APPENDIX E

MSL SHORELINE AND BEACH WIDTH DATA DERIVED FROM BEACH PROFILE DATA

Mean Sea Level Shoreline Positions

	Transect [4]	Pre – 1984 Survey Date	Mean Sea Level Shoreline Position (Feet from Transect Origin)																		
			Pre – 1984	Fall 1984	Fall 1989	Spring 1996	Fall 1996	Spring 1997	Fall 1997	Spring 1998	Fall 1998	Spring 1999	Fall 1999	Spring 2000	Fall 2000	Spring 2001	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003
Silver Strand Littoral Cell	SS-0003	Mar 1969	230	306	316			283	310	162	270	257	309	227	279	211	304	259	285	230	272
	SS-0005			290	360														291	231	281
	SS-0007			321	271								369	135	272	206		83			
	SS-0015	Jun 1975	357	315	224			185	221	116	137	131	188	174	163	152	219	169	209	140	182
	SS-0020 [1, 2, 3]															125	186	135	162	138	154
	SS-0025 [1, 2, 3]															81	263	133	217	116	218
	SS-0035 [3]			227	264	170	252	184	216	141	328	168	246	190	246	164	336	180	246	124	245
	SS-0050 [2, 3]				278											189	271	185	230	140	196
	SS-0077			701	738			639	652	591	647	613	682	648	667	603	663	633	669	630	666
	SS-0090			278	356	265	295	248	289	234	290	239	323	252	312	238	323	278	316	262	315
	SS-0160			719	788	748	786	767	756	625	773	729	772	744	781	727	798	771	781	739	782
Mission Beach Littoral Cell	OB-0230	Jul 1970	283	355	375	343	359	384	343	320	373	358	377	359	369	328	378	354	390	357	354
	MB-0310 [3]	Jul 1955	399	290	329	279	290	254	267	195	265	244	285	303	322	227	307	255	326	241	325
	MB-0320 [2, 3]															204	300	276	278	212	292
	MB-0335 [1, 2, 3]															191	264	218	258	194	254
	MB-0340 [1, 3]	Jun 1972	198	194	252			165	197	100	181	137	232	141	230	158	266	201	255	198	249
	MB-0384 [3]	Jun 1972	201	242	282			237	255	191	228	203	277	225	266	198	270	220	278	230	274
	PB-0408			133	170	129	198	121	165	93	157	95	116	103	167	182	188	113	158	138	204
Oceanside Littoral Cell	LJ-0443			123	138			46	73	4	100	80	110	74	118	61	116	76	130	59	114
	LJ-0445			217	171			193	180	244	209	195	210	210	210	197	209	205	214	196	217
	LJ-0450			252	274	255	260	229	263	155	251	206	244	235	282	262	294	213	312	259	282
	LJ-0460			182	178			114	161	123	234	87	195	126	228	142	269	176	250	137	230
	TP-0470			188	260			162	168	82	148	72	181	103	195	149	204	238	266	195	232
	TP-0520 [1]			234	191	128	171	144	167	103	189	102	204	130	227	139	284	189	239	189	212
	TP-0530 [1]			155	185			250	169	135	188	167	210	166	252	136	300	221	286	191	247
	DM-0565 [2]															261	283	269	347	241	365
	DM-0560			200															203	165	187
	DM-0580 [1]			228	234	191	206	175	167	131	244	152	245	155	224	120	250	172	231	138	216
	DM-0590			184	285			112	161	36	154	139	236	176	135	77	102	159	159	93	126
	SD-0595																	154	177	126	173
	SD-0600 [1]			150	150	87	90	84	73	48	111	67	100	78	85	67	148	85	118	74	115
	SD-0610																	27	147	21	108

(continued)

Mean Sea Level Shoreline Positions (continued)

