corralitos Creek just upstream of Salsipuedes Cr.)	01/19/05	64
CC-3 (Salsipuedes Creek at Lake Ave.)	01/19/05	81
CC-4 (Salsipuedes Creek at Riverside Drive Bridge)	01/19/05	39
CC-5 (Salsipuedes Creek just upstream of Pajaro River Confluence)	01/19/05	53
CC-1 (Corralitos Creek at Green Valley Rd)	01/26/05 *	3448
CC-2 (Corralitos Creek just upstream of Salsipuedes Cr.)	01/26/05 *	2909
CC-3 (Salsipuedes Creek at Lake Ave.)	01/26/05 *	1956
CC-4 (Salsipuedes Creek at Riverside Drive Bridge)	01/26/05 *	2723
CC-5 (Salsipuedes Creek just upstream of Pajaro River Confluence)	01/26/05 *	4106
CC-1 (Corralitos Creek at Green Valley Rd)	02/02/05	215
CC-2 (Corralitos Creek just upstream of Salsipuedes Cr.)	02/02/05	69
CC-3 (Salsipuedes Creek at Lake Ave.)	02/02/05	91
CC-4 (Salsipuedes Creek at Riverside Drive Bridge)	02/02/05	144
CC-5 (Salsipuedes Creek just upstream of Pajaro River Confluence)	02/02/05	154
CC-1 (Corralitos Creek at Green Valley Rd)	02/09/05	85
CC-2 (Corralitos Creek just upstream of Salsipuedes Cr.)	02/09/05	110
CC-3 (Salsipuedes Creek at Lake Ave.)	02/09/05	92
CC-4 (Salsipuedes Creek at Riverside Drive Bridge)	02/09/05	646
CC-5 (Salsipuedes Creek just upstream of Pajaro River Confluence)	02/09/05	621

\* Field notes indicated rain event during sampling on January 26, 05



## DATA ANALYSIS

Staff used two methods to analyze fecal coliform and *E. coli* water quality data. Staff analyzed the fecal coliform data using a program titled “Fecal Coliform Investigation and Analysis Spreadsheet” (FECIA; Riverson, 2003). FECIA is a fully automated spreadsheet designed to assist in characterization and quantification of fecal coliform instream water quality objective exceedances. Staff compared the observed data against specified values equal to water quality objectives to determine the magnitude and nature of exceedances. Staff used the FECIA program to generate the data analysis figures and tables contained in this section of the appendix. Figures display the water contact recreation beneficial use maximum water quality objective for fecal coliform only (as a bold horizontal line). Staff determined, none of the samples collected amounted to greater than five in a 30-day period, the rate necessary to calculate a geometric mean. Therefore, staff did not use the geometric mean water quality objective for fecal coliform.

Staff used a second method, an Excel spread sheet, for analyzing *E. coli* data. Staff calculated the geomean for each set of five samples in a 30-day period. Staff also used Excel to calculate the percent of exceedances for data sets of less than five samples in a 30-day period. Two Coastal Watershed Council *E. coli* sample sets contained eight samples collected in an approximate one-year period. In this case, staff used Excel to calculate the geomean of all eight samples at each location. Although there was not enough data to analyze according to USEPA water quality criteria, staff felt the analysis was sufficient for indicating the presence or absence of high levels of indicator bacteria. Statistics that staff generated from the analysis are included in this section of the appendix.

Tables below each figure display statistical data on a monthly basis including the mean, median, minimum, maximum, number of exceedances of the water contact recreation water quality objective versus the sample count (XS:Count), and the percent sample exceedance (XS%) of the water quality objective. Note that when the table analyzed geometric means, the column entitled “mean” was actually the “mean of the geometric mean.” The mean value for the maximum water quality objective or criterion is the actual mean value of the samples collected.

