

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
Silver Strand Littoral Cell	SS-0003	Mar 1969	244	312	323			288	320	162	273	266	318	229	284	213	312	264	289
	SS-0005			297	368														299
	SS-0007			330	279				293	258	39	(-55)	390	172	301	224	353	85	
	SS-0015	Jun 1975	361	332	231			189	233	118	139	136	196	177	172	155	228	172	215
	SS-0020 ^(1, 2, 3)															128	195	139	167
	SS-0025 ^(1, 2, 3)															84	277	142	224
	SS-0035 ⁽³⁾			232	273	175	260	190	230	144	334	174	254	196	256	172	347	219	255
	SS-0050 ^(2, 3)				288											198	286	192	244
	SS-0077		657	706	746			643	665	594	650	616	689	652	675	608	671	639	673
	SS-0090			285	363	272	303	256	302	238	294	245	331	256	320	244	336	283	324
	SS-0160			725	796	759	796	776	766	633	783	738	785	753	790	737	808	785	788
Mission Beach Littoral Cell	OB-0230	Jul 1970	291	363	382	348	366	396	349	326	385	365	389	365	378	334	389	362	397
	MB-0310 ⁽³⁾	Jul 1955	408	296	336	285	299	258	277	201	274	255	292	311	333	231	317	262	337
	MB-0320 ^(2, 3)															210	311	277	284
	MB-0335 ^(1, 2, 3)															199	271	225	269
	MB-0340 ^(1, 3)	Jun 1972	201	199	263			171	209	104	195	142	242	145	240	167	277	209	263
	MB-0384 ⁽³⁾	Jun 1972	204	250	291			245	269	197	235	210	287	230	277	205	277	225	286
	PB-0408			153	184	135	208	125	180	96	166	98	125	109	186	197	202	119	195
Oceanside Littoral Cell	LJ-0443			138	162			64	87	14	111	92	121	81	135	72	130	88	137
	LJ-0445			228	176			207	192	259	221	206	219	213	221	212	220	214	222
	LJ-0450			265	280	264	272	248	282	160	263	217	253	246	293	274	305	222	332
	LJ-0460			194	188			132	177	133	251	98	213	139	248	152	285	186	266
	TP-0470			199	264			147	180	88	155	78	190	107	205	162	211	254	274
	TP-0520 ⁽¹⁾			242	201	141	179	149	174	106	197	107	212	143	235	145	296	196	248
	TP-0530 ⁽¹⁾			164	189			258	174	142	196	176	219	171	265	141	311	234	296
	DM-0565 ⁽²⁾															265	289	274	359
	DM-0560			213														n/a	211
	DM-0580 ⁽¹⁾			233	238	197	214	181	178	134	250	159	253	159	228	122	256	176	237
	DM-0590			190	291			117	169	39	170	146	240	181	154	98	108	166	226
	SD-0595																	161	185
	SD-0600 ⁽¹⁾			158	155	91	96	88	76	53	120	70	108	83	92	72	156	90	127
	SD-0610																	33	156