	Transect [4]	Pre – 1984 Survey Date	Mean Sea Level Shoreline Position (Feet from Transect Origin)																		
			Pre – 1984	Fall 1984	Fall 1989	Spring 1996	Fall 1996	Spring 1997	Fall 1997	Spring 1998	Fall 1998	Spring 1999	Fall 1999	Spring 2000	Fall 2000	Spring 2001	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003
Oceanside Littoral Cell (continued)	SD-0620														99	88	100	150	135	118	127
	SD-0625														106	74	119	124	143	102	155
	SD-0630 [1]	Oct 1970	162	171	169	66	85	53	72	77	133	77	88	75	132	87	204	106	194	121	184
	SD-0650														142	113	149	139	149	130	147
	SD-0660														136	122	141	116	168	96	141
	SD-0670 [1, 3]	Apr 1957	81	152	94	107	106	124	99	101	182	117	188	136	227	124	271	188	211	172	227
	SD-0675 [2, 3]															84	107	99	144	96	137
	SD-0680 [3]											70	137	97	145	85	169	145	174	124	182
	SD-0690 [1, 2, 3]															73	105	117	115	98	101
	SD-0695 [2, 3]															78	119	135	128	112	116
	SD-0700 [3]														77	69	81	122	117	86	112
	SD-0710 [1, 2]															158	238	163	208	146	213
	CB-0720	Oct 1970	309	192	169	286	356	251	295	228	346	230	366	269	390	263	386	355	408	298	389
	CB-0740				135	241	219	218	218	177	201	166	205	187	233	178	205	198	235	199	246
	CB-0760			138	111	230	191	210	198	120	165	122	174	136	173	121	189	198	195	164	190
	CB-0775 [1, 2]															226	333	266	288	241	257
	CB-0780				206	276	285	233	263	196	281	190	258	216	265	211	292	242	264	218	233
	CB-0800			88	89	84	67	93	59	32	48	95	60	73	64	71	38	89	58	57	62
	CB-0820				133	187	165	148	238	170	198	147	149	140	149	170	213	140	148	138	188
	CB-0830			207	115	119	101	127	71	86	57	97	72	82	82	124	68	133	118	143	151
	CB-0840 [3]				84	128	90	136	76	97	55	145	109	101	83	137	98	152	125	176	148
	CB-0850 [3]				205	205	194	192	214	183	176	218	213	202	200	216	240	229	267	261	280
	CB-0865 [1, 2, 3]															82	192	149	198	151	187
	CB-0880 [1, 3]				153	142	88	139	140	113	125	133	122	94	134	111	165	200	180	182	195
	OS-0900 [3]				130	101	55	53	65	61	95	72	101	86	113	94	112	153	149	116	154
	OS-0915 [1, 2]															71	186	114	137	106	141
	OS-0930 [1]	Jan 1972	177	210	219	162	158	174	148	194	177	179	200	174	190	171	303	263	261	213	243
	OS-1000	Sep 1965	244	252	228			153	181	169	198	187	207	183	202	174	218	210	230	200	247
	OS-1030	Oct 1963	336	341	203			278	225	209	185	207	176	206	203	201	190	222	182	198	222
	OS-1070	Oct 1973	469	454	412			519	503	410	449	430	435	422	440	400	436	416	455	395	422

Note:
(1) Transect crosses RBSP receiver site (shown in red type).
(2) New transect established to support RBSP in Spring 2001.
(3) Transect used for monthly beach width measurements.
(4) Transect locations are indicated in Appendix A.

