

STATION	Location Descriptic		1999	2000	2001	2002
			AB 411 SINGLE SAMPLE	AB 411 SINGLE SAMPLE	AB 411 SINGLE SAMPLE	AB 411 SINGLE SAMPLE
SEAL BEACH (surfzone)						
OSB02	Projection of 1st Street	TC	1/51	0/52	2/58	1/33
		EC	6/41	0/52	2/58	1/33
		ENT	7/40	9/52	9/58	4/33
OSB03	Projection of 8th Street	TC	2/51	0/52	0/58	0/33
		EC	3/40	2/52	1/58	0/33
		ENT	3/40	4/52	7/58	0/33
OSB04	Projection of 14th Street	TC	2/51	0/52	0/58	0/33
		EC	2/40	0/52	0/58	0/33
		ENT	1/40	2/52	2/58	0/33
OSB01	Projection of Sea Way	TC	0/51	0/52	0/58	0/33
		EC	0/40	0/52	0/58	0/33
		ENT	0/40	2/52	1/58	0/33
SUNSET BEACH (surfzone)						
OSUB1	Projection of Broadway	TC	0/51	0/52	0/58	0/33
		EC	0/40	0/52	0/58	0/33
		ENT	0/40	0/52	1/58	0/33
HUNTINGTON HARBOUR (In Harbour)						
BHH08	Bolsa Bay	TC	1/40	0/52	0/58	0/33
		EC	2/40	3/52	2/58	0/33
		ENT	2/40	1/52	2/58	1/33
MHH07	Sunset Aquatic Marina	TC	4/40	4/52	7/58	2/33
		EC	4/40	4/52	9/58	4/33
		ENT	4/40	6/52	12/58	3/33
BHH15	Mother's Beach	TC	3/40	1/52	5/58	2/33
		EC	6/40	4/52	5/58	1/33
		ENT	5/40	3/52	4/58	1/33
BHH12	Trinidad Lane Beach	TC	3/40	2/52	2/58	0/33
		EC	2/40	2/52	3/58	1/33
		ENT	2/40	2/52	3/58	1/33
BHH09	Sea Gate	TC	0/40	0/52	0/58	0/33
		EC	0/40	0/52	0/58	0/33
		ENT	0/40	1/52	2/58	1/33
BHH06	Humboldt Beach	TC	1/40	1/52	2/58	0/33
		EC	2/40	0/52	3/58	0/33
		ENT	1/40	0/52	4/58	0/33
MHH10	Davenport Beach	TC	2/40	1/52	3/58	1/33
		EC	4/40	3/52	3/58	0/33
		ENT	3/40	3/52	3/58	0/33
MHH01	Clubhouse Marina	TC	1/40	2/52	8/58	3/33
		EC	2/40	3/52	16/58	4/33
		ENT	2/40	4/52	13/58	1/33
BHH13	Harbour Channel	TC	4/40	3/52	3/58	1/33
		EC	2/41	3/52	2/58	4/33
		ENT	8/40	6/52	7/58	4/33
BHH04	11th Street Beach	TC	3/40	2/52	3/58	0/33
		EC	4/40	7/52	6/58	0/33
		ENT	6/40	8/52	13/58	2/33
BHH11	Admiralty Drive	TC	3/40	1/52	3/58	0/33
		EC	2/40	1/52	4/58	0/33
		ENT	2/40	2/52	8/58	4/33
MHH14	Anderson Street Marina	TC	6/40	4/52	5/58	2/33
		EC	6/40	2/52	4/58	3/33
		ENT	6/51	4/52	7/58	0/33
BHH05	Anaheim Bay - Gas Dock	TC	1/40	0/52	1/58	1/33
		EC	3/40	1/52	1/58	1/33
		ENT	1/40	3/52	7/58	1/33
BHH16	Coral Cay Beach	TC	0/20	1/52	3/58	0/33
		EC	2/20	2/52	5/58	0/33
		ENT	2/20	2/52	4/58	2/33
OSB05	100 Yards South of Pier	TC	not sampled	not sampled	0/4	0/33
		FC	not sampled	not sampled	0/4	0/33
		ENT	not sampled	not sampled	0/4	0/33