(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
Oceanside Littoral Cell (continued)	SD-0620														103	90	102	159	141
	SD-0625														112	77	124	128	149
	SD-0630 ⁽¹⁾	Oct 1970	169	177	173	68	75	55	75	78	141	79	89	78	140	91	208	109	202
	SD-0650														151	120	157	149	157
	SD-0660														142	128	149	122	173
	SD-0670 ^(1, 3)	Apr 1957	87	163	100	113	110	128	101	105	189	122	194	142	238	132	276	194	217
	SD-0675 ^(2, 3)															91	115	106	154
	SD-0680 ⁽³⁾											74	147	104	155	91	177	151	182
	SD-0690 ^(1, 2, 3)															78	108	124	121
	SD-0695 ^(2, 3)															83	125	142	134
	SD-0700 ⁽³⁾														86	76	89	129	123
	SD-0710 ^(1, 2)															166	243	172	215
	CB-0720	Oct 1970	313	196	170	295	365	258	301	234	357	240	372	276	403	272	395	362	417
	CB-0740				141	254	229	230	240	183	210	170	211	191	243	183	212	206	243
	CB-0760			144	115	235	199	227	206	123	171	126	183	141	184	126	195	203	202
	CB-0775 ^(1, 2)															234	337	272	297
	CB-0780			97		281	294	237	271	201	286	195	266	221	273	218	295	250	272
	CB-0800			137		90	78	100	71	38	55	102	66	76	75	79	43	97	63
	CB-0820					193	172	152	247	173	203	152	156	143	155	176	221	147	154
	CB-0830			215	120	123	107	133	74	90	58	102	76	86	86	129	72	140	123
	CB-0840 ⁽³⁾				89	132	97	141	79	103	57	152	112	106	87	142	105	157	132
	CB-0850 ⁽³⁾				212	209	198	200	221	187	179	226	217	205	204	220	250	233	271
	CB-0865 ^(1, 2, 3)															89	200	152	205
	CB-0880 ^(1, 3)				159	149	90	144	148	118	129	140	127	100	144	123	172	205	199
	OS-0900 ⁽³⁾				138	109	57	57	66	63	102	74	106	92	120	98	119	156	152
	OS-0915 ^(1, 2)															77	189	117	142
	OS-0930 ⁽¹⁾	Jan 1972	183	220	226	167	166	181	155	202	180	187	208	177	198	179	305	265	267
	OS-1000	Sep 1965	250	259	234			155	188	173	203	195	213	187	210	181	223	216	238
	OS-1030	Oct 1963	340	350	208			282	232	212	193	210	179	210	211	206	195	227	191
	OS-1070	Oct 1973	478	463	422			506	498	404	428	435	442	428	448	404	447	422	465

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 Figures 10a and 10b.

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	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
Silver Strand Littoral Cell	SS-0003		(-158)	(-7)	(-89)	(-71)	(-48)		32	111	52	55	99	25
	SS-0005													
	SS-0007		(-35)	(-94)	(-218)	(-77)	(-268)			(-219)	445	129	129	
	SS-0015		(-115)	(-3)	(-19)	(-17)	(-56)		44	21	60	(-5)	73	43
	SS-0020 ^(1, 2, 3)						(-56)						67	28
	SS-0025 ^(1, 2, 3)						(-135)						193	82
	SS-0035 ⁽³⁾	(-70)	(-86)	(-160)	(-58)	(-84)	(-128)	85	40	190	80	60	175	36
	SS-0050 ^(2, 3)						(-94)						88	52
	SS-0077		(-71)	(-34)	(-37)	(-67)	(-32)		22	56	73	23	63	34
	SS-0090	(-47)	(-64)	(-49)	(-75)	(-76)	(-53)	31	46	56	86	64	92	41
	SS-0160	(-20)	(-133)	(-45)	(-32)	(-53)	(-23)	37	(-10)	150	47	37	71	3
Mission Beach Littoral Cell	OB-0230	30	(-23)	(-20)	(-24)	(-44)	(-27)	18	(-47)	59	24	13	55	35
	MB-0310 ⁽³⁾	(-41)	(-76)	(-19)	19	(-102)	(-55)	14	19	73	37	22	86	75
	MB-0320 ^(2, 3)						(-34)						101	7
	MB-0335 ^(1, 2, 3)						(-46)						72	44
	MB-0340 ^(1, 3)		(-105)	(-53)	(-97)	(-73)	(-68)		38	91	100	95	110	54
	MB-0384 ⁽³⁾		(-72)	(-25)	(-57)	(-72)	(-52)		24	38	77	47	72	61
	PB-0408	(-83)	(-84)	(-68)	(-16)	11	(-83)	73	55	70	27	77	5	76
Oceanside Littoral Cell	LJ-0443		(-73)	(-19)	(-40)	(-63)	(-42)		23	97	29	54	58	49
	LJ-0445		67	(-15)	(-6)	(-9)	(-6)		(-15)	(-38)	13	8	8	8
	LJ-0450	(-24)	(-122)	(-46)	(-7)	(-19)	(-83)	8	34	103	36	47	31	110
	LJ-0460		(-44)	(-153)	(-74)	(-96)	(-99)		45	118	115	109	133	80
	TP-0470		(-92)	(-77)	(-83)	(-43)	43		33	67	112	98	49	20
	TP-0520 ⁽¹⁾	(-30)	(-68)	(-90)	(-69)	(-90)	(-100)	38	25	91	105	92	151	52
	TP-0530 ⁽¹⁾		(-32)	(-20)	(-48)	(-124)	(-77)		(-84)	54	43	94	170	62
	DM-0565 ⁽²⁾						(-15)						24	85
	DM-0560													
	DM-0580 ⁽¹⁾	(-33)	(-44)	(-91)	(-94)	(-106)	(-80)	17	(-3)	116	94	69	134	61
	DM-0590		(-130)	(-24)	(-59)	(-56)	58		52	131	94	(-27)	10	60
	SD-0695													24
	SD-0600 ⁽¹⁾	(-8)	(-23)	(-50)	(-25)	(-20)	(-66)	5	(-12)	67	38	9	84	37
	SD-0610													123