Seasonal Changes in Mean Sea Level Shoreline Position

	Transect [4]	Winter Seasonal Change (ft) [2,3]							Summer Seasonal Change (ft) [2,3]							
		Fall 1996 to Spring 1997	Fall 1997 to Spring 1998	Fall 1998 to Spring 1999	Fall 1999 to Spring 2000	Fall 2000 to Spring 2001	Fall 2001 to Spring 2002	Fall 2002 to Spring 2003	Spring 1996 to Fall 1996	Spring 1997 to Fall 1997	Spring 1998 to Fall 1998	Spring 1999 to Fall 1999	Spring 2000 to Fall 2000	Spring 2001 to Fall 2001	Spring 2002 to Fall 2002	Spring 2003 to Fall 2003
Silver Strand Littoral Cell	SS-0003		(-148)	(-13)	(-82)	(-68)	(-45)	(-55)		27	108	52	52	93	26	42
	SS-0005							(-60)								50
	SS-0007				(-234)	(-66)							137			
	SS-0015		(-105)	(-6)	(-14)	(-11)	(-50)	(-69)		36	21	57	(-11)	67	40	42
	SS-0020 [1, 2, 3]						(-51)	(-24)						61	27	16
	SS-0025 [1, 2, 3]						(-130)	(-101)						182	84	102
	SS-0035 [3]	(-68)	(-75)	(-160)	(-56)	(-82)	(-156)	(-122)	82	32	187	78	56	172	66	121
	SS-0050 [2, 3]						(-86)	(-90)						82	45	56
	SS-0077		(-61)	(-34)	(-34)	(-64)	(-30)	(-39)		13	56	69	19	60	36	36
	SS-0090	(-47)	(-55)	(-51)	(-71)	(-74)	(-45)	(-54)	30	41	56	84	60	85	38	53
	SS-0160	(-19)	(-131)	(-44)	(-28)	(-54)	(-27)	(-42)	38	(-11)	148	43	37	71	10	43
Mission Beach Littoral Cell	OB-0230	25	(-23)	(-15)	(-18)	(-41)	(-24)	(-33)	16	(-41)	53	19	10	50	36	(-3)
	MB-0310 [3]	(-36)	(-72)	(-21)	18	(-95)	(-52)	(-85)	11	13	70	41	19	80	71	84
	MB-0320 [2, 3]						(-24)	(-66)						96	2	80
	MB-0335 [1, 2, 3]						(-46)	(-64)						73	40	60
	MB-0340 [1, 3]		(-97)	(-44)	(-91)	(-72)	(-65)	(-57)		32	81	95	89	108	54	51
	MB-0384 [3]		(-64)	(-25)	(-52)	(-68)	(-50)	(-48)		18	37	74	41	72	58	44
	PB-0408	(-77)	(-72)	(-62)	(-13)	15	(-75)	(-20)	69	44	64	21	64	6	45	66
Oceanside Littoral Cell	LJ-0443		(-69)	(-20)	(-36)	(-57)	(-40)	(-71)		27	96	30	44	55	54	55
	LJ-0445		64	(-14)	0	(-13)	(-4)	(-18)		(-13)	(-35)	15	0	12	9	21
	LJ-0450	(-31)	(-108)	(-45)	(-9)	(-20)	(-81)	(-53)	5	34	96	38	47	32	99	23
	LJ-0460		(-38)	(-147)	(-69)	(-86)	(-93)	(-113)		47	111	108	102	127	74	93
	TP-0470		(-86)	(-76)	(-78)	(-46)	34	(-71)		6	66	109	92	55	28	37
	TP-0520 [1]	(-27)	(-64)	(-87)	(-74)	(-88)	(-95)	(-50)	43	23	86	102	97	145	50	23
	TP-0530 [1]		(-34)	(-21)	(-44)	(-116)	(-79)	(-95)		(-81)	53	43	86	164	65	56
	DM-0565 [2]						(-14)	(-106)						22	78	124
	DM-0560							(-38)								22
	DM-0580 [1]	(-31)	(-36)	(-92)	(-90)	(-104)	(-78)	(-93)	15	(-8)	113	93	69	130	59	78
	DM-0590		(-125)	(-15)	(-60)	(-58)	57	(-66)		49	118	97	(-41)	25	0	33
	SD-0695							(-51)							23	47
	SD-0600 [1]	(-6)	(-25)	(-44)	(-22)	(-18)	(-63)	(-44)	3	(-11)	63	33	7	81	33	41
	SD-0610							(-126)							120	87

(continued)

Seasonal Changes in Mean Sea Level Shoreline Position (continued)