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Receiving Water Body	Parameter Name	Number of times above std.	Standard	Source of Standard
Newport Pier	Yellowfin Croaker	0/1	32.0 $\mu\text{g}/\text{kg}$	MTRL's in enclosed bags
	White Croaker	1/1		
Balboa Pier	Walleye Surfperch	1/1		
	Diamond Turbot	0/2		
	Barred Surfperch	1/1		
Newport Jetty	Spotted Scorpionfish	0/1		
	Spotted Turbot	0/2		
	Black Surfperch	0/1		
	Shiner Surfperch	1/1		
Newport Bay Above PCH Bridge	Diamond Turbot	0/1		
	Shiner Surfperch	2/2		
	Spotted Turbot	1/1		
	Yellowfin Croaker	1/1		
Emma Oil Platform	Black Surfperch	1/1		
	Kelp Bass	1/1		
Seal Beach	White Croaker	0/1		
	Yellowfin Croaker	0/2		

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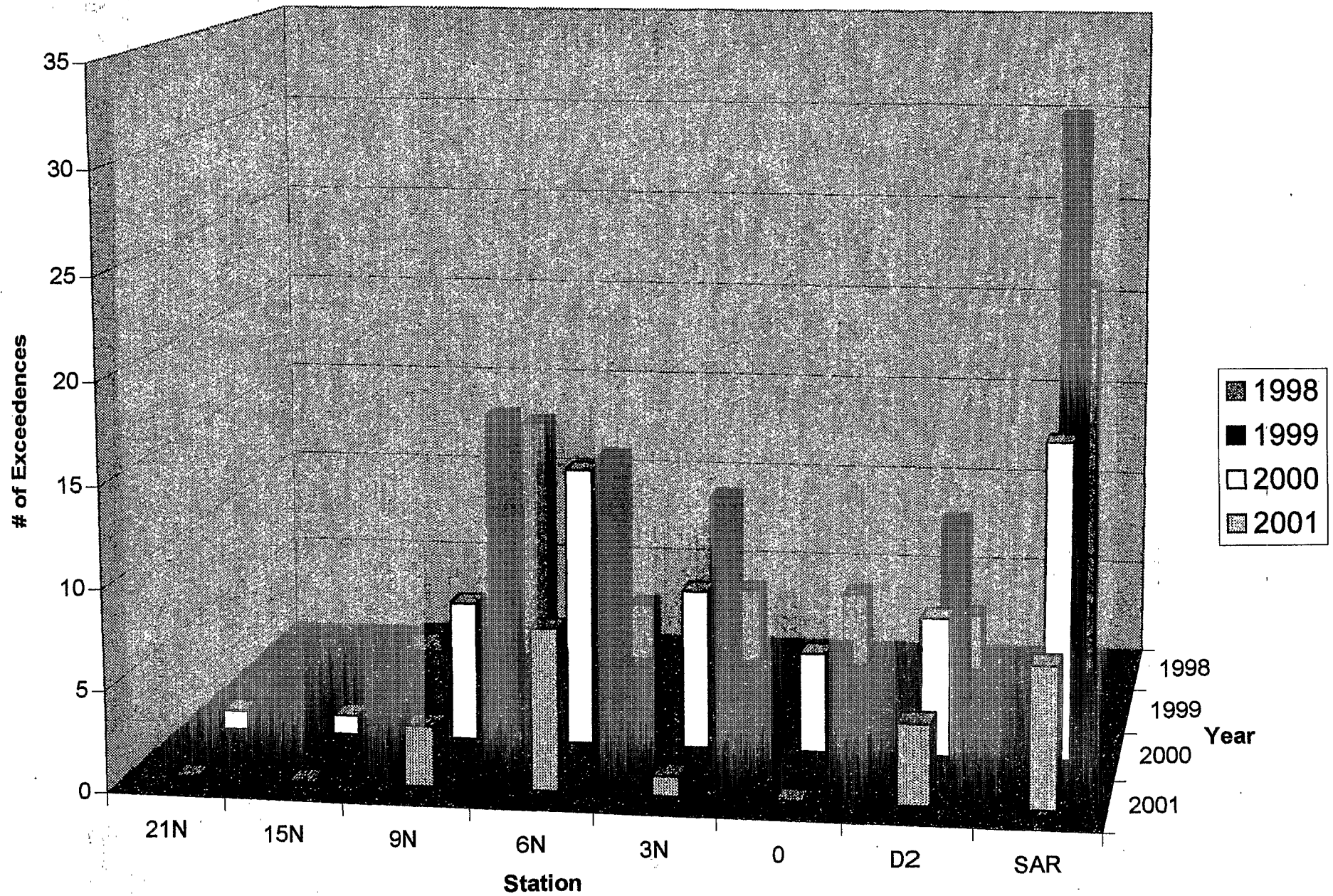
Mercury Data