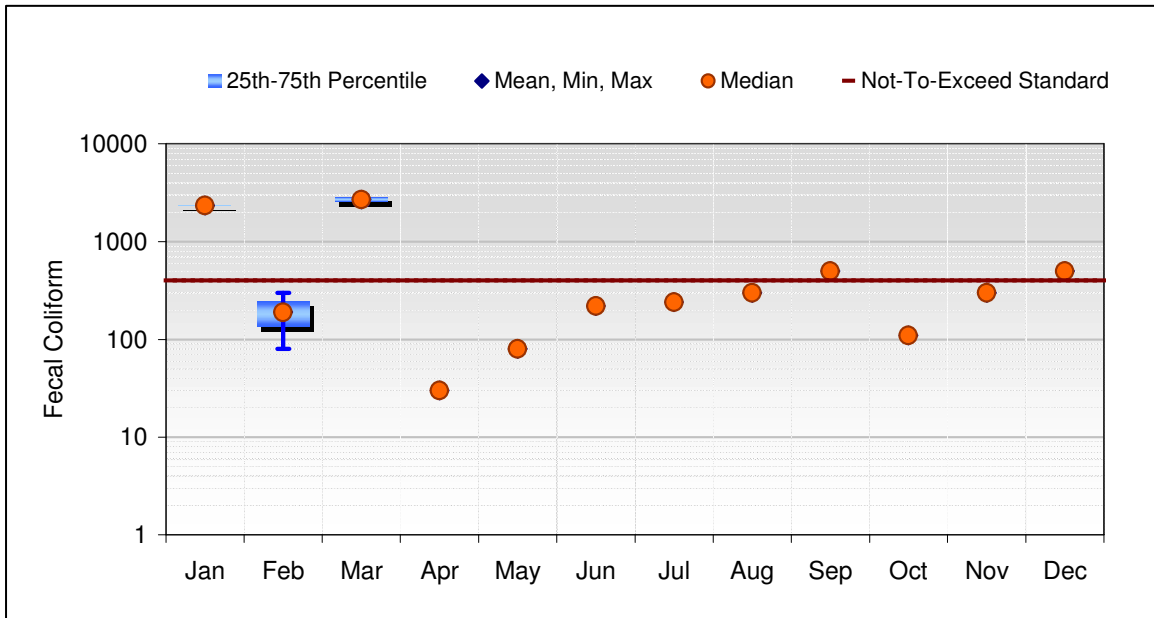
***CCAMP data: Salsipuedes Creek at Riverside Drive Bridge  
(305 COR)***

Geometric Mean Water Quality Objective (200 MPN/100 ml)

There was not enough water quality data collected at the Salsipuedes Creek at Riverside Drive Bridge sampling station to calculate geometric means.

**CCAMP data: Salsipuedes Creek at Riverside Drive Bridge  
 (305 COR)**

Maximum Water Quality Objective (400 MPN/100 ml)



**Figure 1. Salsipuedes Creek at Riverside Drive Bridge Fecal Coliform (#/100 ml) and Water Contact Maximum Water Quality Objective (January 05 through March 2006)**

**Table 1. Salsipuedes Creek at Riverside Drive Bridge Fecal Coliform (#/100 ml) Data Summary and Exceedance of Water Contract Recreation Maximum Water Quality Objective**

Summary Statistics ( Data: 1/24/2005 3:53:00 PM to 3/14/2006 1:28:00 PM )								
Month	Mean	Median	Min	Max	25th	75th	XS:Count	XS%
Jan	2350	2350	2300	2400	2325	2375	2:2	100%
Feb	190	190	80	300	135	245	0:2	0%
Mar	2700	2700	2400	3000	2550	2850	2:2	100%
Apr	30	30	30	30	30	30	0:1	0%
May	80	80	80	80	80	80	0:1	0%
Jun	220	220	220	220	220	220	0:1	0%
Jul	240	240	240	240	240	240	0:1	0%
Aug	300	300	300	300	300	300	0:1	0%
Sep	500	500	500	500	500	500	1:1	100%
Oct	110	110	110	110	110	110	0:1	0%
Nov	300	300	300	300	300	300	0:1	0%
Dec	500	500	500	500	500	500	1:1	100%
<b>All Data</b>	<b>851</b>	<b>300</b>	<b>30</b>	<b>3000</b>	<b>165</b>	<b>1400</b>	<b>6:15</b>	<b>40%</b>