	Transect [4]	Winter Seasonal Change (ft) [2,3]							Summer Seasonal Change (ft) [2,3]							
		Fall 1996 to Spring 1997	Fall 1997 to Spring 1998	Fall 1998 to Spring 1999	Fall 1999 to Spring 2000	Fall 2000 to Spring 2001	Fall 2001 to Spring 2002	Fall 2002 to Spring 2003	Spring 1996 to Fall 1996	Spring 1997 to Fall 1997	Spring 1998 to Fall 1998	Spring 1999 to Fall 1999	Spring 2000 to Fall 2000	Spring 2001 to Fall 2001	Spring 2002 to Fall 2002	Spring 2003 to Fall 2003
Oceanside Littoral Cell (continued)	SD-0620					(-11)	50	(-17)						12	(-15)	9
	SD-0625					(-32)	5	(-41)						45	19	53
	SD-0630 [1]	(-32)	5	(-56)	(-13)	(-45)	(-98)	(-73)	19	19	56	11	57	117	88	63
	SD-0650					(-29)	(-10)	(-19)						36	10	17
	SD-0660					(-14	(-25	(-72						19	52	45
	SD-0670 [1, 3]	18	2	(-65)	(-52)	(-103)	(-83)	(-39)	(-1)	(-25)	81	71	91	147	23	55
	SD-0675 [2, 3]						(-8)	(-48)						23	45	41
	SD-0680 [3]				(-40)	(-60)	(-24)	(-50)				67	48	84	29	58
	SD-0690 [1, 2, 3]						12	(-17)						32	(-2)	3
	SD-0695 [2, 3]						16	(-16)						41	(-7)	4
	SD-0700 [3]					(-8)	41	(-31)						12	(-5)	26
	SD-0710 [1, 2]						(-75)	(-62)						80	45	67
	CB-0720	(-105)	(-67)	(-116)	(-97)	(-127)	(-31)	(-110)	70	44	118	136	121	123	53	91
	CB-0740	(-1)	(-41)	(-35)	(-18)	(-55)	(-7)	(-36)	(-22)	0	24	39	46	27	37	47
	CB-0760	19	(-78)	(-43)	(-38)	(-52)	9	(-31)	(-39)	(-12)	45	52	37	68	(-3)	26
	CB-0775 [1, 2]						(-67)	(-47)						107	22	16
	CB-0780	(-52)	(-67)	(-91)	(-42)	(-54)	(-50)	(-46)	9	30	85	68	49	81	22	15
	CB-0800	26	(-27)	47	13	7	51	(-1)	(-17)	(-34)	16	(-35)	(-9)	(-33)	(-31)	5
	CB-0820	(-17)	(-68)	(-51)	(-9)	21	(-73)	(-10)	(-22)	90	28	2	9	43	8	50
	CB-0830	26	15	40	10	42	65	25	(-18)	(-56)	(-29)	(-25)	0	(-56)	(-15)	8
	CB-0840 [3]	46	21	90	(-8)	54	54	51	(-38)	(-60)	(-42)	(-36)	(-18)	(-39)	(-27)	(-28)
	CB-0850 [3]	(-2)	(-31)	42	(-11)	16	(-11)	(-6)	(-11)	22	(-7)	(-5)	(-2)	24	38	19
	CB-0865 [1, 2, 3]						(-43)	(-47)						110	49	36
	CB-0880 [1, 3]	51	(-27)	8	(-28)	(-23)	35	2	(-54)	1	12	(-11)	40	54	(-20)	13
	OS-0900 [3]	(-2)	(-4)	(-23)	(-15)	(-19)	41	(-33)	(-46)	12	34	29	27	18	(-4)	38
	OS-0915 [1, 2]						(-72)	(-31)						115	23	35
	OS-0930 [1]	16	46	2	(-26)	(-19)	(-40)	(-48)	(-4)	(-26)	(-17)	21	16	132	(-2)	30
	OS-1000		(-12)	(-11)	(-24)	(-28)	(-8)	(-30)		28	29	20	19	44	20	47
	OS-1030		(-16)	22	30	(-2)	32	16		(-53)	(-24)	(-31)	(-3)	(-11)	(-40)	24
	OS-1070		(-93)	(-19)	(-13)	(-40)	(-20)	(-60)		(-16)	39	5	18	36	39	27

Notes:
(1) Transect crosses RBSP receiver site (shown in red type).
(2) New transect established to support RBSP in Spring 2001.
(3) Transect used for monthly beach width measurements.
(4) Transect Locations are indicted in Appendix A.
(5) Positive values indicate seaward movement of the shoreline (accretion).
(6) Negative values indicate landward movement of the shoreline (erosion).