Receiving Water Body	Parameter Name	Number of times above std.	Standard	Source of Standard
Seal Beach ^{white} Croaker	Mercury	1 0 / 3	• $3.7 \times 10^{-3} \mu\text{g/g}$	MTRL'S For Carcinogens in Ocean Waters
		0 / 3	0.5 $\mu\text{g/g}$	NAS
		0 / 3	1 $\mu\text{g/g}$	FDA
Seal Beach ^{Yellow} Perch	Mercury	3 2 / 2	• $3.7 \times 10^{-3} \mu\text{g/g}$	MTRL'S
		0 / 2	0.5 $\mu\text{g/g}$	NAS
		0 / 2	1 $\mu\text{g/g}$	FDA
Huntington Beach	Mercury	1 0 / 1	• 0.0037 $\mu\text{g/g}$	MTRL'S
Yellowfin Croaker		0 / 1	0.5 $\mu\text{g/g}$	NAS
		0 / 1	1 $\mu\text{g/g}$	FDA
Hunt Beach ^{Barre} Surfperch	"	1 0 / 1	• 0.0037 $\mu\text{g/g}$	MTRL
		0 / 1	0.5 $\mu\text{g/g}$	NAS
		0 / 1	1 $\mu\text{g/g}$	FDA
" ^{Shiner} Surfperch	"	1 0 / 1	• 0.0037 $\mu\text{g/g}$	MTRL
		0 / 1	0.5 $\mu\text{g/g}$	NAS
		0 / 1	1 $\mu\text{g/g}$	FDA