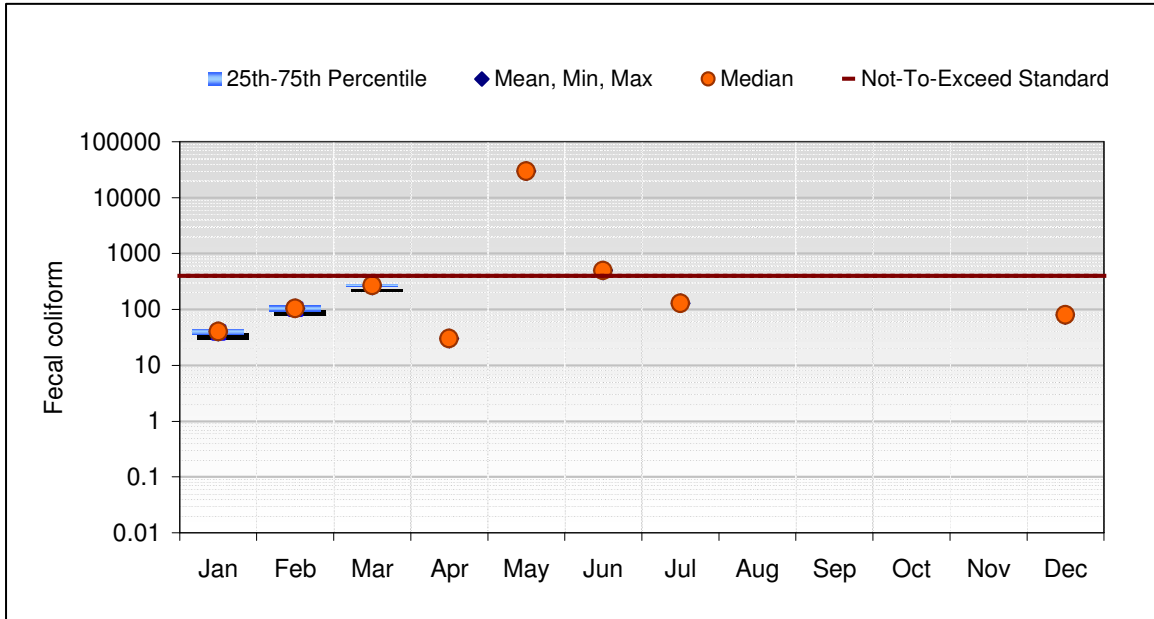
***CCAMP data: Corralitos Creek at Browns Valley Bridge  
(305 COR2)***

Geometric Mean Water Quality Objective (200 MPN/100 ml)

There was not enough water quality data collected at the Corralitos Creek at Browns Valley Bridge sampling station to calculate geometric means.

**CCAMP Data: Corralitos Creek at Browns Valley Bridge  
 (305 COR2)**

Maximum Water Quality Objective (400 MPN/100 ml)



**Figure 2. Corralitos Creek at Browns Valley Bridge Fecal Coliform (#/100 ml) and Water Contact Maximum Water Quality Objective (January 05 through March 2006)**

**Table 2. Corralitos Creek at Browns Valley Bridge Fecal Coliform (#/100 ml) Data Summary and Exceedance of Water Contract Recreation Maximum Water Quality Objective**