Long-Term Changes, Long-Term Change Rates, and Annual Changes in Mean Sea Level Shoreline Position

	Transect [4]	Pre - 1984 Survey Date	Long-Term Change (ft) [2,3]			Long-Term Change Rate (ft/yr) [2,3]			Annual Change (ft) [2,3]						
			Pre - 1984 to Fall 1984	Fall 1984 to Fall 1989	Fall 1989 to Fall 2000	Pre - 1984 to Fall 1984	Fall 1984 to Fall 1989	Fall 1989 to Fall 2000	Fall 1996 to Fall 1997	Fall 1997 to Fall 1998	Fall 1998 to Fall 1999	Fall 1999 to Fall 2000	Fall 2000 to Fall 2001	Fall 2001 to Fall 2002	Fall 2002 to Fall 2003
Silver Strand Littoral Cell	SS-0003	Mar 1969	76	10	(-37)	4.9	2.0	(-3.4)		(-40)	39	(-30)	25	(-19)	(-13)
	SS-0005			70			14.0								(-10)
	SS-0007			(-50)	1		(-10.0)	0.1				(-97)			
	SS-0015	June 1975	(-42)	(-91)	(-61)	(-4.4)	(-18.2)	(-5.5)		(-84)	51	(-25)	56	(-10)	(-27)
	SS-0020 [1, 2, 3]													(-24)	(-8)
	SS-0025 [1, 2, 3]													(-46)	1
	SS-0035 [3]			37	(-18		7.4	(-1.6)	(-36)	112	(-82)	0	90	(-90)	(-1)
	SS-0050 [2, 3]													(-41)	(-34)
	SS-0077			37	(-71)		7.4	(-6.5)		(-5)	35	(-15)	(-4)	6	(-3)
	SS-0090			78	(-44)		15.6	(-4.0)	(-6)	1	33	(-11)	11	(-7)	(-1)
	SS-0160			69	(-7)		13.8	(-0.6)	(-30)	17	(-1)	9	17	(-17)	1
Mission Beach Littoral Cell	OB-0230	July 1970	72	20	(-6)	5.1	4.0	(-0.5)	(-16)	30	4	(-8)	9	12	(-36)
	MB-0310 [3]	July 1955	(-109)	39	(-7)	(-3.7	7.8	(-0.6)	(-23)	(-2)	20	37	(-15)	19	(-1)
	MB-0320 [2, 3]													(-22)	14
	MB-0335 [1, 2, 3]													(-6)	(-4)
	MB-0340 [1, 3]	June 1972	(-4)	58	(-22)	(-0.3	11.6	(-2.0)		(-16)	51	(-2)	36	(-11)	(-6)
	MB-0384 [3]	June 1972	41	40	(-16)	3.3	8.0	(-1.5)		(-27)	49	(-11)	4	8	(-4)
	PB-0408			37	(-3)		7.4	(-0.3)	(-33)	(-8)	(-41)	51	21	(-30)	46
Oceanside Littoral Cell	LJ-0443			15	(-20)		3.0	(-1.8)		27	10	8	(-2)	14	(-16)
	LJ-0445			(-46)	39		(-9.2)	3.5		29	1	0	(-1)	5	3
	LJ-0450			22	8		4.4	0.7	3	(-12)	(-7)	38	12	18	(-30)
	LJ-0460			(-4)	50		(-0.8)	4.5		73	(-39)	33	41	(-19)	(-20)
	TP-0470			72	(-65)		14.4	(-5.9)		(-20)	33	14	9	62	(-34)
	TP-0520 [1]			(-43)	36		(-8.6)	3.3	(-4)	22	15	23	57	(-45)	(-27)
	TP-0530 [1]			30	67		6.0	6.1		19	22	42	48	(-14)	(-39)
	DM-0565 [2]													64	18
	DM-0560														(-16)
	DM-0580 [1]			6	(-10)		1.2	(-0.9)	(-39)	77	1	(-21)	26	(-19)	(-15)
	DM-0590			101	(-150)		20.2	(-13.6)		(-7)	82	(-101	(-33)	57	(-33)
	SD-0595														(-4)
	SD-0600 [1]			0	(-65)		0.0	(-5.9)	(-17)	38	(-11)	(-15)	63	(-30)	(-3)
	SD-0610														(-39)