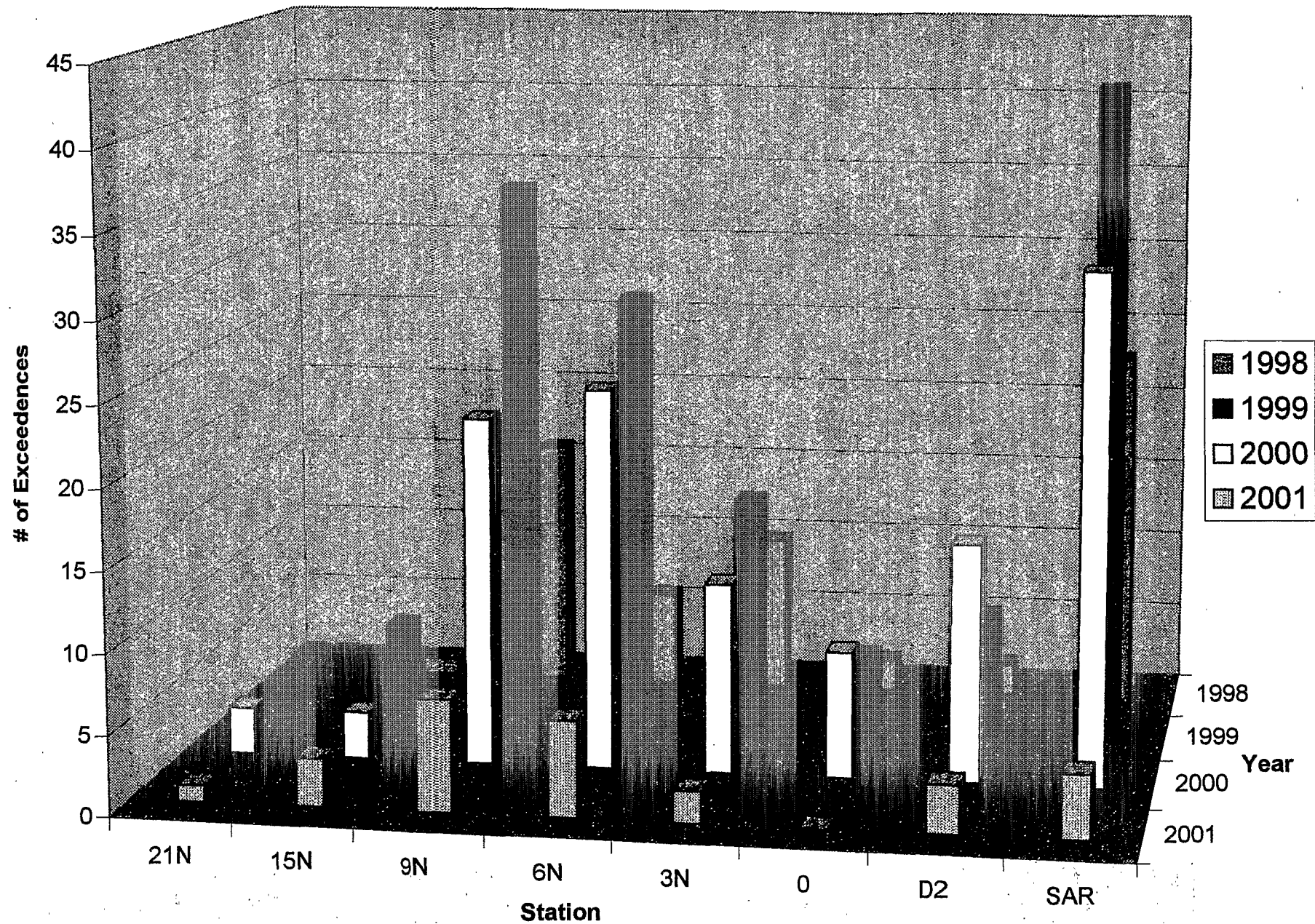
Receiving Water Body	Parameter Name	Number of times above std.	Standard	Source of Standard
Seal Beach white creaker	Endosulfan	0/3	24 64.8 mg/kg	MTRL
	Endosulfan	0/3	0.1 ug/g	NAS
	Endosulfan	—	—	FDA
Seal Beach Yellowfin Craker	Endosulfan	0/2	64.8 mg/kg	MTRL
	Endosulfan	0/2	0.1 ug/g	NAS
	Endosulfan	—	—	FDA
Huntington Beach Pier (Yellowfin Craker)	Endosulfan	0/1	64.8 mg/kg	MTRL
	Endosulfan	0/1	0.1 ug/g	NAS
	Endosulfan	—	—	FDA
Huntington Beach Craker	Endosulfan	0/1	64.8 mg/kg	MTRL
(Year 1 - Parrot Snapper)	Endosulfan	0/1	0.1 ug/g	NAS
	Endosulfan	—	—	FDA
Huntington Beach	Endosulfan	0/1	64.8 mg/kg	MTRL
(Year 2 - Basher Snapper)	Endosulfan	0/1	0.1 ug/g	NAS
	Endosulfan	0/1	—	FDA

Receiving Water Body	Parameter Name	Number of times above std.	Standard	Source of Standard
✓ Anaheim Bay Diamond Turbot	ddepp-W($\frac{ng}{g}$)	0 / 1	32.0 $\mu g/Kg$	MTRL's in enclosed bays
Black Surfperch		0 / 1		
Shiner Surfperch		1 / 1		
Yellow Croaker		1 / 1		
✓ Esther Oil Platform Black Surfperch		1 / 1		
Kelp Bass		1 / 1		
Huntington Beach Pier Yellowfin Croaker		1 / 1		
✓ Huntington Beach Barred Surfperch		0 / 1		
Shiner Surfperch		1 / 1		
Newport Beach Walleye Surfperch		1 / 1		
Barred Surfperch		1 / 2		
California Corbina		0 / 1		
Shiner Surfperch		1 / 1		
White Croaker		1 / 1		
N.P. Bay Newport Pier Spotted Turbot		0 / 1		
Barred Surfperch		1 / 2		
California Corbina		0 / 1		

Fecal Coliform Exceedences (>400) by Year



Enterococci Exceedences (>104) by Year



Thousands of feet north of SAR

0 3 6 9 12 15

TC (Total coliform)		OK	
FC (Fecal coliform)		V	
Ent (Enterococcus)		V	
Posting		↔	(+/- 500')

**Scenario 1:
Box 17**

TC	OK	OK	
FC	V	V	
Ent	V	V	
Posting	2N	7N	(1000' buffer at endpoints)

**Scenario 2:
Box 22 (2), 24**

TC		OK		OK
FC		V		OK
Ent		V		V
Posting	(-1000' from 6N)	5N	Box 22(1)	12.5N (+500' from 12N)