Summary Statistics ( Data: 1/24/2005 2:26:00 PM to 3/16/2006 11:06:00 AM )									
Month	Mean	Median	Min	Max	25th	75th	XS:Count	XS%	
Jan	40	40	30	50	35	45	0:2	0%	
Feb	105	105	80	130	93	118	0:2	0%	
Mar	270	270	240	300	255	285	0:2	0%	
Apr	30	30	30	30	30	30	0:1	0%	
May	30000	30000	30000	30000	30000	30000	1:1	100%	
Jun	500	500	500	500	500	500	1:1	100%	
Jul	130	130	130	130	130	130	0:1	0%	
Aug	0	0	0	0	0	0	0:0	n/a	
Sep	0	0	0	0	0	0	0:0	n/a	
Oct	0	0	0	0	0	0	0:0	n/a	
Nov	0	0	0	0	0	0	0:0	n/a	
Dec	80	80	80	80	80	80	0:1	0%	
<b>All Data</b>	<b>2870</b>	<b>130</b>	<b>30</b>	<b>30000</b>	<b>65</b>	<b>270</b>	<b>2:11</b>	<b>18%</b>	

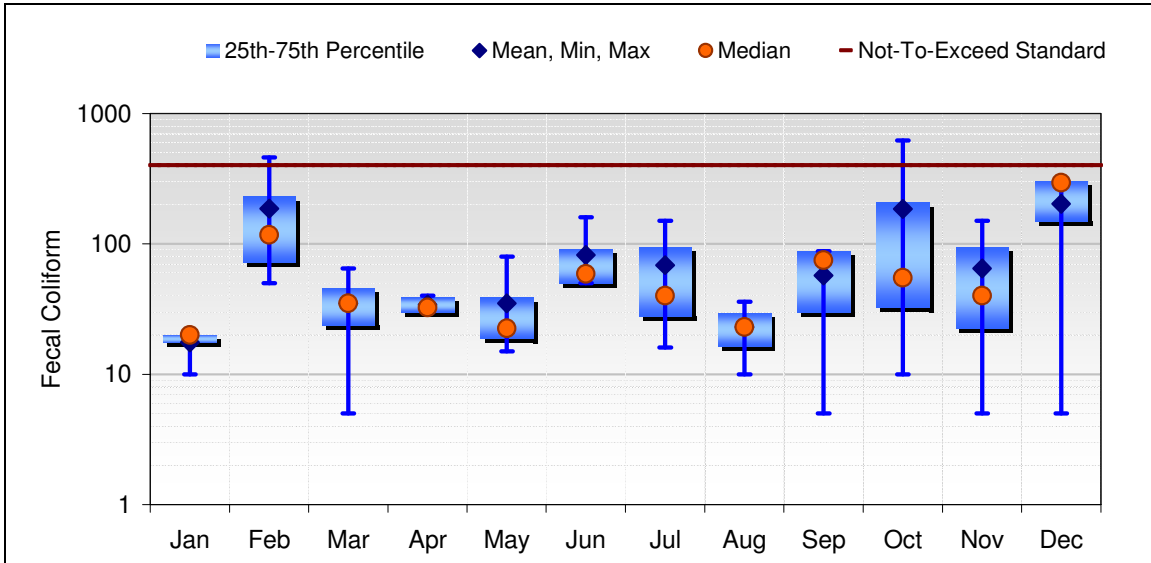
***Santa Cruz County Data: Corralitos Creek at Rider Creek  
(SCC1)***

Geometric Mean Water Quality Objective (200 MPN/100 ml)

There was not enough water quality data collected at the Corralitos Creek at Rider Creek sampling station to calculate geometric means.

**Santa Cruz County Data: Corralitos Creek at Rider Creek (SCC1)**

Maximum Water Quality Objective (400 MPN/100 ml)



**Figure 3. Corralitos Creek at Rider Creek Fecal Coliform (#/100 ml) and Water Contact Maximum Water Quality Objective (periodically from January 2003 through October 2006)**

**Table 3. Corralitos Creek at Rider Creek Fecal Coliform (#/100 ml) Data Summary and Exceedance of Water Contract Recreation Maximum Water Quality Objective**