(continued)

Long-Term Changes, Long-Term Change Rates, and Annual Changes in Mean Sea Level Shoreline Position (continued)

	Transect [4]	Pre - 1984 Survey Date	Long-Term Change (ft) [2,3]			Long-Term Change Rate (ft/yr) [2,3]			Annual Change (ft) [2,3]						
			Pre - 1984 to Fall 1984	Fall 1984 to Fall 1989	Fall 1989 to Fall 2000	Pre - 1984 to Fall 1984	Fall 1984 to Fall 1989	Fall 1989 to Fall 2000	Fall 1996 to Fall 1997	Fall 1997 to Fall 1998	Fall 1998 to Fall 1999	Fall 1999 to Fall 2000	Fall 2000 to Fall 2001	Fall 2001 to Fall 2002	Fall 2002 to Fall 2003
Oceanside Littoral Cell (continued)	SD-0620												1	35	(-8)
	SD-0625												13	24	12
	SD-0630 [1]	Oct 1970	9	(-2)	(-37)	0.6	(-0.4)	(-3.4)	(-13)	61	(-45)	44	72	(-10)	(-10)
	SD-0650												7	0	(-2)
	SD-0660												5	27	(-27)
	SD-0670 [1, 3]	Apr 1957	71	(-58)	133	2.6	(-11.6)	12.1	(-7)	83	6	39	44	(-60)	16
	SD-0675 [2, 3]													37	(-7)
	SD-0680 [3]											8	24	5	8
	SD-0690 [1, 2, 3]													10	(-14)
	SD-0695 [2, 3]													9	(-12)
	SD-0700 [3]												4	36	(-5)
	SD-0710 [1, 2]													(-30)	5
	CB-0720	Oct 1970	(-117)	(-23)	221	(-8.4)	(-4.6)	20.1	(-61)	51	20	24	(-4	22	(-19)
	CB-0740				98			8.9	(-1)	(-17)	4	28	(-28)	30	11
	CB-0760			(-27)	62		(-5.4)	5.6	7	(-33)	9	(-1)	16	6	(-5)
	CB-0775 [1, 2]													(-45)	(-31)
	CB-0780				59			5.4	(-22)	18	(-23)	7	27	(-28)	(-31)
	CB-0800			1	(-25)		0.2	(-2.3)	(-8)	(-11)	12	4	(-26)	20	4
	CB-0820				16			1.5	73	(-40)	(-49)	0	64	(-65)	40
	CB-0830			(-92)	(-33)		(-18.4)	(-3.0)	(-30)	(-14)	15	10	(-14)	50	33
	CB-0840 [3]				(-1)			(-0.1)	(-14)	(-21)	54	(-26)	15	27	23
	CB-0850 [3]				(-5)			(-0.5)	20	(-38)	37	(-13)	40	27	13
	CB-0865 [1, 2, 3]													6	(-11)
	CB-0880 [1, 3]				(-19)			(-1.7)	52	(-15)	(-3)	12	31	15	15
	OS-0900 [3]				(-17)			(-1.5)	10	30	6	12	(-1)	37	5
	OS-0915 [1, 2]													(-49)	4
	OS-0930 [1]	Jan 1972	33	9	(-29)	2.6	1.8	(-2.6)	(-10)	29	23	(-10)	113	(-42)	(-18)
	OS-1000	Sep 1965	8	(-24)	(-26)	0.4	(-4.8)	(-2.4)		17	9	(-5)	16	12	17
	OS(-1030	Oct 1963	5	(-138)	0	0.2	(-27.6)	0.0		(-40)	(-9)	27	(-13)	(-8)	40
	OS-1070	Oct 1973	(-15)	(-42)	28	(-1.4)	(-8.4)	2.5		(-54)	(-14)	5	(-4)	19	(-33)

Notes:
(1) Transect crosses RBSP receiver site (shown in red type).
(2) New transect established to support RBSP in Spring 2001.
(3) Transect used for monthly beach width measurements.
(4) Transect locations are indicted in Appendix A.
(5) Positive values indicate seaward movement of the shoreline (accretion).
(6) Negative values indicate landward movement of the shoreline (erosion).