(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	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
Oceanside Littoral Cell (continued)	SD-0620					(-13)	57						12	(-18)
	SD-0625					(-35)	4						47	21
	SD-0630 ⁽¹⁾	(-20)	3	(-62)	(-11)	(-49)	(-99)	7	20	63	10	62	117	93
	SD-0650					(-31)	(-8)						37	8
	SD-0660					(-14)	(-27)						21	51
	SD-0670 ^(1, 3)	18	4	(-67)	(-52)	(-106)	(-82)	(-3)	(-27)	84	72	96	144	23
	SD-0675 ^(2, 3)						(-9)						24	48
	SD-0680 ⁽³⁾				(-43)	(-64)	(-26)				73	51	86	31
	SD-0690 ^(1, 2, 3)						16						30	(-3)
	SD-0695 ^(2, 3)						17						42	(-8)
	SD-0700 ⁽³⁾					(-10)	40						13	(-6)
	SD-0710 ^(1, 2)						(-71)						77	43
	CB-0720	(-107)	(-67)	(-117)	(-96)	(-131)	(-33)	70	43	123	132	127	123	55
	CB-0740	1	(-57)	(-40)	(-20)	(-60)	(-6)	(-25)	10	27	41	52	29	37
	CB-0760	28	(-83)	(-45)	(-42)	(-58)	8	(-36)	(-21)	48	57	43	69	(-1)
	CB-0775 ^(1, 2)						(-65)						103	25
	CB-0780	(-57)	(-70)	(-91)	(-45)	(-55)	(-45)	13	34	85	71	52	77	22
	CB-0800	22	(-33)	47	10	4	54	(-12)	(-29)	17	(-36)	(-1)	(-36)	(-34)
	CB-0820	(-20)	(-74)	(-51)	(-13)	21	(-74)	(-21)	95	30	4	12	45	7
	CB-0830	26	16	44	10	43	68	(-16)	(-59)	(-32)	(-26)	0	(-57)	(-17)
	CB-0840 ⁽³⁾	44	24	95	(-6)	55	52	(-35)	(-62)	(-46)	(-40)	(-19)	(-37)	(-25)
	CB-0850 ⁽³⁾	2	(-34)	47	(-12)	16	(-17)	(-11)	21	(-8)	(-9)	(-1)	30	38
	CB-0865 ^(1, 2, 3)						(-48)						111	53
	CB-0880 ^(1, 3)	54	(-30)	11	(-27)	(-21)	33	(-59)	4	11	(-13)	44	49	(-6)
	OS-0900 ⁽³⁾	0	(-3)	(-28)	(-14)	(-22)	37		9	39	32	28	21	(-4)
	OS-0915 ^(1, 2)						(-72)						112	25
	OS-0930 ⁽¹⁾	15	47	7	(-31)	(-19)	(-40)	(-1)	(-26)	(-22)	21	21	126	2
	OS-1000		(-15)	(-8)	(-26)	(-29)	(-7)		33	30	18	23	42	22
	OS-1030		(-20)	17	31	(-5)	32		(-50)	(-19)	(-31)	1	(-11)	(36)
	OS-1070		(-94)	7	(-14)	(-44)	(-25)		(-8)	24	7	20	43	43

Notes: ⁽¹⁾ Transect crosses RBSP receiver site (shown in **red type**).
⁽³⁾ Transect used for monthly beach width measurements.
⁽⁵⁾ Positive values indicate seaward movement of the shoreline (accretion).