Summary Statistics ( Data: 1/13/2003 to 10/11/2006 )								
Month	Mean	Median	Min	Max	25th	75th	XS:Count	XS%
Jan	18	20	10	20	18	20	0:4	0%
Feb	186	118	50	460	73	231	1:4	25%
Mar	35	35	5	65	24	46	0:4	0%
Apr	34	33	30	40	30	39	0:6	0%
May	35	23	15	80	19	39	0:4	0%
Jun	82	59	50	160	50	91	0:4	0%
Jul	69	40	16	150	28	95	0:3	0%
Aug	23	23	10	36	17	30	0:2	0%
Sep	57	75	5	88	30	88	0:5	0%
Oct	185	55	10	620	33	208	1:4	25%
Nov	65	40	5	150	23	95	0:3	0%
Dec	203	295	5	310	150	303	0:3	0%
<b>All Data</b>	<b>81</b>	<b>40</b>	<b>5</b>	<b>620</b>	<b>20</b>	<b>79</b>	<b>2:46</b>	<b>4%</b>

***Santa Cruz County Data: Corralitos Creek at Browns Valley Bridge  
(SCC2)***

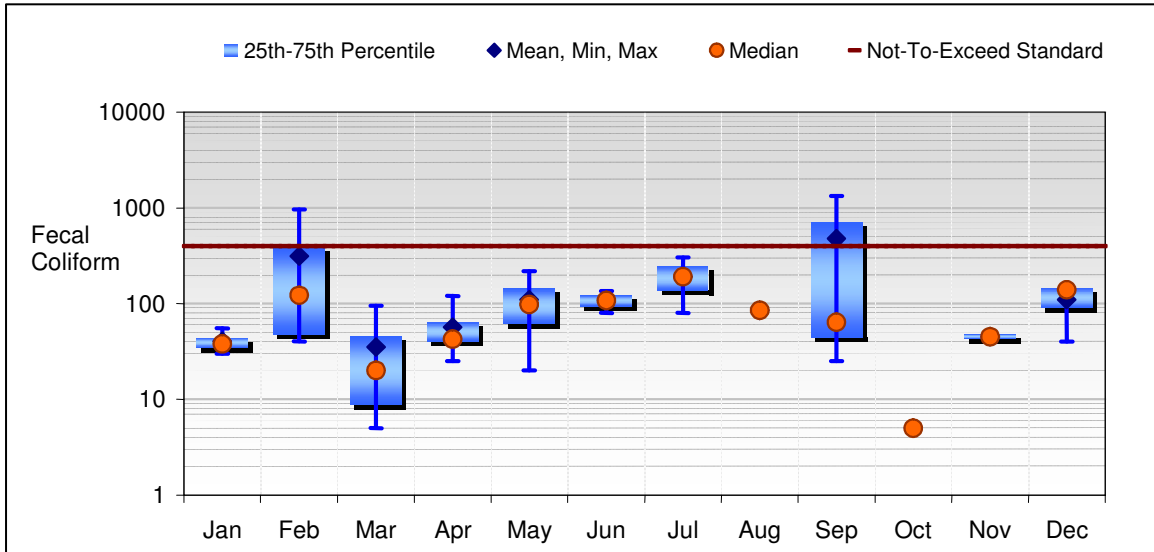
Geometric Mean Water Quality Objective (200 MPN/100 ml)

There was not enough water quality data collected at the Corralitos Creek at the Browns Valley Bridge sampling station to calculate geometric means.



**Santa Cruz County Data: Corralitos Creek at Browns Valley Bridge (SCC2)**

Maximum Water Quality Objective (400 MPN/100 ml)



**Figure 4. Corralitos Creek at Browns Valley Bridge Fecal Coliform (#/100 ml) and Water Contact Maximum Water Quality Objective (periodically from January 2003 through October 2006)**

**Table 4. Corralitos Creek at Browns Valley Bridge Fecal Coliform (#/100 ml) Data Summary and Exceedance of Water Contract Recreation Maximum Water Quality Objective**