Mean Sea Level Beach Widths

	Transect [4]	Landward Limit of Sand	Pre – 1984 Survey Date	Mean Sea Level Beach Width (feet) [5]																		
				Pre – 1984	Fall 1984	Fall 1989	Spring 1996	Fall 1996	Spring 1997	Fall 1997	Spring 1998	Fall 1998	Spring 1999	Fall 1999	Spring 2000	Fall 2000	Spring 2001	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003
Silver Strand Littoral Cell	SS-0003	Concrete Slab	Mar 1969	230	306	316			283	310	162	270	257	309	227	279	211	304	259	285	230	272
	SS-0005	Monument			290	360														291	231	281
	SS-0015	Base of Revetment	Jun 1975	187	145	54			15	51	0	0	0	18	4	0	0	49	0	39	0	12
	SS-0020 [1, 2, 3]	Sidewalk															125	186	135	162	138	154
	SS-0025 [1, 2, 3]	Base of Revetment															69	251	121	205	104	206
	SS-0035 [3]	Base of Revetment			199	236	142	224	156	188	113	300	140	218	162	218	136	308	152	218	96	217
	SS-0050 [2, 3]	Seawall				273											184	266	180	225	135	191
	SS-0077	Fence			677	714			615	628	567	623	589	658	624	643	579	639	609	645	606	642
	SS-0090	Access Road			219	297	206	236	189	230	175	231	180	264	193	253	179	264	219	257	203	256
	SS-0160	Base of Revetment			705	774	734	772	753	742	611	759	715	758	730	767	713	784	757	767	725	768
Mission Beach Littoral Cell	OB-0230	Parking Lot	Jul 1970	188	260	280	248	264	289	248	225	278	263	282	264	274	233	283	259	295	262	259
	MB-0310 [3]	Multi-Use Path	Jul 1955	292	283	322	272	283	247	260	188	258	237	278	296	315	220	300	248	319	234	318
	MB-0320 [2, 3]	Multi-Use Path															176	272	248	250	184	264
	MB-0335 [1, 2, 3]	Multi-Use Path															181	254	208	248	184	244
	MB-0340 [1, 3]	Multi-Use Path	Jun 1972	192	188	246			159	191	94	175	131	226	135	224	152	260	195	249	192	243
	MB-0384 [3]	Multi-Use Path	Jun 1972	192	233	273			228	246	182	219	194	268	216	257	189	261	211	269	221	265
	PB-0408	Base of Bluff			158	195	154	223	146	190	118	182	120	141	128	192	207	213	138	183	163	229
Oceanside Littoral Cell	LJ-0443	Restaurant			123	138			46	73	4	100	80	110	74	118	61	116	76	130	59	114
	LJ-0445	Multi-Use Path			208	162			184	171	235	200	186	201	201	201	188	200	196	205	187	208
	LJ-0450	Multi-Use Path			249	271	252	257	226	260	152	248	203	241	232	279	259	291	210	309	256	279
	LJ-0460	Building			182	178			114	161	123	234	87	195	126	228	142	269	176	250	137	230
	TP-0470	Base of Bluff			188	260			162	168	82	148	72	181	103	195	149	204	238	266	195	232
	TP-0520 [1]	Base of Revetment			194	151	88	131	104	127	63	149	62	164	90	187	99	244	149	199	149	172
	TP-0530 [1]	Base of Revetment			113	143			208	127	93	146	125	168	124	210	94	258	179	244	149	205
	DM-0565 [2]	Base of Bluff															53	75	61	139	33	157
	DM-0560	Base of Bluff			188															191	153	175
	DM-0580 [1]	Seawall			219	225	182	197	166	158	122	235	143	236	146	215	111	241	163	222	129	207
	DM-0590	Base of Revetment			166	267			94	143	18	136	121	218	158	117	59	84	141	141	75	108
	SD-0595	Base of Bluff																	95	118	67	114
	SD-0600 [1]	Base of Bluff			173	173	110	113	107	96	71	134	90	123	101	108	90	171	108	141	97	138
	SD-0610	Base of Bluff																	68	188	62	149