**Scenario 3:
Box 22(1), 24**

TC	OK	OK	
FC	V	OK	
Ent	V	V	
Posting	↔ (+/- 500')	↔ (+/- 150')	

**Scenario 4:
Box 23**

Blank= no violations; OK=no single sample standard violation; V=violation of single sample standard

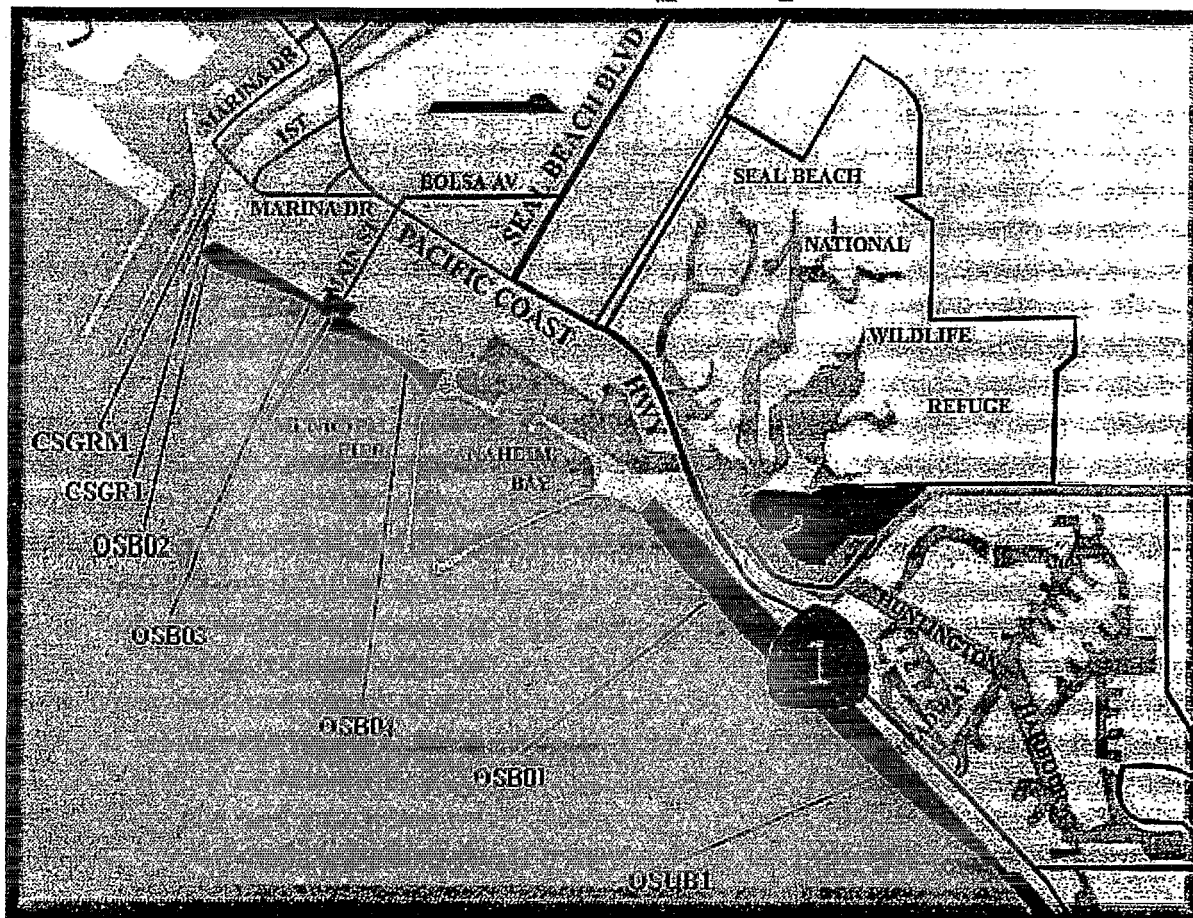
Site Name		
SEAL BEACH (surfzone)		2002 TOTAL EXCEEDANCES
OSB02	1st Street	5
OSB03	8th Street	0
OSB05	100 Yards South of Pier	0
OSB04	14th Street	0
OSB01	Sea Way	0
SUNSET BEACH (surfzone)		
OSUB1	Broadway	0
HUNTINGTON HARBOUR (in Harbour)		
BHH08	Bolsa Bay	1
MHH07	Sunset Aquatic Marina	5
BHH15	Mother's Beach	3
BHH12	Trinidad Lane Beach	2
BHH09	Sea Gate Lagoon	1
BHH06	Humboldt Beach	0
MHH10	Davenport Beach	1
MHH01	Clubhouse Marina	5
BHH13	Harbour Channel	5
BHH04	11th Street Beach	2
BHH11	Admiralty Drive	4
MHH14	Anderson Street Marina	4
BHH05	Anaheim Bay - Gas Dock	2
BHH16	Coral Cay Beach	2
NEWPORT COAST (surfzone)		
ONB29	Corona Del Mar State Beach	3
ONB31	Little Corona Beach	4
ONB35	Pelican Point	1
ONB39	Crystal Cove	2
ONB43	Muddy Creek	0
ONB45	El Morro Beach	0
HUNTINGTON BEACH (surfzone)		
39N	Bolsa Chica Beach	1
33N	Bolsa Chica Reserve	3
27N	Bluffs	6
21N	17th Street	6
15N	Jacks Snack Bar	5
12N	Beach Blvd.	2
9N	SCE Plant	13
6N	Magnolia Street	37
3N	Brookhurst	20
0	Santa Ana River Mouth	7
NEWPORT BEACH (surfzone)		
3S	Orange Street	8
6S	52nd/53rd Street	5
9S	38th Street	4
12S	Newport Pier	7
15S	15th/16th Street	1
21S	Balboa Pier	1
27S	The Wedge	1
29S	Corona Del Mar Beach	6
39S	Crystal Cove	1