Summary Statistics ( Data: 1/13/2003 to 10/11/2006 )									
Month	Mean	Median	Min	Max	25th	75th	XS:Count	XS%	
Jan	40	38	30	55	35	44	0:4	0%	
Feb	313	123	40	965	48	388	1:4	25%	
Mar	35	20	5	95	9	46	0:4	0%	
Apr	57	43	25	120	40	64	0:6	0%	
May	109	98	20	220	61	145	0:4	0%	
Jun	108	108	80	135	94	121	0:2	0%	
Jul	193	193	80	305	136	249	0:2	0%	
Aug	85	85	85	85	85	85	0:1	0%	
Sep	476	64	25	1340	45	702	1:3	33%	
Oct	5	5	5	5	5	5	0:1	0%	
Nov	45	45	40	50	43	48	0:2	0%	
Dec	110	140	40	150	90	145	0:3	0%	
<b>All Data</b>	<b>135</b>	<b>53</b>	<b>5</b>	<b>1340</b>	<b>39</b>	<b>120</b>	<b>2:36</b>	<b>6%</b>	

**Coastal Watershed Council Data: Corralitos Creek at Pista Lane/7226 Freedom Blvd. and Salsipuedes Creek at East Lake Avenue Bridge (SALSI 21 and CORRA 23)**

Geometric Mean Water Quality Objective (126 MPN/100 ml)

**Table 5. Corralitos Creek at Pista Lane/7226 Freedom Blvd. and Salsipuedes Creek at East Lake Avenue Bridge *E. coli* (#/100 ml) Data Summary and Geometric Mean of all 8 samples at each location (periodically from November 2003 through November 2004).**

Location	Date	<i>E. coli</i>	Geomean
<b>CORRA 23</b>			
(Corralitos			
Creek At	11/05/03	322	
Pista	03/08/04	20	
Lane/7226	05/26/04	441	
Freedom	07/06/04	1333	
Blvd.)	08/12/04	201	
	09/22/04	855	
	10/07/04	4611	
	11/08/04	187	
			392
<b>SALSI 21</b>			
(Salsipuedes			
Creek at	11/05/03	662	
East Lake	03/08/04	161	
Avenue	05/26/04	185	
Bridge)	07/06/04	226	
	08/12/04	285	
	09/22/04	243	
	10/07/04	437	
	11/08/04	20	
			201

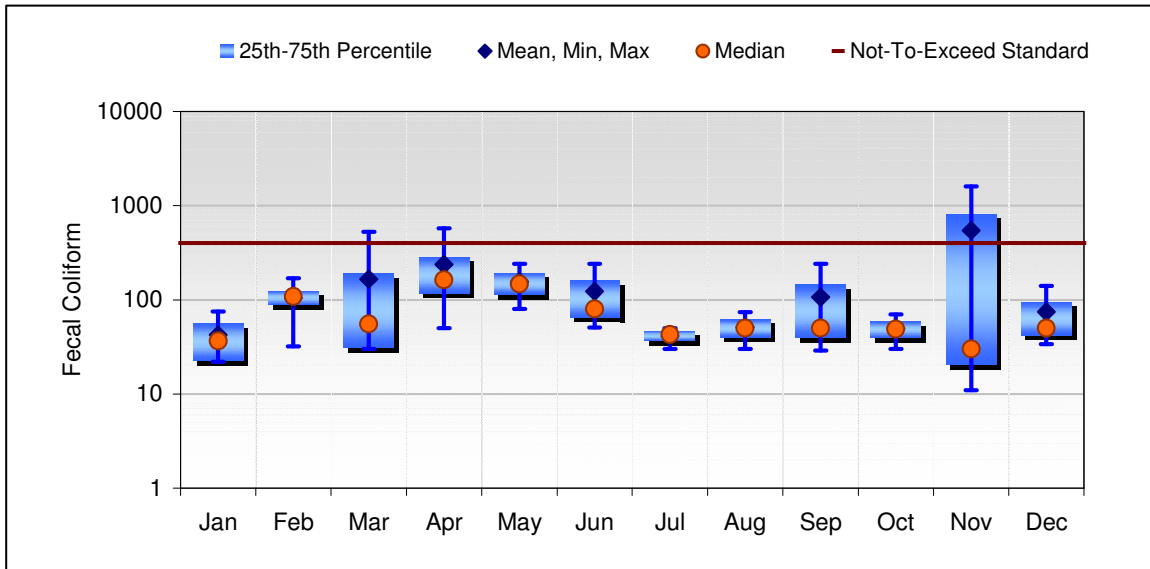
***City of Watsonville Data: Browns Valley Intake (BVI)***

Geometric Mean Water Quality Objective (200 MPN/100 ml)

There was not enough water quality data collected at the Browns Valley Intake sampling station to calculate geometric means.