⁽²⁾ New transect established to support RBSP in Spring 2001.
⁽⁴⁾ Transect Locations are indicted in Figures 10a and 10b.
⁽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
Silver Strand Littoral Cell	SS-0003	Mar 1969	68	11	(-39)	4.4	2.2	(-3.5)		(-47)	45	(-34)	28	(-23)
	SS-0005			71			14.2							
	SS-0007			(-51)	22		(-10.2)	2.0		(-254)	351	-89	52	
	SS-0015	June 1975	(-29)	(-101)	(-59)	(-3.1)	(-20.2)	(-5.4)		(-94)	57	(-24)	56	(-13)
	SS-0020 ^(1, 2, 3)													(-28)
	SS-0025 ^(1, 2, 3)													(-53)
	SS-0035 ⁽³⁾			41	(-17)		8.2	(-1.5)	(-30)	104	(-80)	2	91	(-92)
	SS-0050 ^(2, 3)													(-42)
	SS-0077			40	(-71)		8.0	(-6.5)		(-15)	39	(-14)	(-4)	2
	SS-0090			78	(-43)		15.6	(-3.9)	(-1)	(-8)	37	(-11)	16	(-12)
	SS-0160			71	(-6)		14.2	(-0.5)	(-30)	17	2	5	18	(-20)
Mission Beach Littoral Cell	OB-0230	July 1970	72	19	(-4)	5.0	3.8	(-0.4)	(-17)	36	4	(-11)	11	8
	MB-0310 ⁽³⁾	July 1955	(-112)	40	(-3)	(-3.8)	8.0	(-0.3)	(-22)	(-3)	18	41	(-16)	20
	MB-0320 ^(2, 3)													(-27)
	MB-0335 ^(1, 2, 3)													(-2)
	MB-0340 ^(1, 3)	June 1972	(-2)	64	(-23)	(-0.2)	12.8	(-2.1)		(-14)	47	(-2)	37	(-14)
	MB-0384 ⁽³⁾	June 1972	46	41	(-14)	3.7	8.2	(-1.3)		(-34)	52	(-10)	0	9
	PB-0408			31	2		6.2	0.2	(-28)	(-14)	(-41)	61	16	(-7)
Oceanside Littoral Cell	LJ-0443			24	(-27)		4.8	(-2.5)		24	10	14	(-5)	7
	LJ-0445			(-52)	45		(-10.4)	4.1		29	(-2)	2	(-1)	2
	LJ-0450			15	13		3.0	1.2	10	(-19)	(-10)	40	12	27
	LJ-0460			(-6)	60		(-1.2)	5.5		74	(-38)	35	37	(-19)
	TP-0470			65	(-59)		13.0	(-5.4)		(-25)	35	15	6	63
	TP-0520 ⁽¹⁾			(-41)	34		(-8.2)	3.1	(-5)	23	15	23	61	(-48)
	TP-0530 ⁽¹⁾			25	76		5.0	6.9		22	23	46	46	(-15)
	DM-0565 ⁽²⁾													70
	DM-0560													
	DM-0580 ⁽¹⁾			5	(-10)		1.0	(-0.9)	(-36)	72	3	(-25)	28	(-19)
	DM-0590			101	(-137)		20.2	(-12.5)		1	70	(-86)	(-46)	118
	SD-0595													
	SD-0600 ⁽¹⁾			(-3)	(-63)		(-0.6)	(-5.7)	(-20)	44	(-12)	(-16)	64	(-29)
	SD-0610													