Site Name		2001 TOTAL EXCEEDANCES
SEAL BEACH (surfzone)		
OSB02	1st Street	9
OSB03	8th Street	7
	100 Yards South of Pier	0
OSB04	14th Street	2
OSB01	Sea Way	1
SUNSET BEACH (surfzone)		
OSUB1	Broadway	1
HUNTINGTON HARBOUR (in Harbour)		
BHH08	Bolsa Bay	1
MHH07	Sunset Aquatic Marina	14
BHH15	Mother's Beach	6
BHH12	Trinidad Lane Beach	4
BHH09	Sea Gate Lagoon	2
BHH06	Humboldt Beach	5
MHH10	Davenport Beach	3
MHH01	Clubhouse Marina	17
BHH13	Harbour Channel	8
BHH04	11th Street Beach	13
BHH11	Admiralty Drive	9
MHH14	Anderson Street Marina	8
BHH05	Anaheim Bay - Gas Dock	7
BHH16	Coral Cay Beach	6
NEWPORT COAST (surfzone)		
ONB29	Corona Del Mar State Beach	4
ONB31	Little Corona Beach	6
ONB35	Pelican Point	2
ONB39	Crystal Cove	2
ONB43	Muddy Creek	1
ONB45	El Morro Beach	2
HUNTINGTON BEACH (surfzone)		
OHB39 / 39N	Bolsa Chica Beach	6
OHB33 / 33N	Bolsa Chica Reserve	4
OHB27 / 27N	Bluffs	7
OHB21 / 21N	17th Street	8
OHB15 / 15N	Jacks Snack Bar	10
OHB12/12N	Beach Blvd.	14
OHB09 / 9N	SCE Plant	15
OHB06 / 6N	Magnolia Street	28
OHB03 / 3N	Brookhurst	27
ONB00 / 0	Santa Ana River Mouth	9
NEWPORT BEACH (surfzone)		
ONB03 / 3S	Orange Street	9
ONB06 / 6S	52nd/53rd Street	3
ONB09 / 9S	38th Street	5
ONB12/12S	Newport Pier	6
ONB15 / 15S	15th/16th Street	7
ONB21 / 21S	Balboa Pier	6
ONB27 / 27S	The Wedge	5
ONB29 / 29S	Corona Del Mar Beach	7
ONB39 / 39S	Crystal Cove	0