**City of Watsonville Data: Browns Valley Intake (BVI)**

Maximum Water Quality Objective (400 MPN/100 ml)



**Figure 5. Corralitos Creek at Browns Valley Intake Fecal Coliform (#/100 ml) and Water Contact Maximum Water Quality Objective (January 2003 through April 2006)**

**Table 6. Corralitos Creek at Browns Valley Intake Fecal Coliform (#/100 ml) Data Summary and Exceedance of Water Contract Recreation Maximum Water Quality Objective**

Summary Statistics ( Data: 1/3/2003 to Sep-05 )										
Month	Mean	Median	Min	Max	25th	75th	XS:Count	XS%		
Jan	43	37	22	75	23	56	0:4	0%		
Feb	105	109	32	170	88	125	0:4	0%		
Mar	167	56	30	525	31	191	1:4	25%		
Apr	238	164	50	576	118	284	1:4	25%		
May	156	147	80	240	114	194	0:3	0%		
Jun	124	80	51	240	66	160	0:3	0%		
Jul	41	43	30	50	37	47	0:3	0%		
Aug	51	50	30	74	40	62	0:3	0%		
Sep	106	50	29	240	40	145	0:3	0%		
Oct	50	49	30	70	40	60	0:3	0%		
Nov	547	30	11	1600	21	815	1:3	33%		
Dec	75	50	34	140	42	95	0:3	0%		
<b>All Data</b>	<b>141</b>	<b>51</b>	<b>11</b>	<b>1600</b>	<b>32</b>	<b>140</b>	<b>3:40</b>	<b>8%</b>		

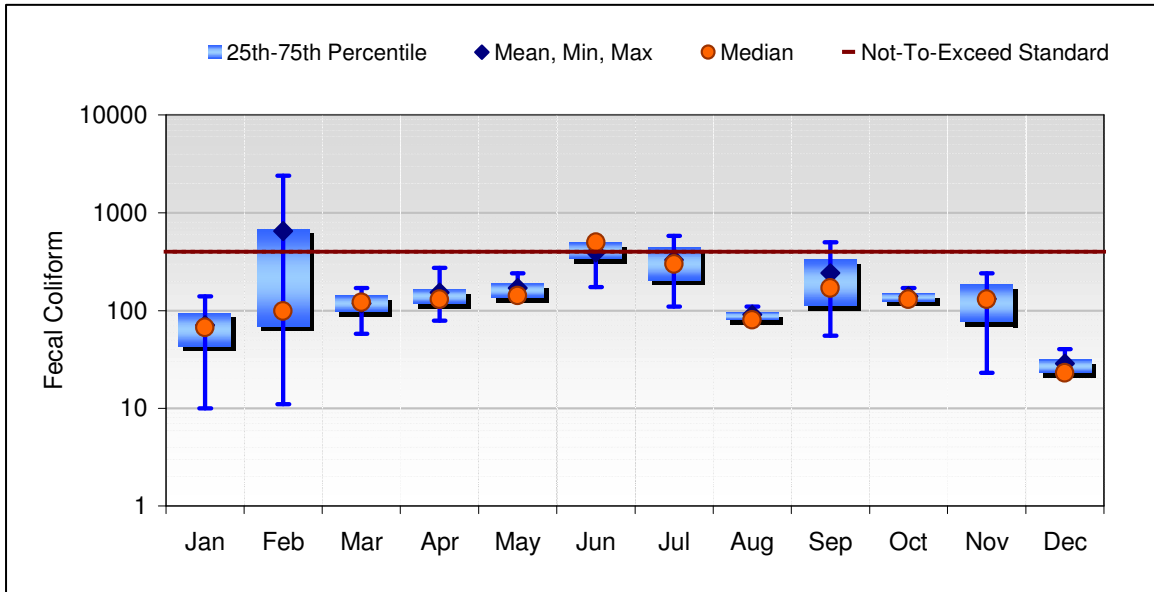
***City of Watsonville Data: Eureka Canyon Intake (ECI)***