(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
Oceanside Littoral Cell (continued)	SD-0620												(-1)	39
	SD-0625												12	25
	SD-0630 ⁽¹⁾	Oct 1970	8	(-4)	(-33)	0.6	(-0.6)	(-3.0)	0	66	(-52)	51	68	(-6)
	SD-0650												6	0
	SD-0660												7	24
	SD-0670 ^(1, 3)	Apr 1957	76	(-63)	138	2.8	(-12.6)	12.5	(-9)	88	5	44	38	(-59)
	SD-0675 ^(2, 3)													39
	SD-0680 ⁽³⁾											8	22	5
	SD-0690 ^(1, 2, 3)													13
	SD-0695 ^(2, 3)													9
	SD-0700 ⁽³⁾												3	34
	SD-0710 ^(1, 2)													(-28)
	CB-0720	Oct 1970	(-117)	(-26)	233	(-8.4)	(-5.2)	21.2	(-64)	56	15	31	(-8)	22
	CB-0740				102			9.3	11	(-30)	1	32	(-31)	31
	CB-0760			(-29)	69		(-5.8)	6.3	7	(-35)	12	1	11	7
	CB-0775 ^(1, 2)													(-40)
	CB-0780				176			16.0	(-23)	15	(-20)	7	22	(-23)
	CB-0800				(-62)			(-5.6)	(-7)	(-16)	11	9	(-32)	20
	CB-0820								75	(-44)	(-47)	(-1)	66	(-67)
	CB-0830			(-95)	(-34)		(-19.0)	(-3.1)	(-33)	(-16)	18	10	(-14)	51
	CB-0840 ⁽³⁾				(-2)			(-0.2)	(-18)	(-22)	55	(-25)	18	27
	CB-0850 ⁽³⁾				(-8)			(-0.7)	23	(-42)	38	(-13)	46	21
	CB-0865 ^(1, 2, 3)													5
	CB-0880 ^(1, 3)				(-15)			(-1.4)	58	(-19)	(-2)	17	28	27
	OS-0900 ⁽³⁾				(-18)			(-1.6)	9	36	4	14	(-1)	33
	OS-0915 ^(1, 2)													(-47)
	OS-0930 ⁽¹⁾	Jan 1972	37	6	(-28)	2.9	1.2	(-2.5)	(-11)	25	28	(-10)	107	(-38)
	OS-1000	Sep 1965	9	(-25)	(-24)	0.5	(-5.0)	(-2.2)		15	10	(-3)	13	15
	OS-1030	Oct 1963	10	(-142)	3	0.5	(-28.4)	0.3		(-39)	(-14)	32	(-16)	(-4)
	OS-1070	Oct 1973	(-15)	(-41)	26	(-1.4)	(-8.2)	2.4		(-70)	14	6	(-1)	18

Notes: ⁽¹⁾ Transect crosses RBSP receiver site (shown in **red type**).
⁽³⁾ Transect used for monthly beach width measurements.
⁽⁵⁾ Positive values indicate seaward movement of the shoreline (accretion).