Site Name		2000 TOTAL EXCEEDANCES
SEAL BEACH (surfzone)		
OSB02	1st Street	9
OSB03	8th Street	6
	100 Yards South of Pier	not listed
OSB04	14th Street	2
OSB01	Sea Way	2
SUNSET BEACH (surfzone)		
OSUB1	Broadway	0
HUNTINGTON HARBOUR (in Harbour)		
BHH08	Bolsa Bay	4
MHH07	Sunset Aquatic Marina	7
BHH15	Mother's Beach	7
BHH12	Trinidad Lane Beach	5
BHH09	Sea Gate Lagoon	1
BHH06	Humboldt Beach	1
MHH10	Davenport Beach	4
MHH01	Clubhouse Marina	9
BHH13	Harbour Channel	8
BHH04	11th Street Beach	10
BHH11	Admiralty Drive	2
MHH14	Anderson Street Marina	6
BHH05	Anaheim Bay - Gas Dock	3
BHH16	Coral Cay Beach	2
NEWPORT COAST (surfzone)		
ONB29	Corona Del Mar State Beach	0
ONB31	Little Corona Beach	4
ONB35	Pelican Point	1
ONB39	Crystal Cove	2
ONB43	Muddy Creek	1
ONB45	El Morro Beach	4
HUNTINGTON BEACH (surfzone)		
OHB39 / 39N	Bolsa Chica Beach	7
OHB33 / 33N	Bolsa Chica Reserve	5
OHB27 / 27N	Bluffs	10
OHB21 / 21N	17th Street	10
OHB15 / 15N	Jacks Snack Bar	7
OHB12/12N	Beach Blvd.	not listed
OHB09 / 9N	SCE Plant	23
OHB06 / 6N	Magnolia Street	31
OHB03 / 3N	Brookhurst	34
ONB00 / 0	Santa Ana River Mouth	16
NEWPORT BEACH (surfzone)		
ONB03 / 3S	Orange Street	13
ONB06 / 6S	52nd/53rd Street	6
ONB09 / 9S	38th Street	5
ONB12/12S	Newport Pier	not listed
ONB15 / 15S	15th/16th Street	7
ONB21 / 21S	Balboa Pier	6
ONB27 / 27S	The Wedge	3
ONB29 / 29S	Corona Del Mar Beach	5
ONB39 / 39S	Crystal Cove	1

Site Name		1999 TOTAL EXCEEDANCES
SEAL BEACH (surfzone)		
OSB02	1st Street	10
OSB03	8th Street	5
	100 Yards South of Pier	not listed
OSB04	14th Street	3
OSB01	Sea Way	0
SUNSET BEACH (surfzone)		
OSUB1	Broadway	0
HUNTINGTON HARBOUR (in Harbour)		
BHH08	Bolsa Bay	3
MHH07	Sunset Aquatic Marina	6
BHH15	Mother's Beach	9
BHH12	Trinidad Lane Beach	6
BHH09	Sea Gate Lagoon	1
BHH06	Humboldt Beach	3
MHH10	Davenport Beach	7
MHH01	Clubhouse Marina	3
BHH13	Harbour Channel	10
BHH04	11th Street Beach	7
BHH11	Admiralty Drive	5
MHH14	Anderson Street Marina	11
BHH05	Anaheim Bay - Gas Dock	3
BHH16	Coral Cay Beach	3
NEWPORT COAST (surfzone)		
ONB29	Corona Del Mar State Beach	0
ONB31	Little Corona Beach	4
ONB35	Pelican Point	0
ONB39	Crystal Cove	0
ONB43	Muddy Creek	0
ONB45	El Morro Beach	0
HUNTINGTON BEACH (surfzone)		
OHB39 / 39N	Bolsa Chica Beach	4
OHB33 / 33N	Bolsa Chica Reserve	3
OHB27 / 27N	Bluffs	1
OHB21 / 21N	17th Street	1
OHB15 / 15N	Jacks Snack Bar	7
OHB12/12N	Beach Blvd.	not listed
OHB09 / 9N	SCE Plant	36
OHB06 / 6N	Magnolia Street	34
OHB03 / 3N	Brookhurst	18
ONB00 / 0	Santa Ana River Mouth	7
NEWPORT BEACH (surfzone)		
ONB03 / 3S	Orange Street	1
ONB06 / 6S	52nd/53rd Street	4
ONB09 / 9S	38th Street	3
ONB12/12S	Newport Pier	not listed
ONB15 / 15S	15th/16th Street	2
ONB21 / 21S	Balboa Pier	1
ONB27 / 27S	The Wedge	1
ONB29 / 29S	Corona Del Mar Beach	3
ONB39 / 39S	Crystal Cove	1

Seal Beach Select a Sampling Site



Location of Sampling Sites

CSGRM = San Gabriel River Marina Drive

CSGR1 = San Gabriel River 1st St. Parking Lot

OSB04 = Projection of 14 th St.