Geometric Mean Water Quality Objective (200 MPN/100 ml)

There was not enough water quality data collected at the Eureka Canyon Intake sampling station to calculate geometric means.

**City of Watsonville Data: Eureka Canyon Intake (ECI)**

Maximum Water Quality Objective (400 MPN/100 ml)



**Figure 6. Corralitos Creek at Eureka Canyon Intake Fecal Coliform (#/100 ml) and Water Contact Maximum Water Quality Objective (January 2003 through April 2006)**

**Table 7. Corralitos Creek at Eureka Canyon Intake Fecal Coliform (#/100 ml) Data Summary and Exceedance of Water Contract Recreation Maximum Water Quality Objective**

Summary Statistics ( Data: 1/3/2003 to Sep-05 )									
Month	Mean	Median	Min	Max	25th	75th	XS:Count	XS%	
Jan	71	67	10	140	43	95	0:4	0%	
Feb	652	99	11	2400	69	683	1:4	25%	
Mar	118	122	58	170	97	143	0:4	0%	
Apr	153	130	79	273	117	166	0:4	0%	
May	171	142	130	240	136	191	0:3	0%	
Jun	391	500	173	500	337	500	2:3	67%	
Jul	331	300	110	582	205	441	1:3	33%	
Aug	90	81	80	110	81	96	0:3	0%	
Sep	242	170	55	500	113	335	1:3	33%	
Oct	140	130	119	170	125	150	0:3	0%	
Nov	131	130	23	240	77	185	0:3	0%	
Dec	29	23	23	40	23	32	0:3	0%	
<b>All Data</b>	<b>214</b>	<b>130</b>	<b>10</b>	<b>2400</b>	<b>80</b>	<b>171</b>	<b>5:40</b>	<b>13%</b>	

**City of Watsonville Data: Downstream Sampling Locations (CC1 through CC5)**

Geometric Mean Water Quality Objective (126 MPN/100 ml)

**Table 8. Downstream sampling locations *E. coli* (#/100 ml) Data Summary and Geometric Mean (periodically from November 2003 through November 2004)**

Date	Sampling Location	<i>E. coli</i>	<i>E. coli</i> MPN/100 ml Geomean	
			Sample Set 1 (first five samples at each location)	Sample Set 2 (last five samples at each location)
01/04/05	CC-1	55		
01/12/05	CC-1	38		
01/19/05	CC-1	39		
01/26/05*	CC-1	3448		
02/02/05	CC-1	215	143	
02/09/05	CC-1	85		156
01/04/05	CC-2	64		
01/12/05	CC-2	75		
01/19/05	CC-2	64		
01/26/05*	CC-2	2909		
02/02/05	CC-2	69	144	
02/09/05	CC-2	110		160
01/04/05	CC-3	109		
01/12/05	CC-3	58		
01/19/05	CC-3	81		
01/26/05*	CC-3	1956		
02/02/05	CC-3	91	156	
02/09/05	CC-3	92		150
01/04/05	SC-4	234		
01/12/05	SC-4	171		
01/19/05	SC-4	39		
01/26/05*	SC-4	2723		
02/02/05	SC-4	144	228	
02/09/05	SC-4	646		279
01/04/05	SC-5	203		
01/12/05	SC-5	226		
01/19/05	SC-5	53		
01/26/05*	SC-5	4106		
02/02/05	SC-5	154	274	
02/09/05	SC-5	621		342

\* Field notes indicated rain event during sampling on January 26, 05