(continued)

Mean Sea Level Beach Widths (continued)

	Transect [4]	Landward Limit of Sand	Pre – 1984 Survey Date	Mean Sea Level Beach Width (feet) [5]																		
				Pre – 1984	Fall 1984	Fall 1989	Spring 1996	Fall 1996	Spring 1997	Fall 1997	Spring 1998	Fall 1998	Spring 1999	Fall 1999	Spring 2000	Fall 2000	Spring 2001	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003
Oceanside Littoral Cell (continued)	SD-0620	Multi-Use Path														99	88	100	150	135	118	127
	SD-0625	PCH														106	74	119	124	143	102	155
	SD-0630 [1]	Base of Revetment	Oct 1970	162	171	169	66	85	53	72	77	133	77	88	75	132	87	204	106	194	121	184
	SD-0650	Beach Access														142	113	149	139	149	130	147
	SD-0660	Stairway														136	122	141	116	168	96	141
	SD-0670 [1, 3]	Lifeguard Tower	Apr 1957	81	152	94	107	106	124	99	101	182	117	188	136	227	124	271	188	211	172	227
	SD-0675 [2, 3]	Base of Bluff															93	116	108	153	105	146
	SD-0680 [3]	Base of Bluff											69	136	96	144	84	168	144	173	123	181
	SD-0690 [1, 2, 3]	Base of Bluff															76	108	120	118	101	104
	SD-0695 [2, 3]	Seawall															78	119	135	128	112	116
	SD-0700 [3]	Base of Bluff														90	82	94	135	130	99	125
	SD-0710 [1, 2]	Base of Bluff															140	220	145	190	128	195
	CB-0720	Parking Lot	Oct 1970	294	177	154	271	341	236	280	213	331	215	351	254	375	248	371	340	393	283	374
	CB-0740	Base of Bluff				52	158	136	135	135	94	118	83	122	104	150	95	122	115	152	116	163
	CB-0760	Base of Bluff			104	77	196	157	176	164	86	131	88	140	102	139	87	155	164	161	130	156
	CB-0775 [1, 2]	Base of bluff															112	219	152	174	127	143
	CB-0780	Base of bluff				114	184	193	141	171	104	189	98	166	124	173	119	200	150	172	126	141
	CB-0800	Base of Revetment			60	61	56	39	65	31	4	20	67	32	45	36	43	10	61	30	29	34
	CB-0820	Seawall				129	183	161	144	234	166	194	143	145	136	145	166	209	136	144	134	184
	CB-0830	Seawall			222	130	134	116	142	86	101	72	112	87	97	97	139	83	148	133	158	166
	CB-0840 [3]	Seawall				84	128	90	136	76	97	55	145	109	101	83	137	98	152	125	176	148
	CB-0850 [3]	Base of Bluff				118	118	107	105	127	96	89	131	126	115	113	129	153	142	180	174	193
	CB-0865 [1, 2, 3]	Stairway															82	192	149	198	151	187
	CB-0880 [1, 3]	Bluff/Seawall				139	128	74	125	126	99	111	119	108	80	120	97	151	186	166	168	181
	OS-0900 [3]	Base of Revetment				73	44	0	0	8	4	38	15	44	29	56	37	55	96	92	59	97
	OS-0915 [1, 2]	Stairway															71	186	114	137	106	141
	OS-0930 [1]	Base of Revetment	Jan 1972	61	94	103	46	42	58	32	78	61	63	84	58	74	55	187	147	145	97	127
	OS-1000	Access Road	Sep 1965	224	232	208			133	161	149	178	167	187	163	182	154	198	190	210	180	227
	OS-1030	Access Road	Oct 1963	386	391	253			328	275	259	235	257	226	256	253	251	240	272	232	248	272
	OS-1070	Access Road	Oct 1973	456	441	399			506	490	397	436	417	422	409	427	387	423	403	442	382	409

Note:
(1) Transect crosses RBSP receiver site (shown in red type).
(2) New transect established to support RBSP in Spring 2001.
(3) Transect used for monthly beach width measurements.
(4) Transect locations are indicated in Appendix A.
(5) Beach widths prior to 1997 should be considered as approximate.