OSB03 = Projection 8th Street

OSB02 = Projection 1st Street

OSB01 = Projection Sea Way

OSUB1 = Projection of Broadway

JAN 1 - DEC 31

MonthlyBMDqry

10/30/01

BeachName	DescriptionOfArea	DateClosed	DateOpened	TypeOfPosting	BMD	
Seal Beach / Surfside	1st, 8th and 14th Streets.	1/5/00	1/7/00	Episode Of High Ind	2.00	2
Seal Beach / Surfside	San Gabriel River to 2nd Street.	3/29/00	3/31/00	Episode Of High Ind	0.19	2
Seal Beach / Surfside	8th Street.	4/27/00	4/29/00	Episode Of High Ind	0.11	2
Seal Beach / Surfside	1st Street.	4/27/00	5/2/00	Episode Of High Ind	0.28	6
Seal Beach / Surfside	1st Street.	5/11/00	5/13/00	Episode Of High Ind	0.11	2
Seal Beach / Surfside	Breakwater to 300 feet downcoas	9/19/00	9/22/00	Episode Of High Ind	0.17	3
Seal Beach / Surfside	Breakwater to 300 feet downcoas	10/3/00	12/28/00	Episode Of High Ind	11.09	→81
Seal Beach / Surfside	Seaway.	10/6/00	10/13/00	Episode Of High Ind	0.40	

JAN 1 - OCT 1

MonthlyBMDqry

10/30/01

BeachName	DescriptionOfArea	DateClosed	DateOpened	TypeOfPosting	BMD
Seal Beach/Surfside	San Gabriel River breakwater to 3	1/5/01	1/19/01	Episode Of High Ind	0.80
Seal Beach/Surfside	8th Street.	1/19/01	2/2/01	Episode Of High Ind	2.34
Seal Beach/Surfside	1st Street.	1/25/01	2/3/01	Episode Of High Ind	2.06
Seal Beach/Surfside	8th Street.	2/7/01	2/9/01	Episode Of High Ind	0.11
Seal Beach/Surfside	500 feet downcoast of Seal Beach Pier	4/5/01	4/7/01	Episode Of High Ind	0.19
Seal Beach/Surfside	Seal Beach Pier - South	9/19/01	9/21/01	Episode Of High Ind	0.11

[illegible]

13. Seal Beach:

- Beneficial Uses: REC 1 and REC 2
- Hydrologic Unit: 801.11
- Total Water Body Size: 1 mile
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Coastal Fish Contamination Data:*
 - White Croaker – 0/3 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - White Croaker – 0/3 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Yellowfin Croaker – 0/2 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - Yellowfin Croaker – 0/2 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - White Croaker – 1/3 exceeded the “MTRLs for Carcinogens in Ocean Waters” Hg standard of 0.00037 ug/g
 - White Croaker – 0/3 exceeded the NAS Hg standard of 0.5 ug/g
 - White Croaker – 0/3 exceeded the FDA Hg standard of 1.0 ug/g
 - Yellowfin Croaker – 2/2 exceeded the MTRL’s Hg standard of 0.00037 ug/g
 - Yellowfin Croaker – 0/2 exceeded the NAS Hg standard of 0.5 ug/g
 - Yellowfin Croaker – 0/2 exceeded the FDA Hg standard of 1.0 ug/g
 - White Croaker – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - Yellowfin Croaker – 0/2 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - White Croaker-off – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - White Croaker-on – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - Orange County Health Care Agency Data:*
 - 1st Street Beach posted 1 time in 3 years during the wet season. Heal the Bay grade is B during the dry season and F during the wet season.

- 8th Street Beach posted 1 time in 3 years during the wet season. Heal the Bay grade is B during the dry season and F during the wet season.
 - 14th Street Beach posted 0 times in 3 years. Heal the Bay grade is A during the dry season and C during the wet season.
 - State Beach posted 0 times in 3 years. Heal the Bay grade unavailable.
 - Breakwater posted 2 times in 3 years during the wet season. Heal the Bay grade not available.
- Potential Sources: Unknown at this time
 - Recommendation:
 - List Seal Beach from 1st Street to Main Street and the breakwater point on 303(d) list for impairment of REC 1, 2 and MUN beneficial uses due to bacterial contamination
 - More fish tissue monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
 - TMDL Priority: High
 - TMDL Start Date: 2007
 - TMDL End Date: 2011