⁽²⁾ New transect established to support RBSP in Spring 2001.
⁽⁴⁾ Transect locations are indicted in Figures 10a and 10b.
⁽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
Silver Strand Littoral Cell	SS-0003	Concrete Slab	Mar 1969	244	312	323			288	320	162	273	266	318	229	284	213	312	264	289
	SS-0005	Monument																		299
	SS-0015	Base of Revetment	Jun 1975	191	162	61			19	63	0	0	0	26	7	2	0	58	2	45
	SS-0020 ^(1, 2, 3)	Sidewalk															128	195	139	167
	SS-0025 ^(1, 2, 3)	Base of Revetment															72	265	130	212
	SS-0035 ⁽³⁾	Base of Revetment			204	245	147	232	162	202	116	306	146	226	168	228	144	319	191	227
	SS-0050 ^(2, 3)	Seawall				283											193	281	187	239
	SS-0077	Fence			682	722			619	641	570	626	592	665	628	651	584	647	615	649
	SS-0090	Access Road			226	304	213	244	197	243	179	235	186	272	197	261	185	277	224	265
	SS-0160	Base of Revetment			711	782	745	782	762	752	619	769	724	771	739	776	723	794	771	774
Mission Beach Littoral Cell	OB-0230	Parking Lot	Jul 1970	197	268	287	253	271	301	254	231	290	270	294	270	283	239	294	267	302
	MB-0310 ⁽³⁾	Multi-Use Path	Jul 1955	401	289	329	278	292	251	270	194	267	248	285	304	326	224	310	255	330
	MB-0320 ^(2, 3)	Multi-Use Path															182	283	249	256
	MB-0335 ^(1, 2, 3)	Multi-Use Path															189	261	215	259
	MB-0340 ^(1, 3)	Multi-Use Path	Jun 1972	195	193	257			165	203	98	189	136	236	139	234	161	271	203	257
	MB-0384 ⁽³⁾	Multi-Use Path	Jun 1972	195	241	282			236	260	188	226	201	278	221	268	196	268	216	277
	PB-0408	Base of Bluff			178	209	160	233	150	205	121	191	123	150	134	211	222	227	144	220
Oceanside Littoral Cell	LJ-0443	Restaurant			138	162			64	87	14	111	92	121	81	135	72	130	88	137
	LJ-0445	Multi-Use Path			219	167			198	183	250	212	197	210	204	212	203	211	205	213
	LJ-0450	Multi-Use Path			262	277	261	269	245	279	157	260	214	250	243	290	271	302	219	329
	LJ-0460	Building			194	188			132	177	133	251	98	213	139	248	152	285	186	266
	TP-0470	Base of Bluff			199	264			147	180	88	155	78	190	107	205	162	211	254	274
	TP-0520 ⁽¹⁾	Base of Revetment			202	161	101	139	109	134	66	157	67	172	103	195	105	256	156	208
	TP-0530 ⁽¹⁾	Base of Revetment			122	147			216	132	100	154	134	177	129	223	99	269	192	254
	DM-0565 ⁽²⁾	Base of Bluff															57	81	66	151
	DM-0560	Base of Bluff																		199
	DM-0580 ⁽¹⁾	Seawall			224	229	188	205	172	169	125	241	150	244	150	219	113	247	167	228
	DM-0590	Base of Revetment			172	273			99	151	21	152	128	222	163	136	80	90	148	208
	SD-0595	Base of Bluff																	102	126
	SD-0600 ⁽¹⁾	Base of Bluff			181	178	114	119	111	99	76	143	93	131	106	115	95	179	113	150
	SD-0610	Base of Bluff																	74	197

(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
Oceanside Littoral Cell (continued)	SD-0620	Multi-Use Path		244												103	90	102	159	141
	SD-0625	PCH														112	77	124	128	149
	SD-0630 ⁽¹⁾	Base of Revetment	Oct 1970	169	177	173	68	75	55	75	78	141	79	89	78	140	91	208	109	202
	SD-0650	Beach Access														151	120	157	149	157
	SD-0660	Stairway														142	128	149	122	173
	SD-0670 ^(1, 3)	Lifeguard Tower	Apr 1957	87	162	100	113	110	128	101	105	189	122	194	142	238	132	276	194	217
	SD-0675 ^(2, 3)	Base of Bluff															100	124	115	163
	SD-0680 ⁽³⁾	Base of Bluff		n/a									73	146	103	154	90	176	150	181
	SD-0690 ^(1, 2, 3)	Base of Bluff															81	111	127	124
	SD-0695 ^(2, 3)	Seawall															83	125	142	134
	SD-0700 ⁽³⁾	Base of Bluff														99	89	102	142	136
	SD-0710 ^(1, 2)	Base of Bluff															148	225	154	197
	CB-0720	Parking Lot	Oct 1970	298	181	155	280	350	243	286	219	342	225	357	261	388	257	380	347	402
	CB-0740	Base of Bluff				58	171	146	147	157	100	127	87	128	108	160	100	129	123	160
	CB-0760	Base of Bluff			110	81	201	165	193	172	89	137	92	149	107	150	92	161	169	168
	CB-0775 ^(1, 2)	Base of bluff				99											120	223	158	183
	CB-0780	Base of bluff				5	189	202	145	179	109	194	103	174	129	181	126	203	158	180
	CB-0800	Base of Revetment			66	109	62	50	72	43	10	27	74	38	48	47	51	15	69	35
	CB-0820	Seawall					189	168	148	243	169	199	148	152	139	151	172	217	143	150
	CB-0830	Seawall			230	135	138	122	148	89	105	73	117	91	101	101	144	87	155	138
	CB-0840 ⁽³⁾	Seawall				89	132	97	141	79	103	57	152	112	106	87	142	105	157	132
	CB-0850 ⁽³⁾	Base of Bluff				125	122	111	113	134	100	92	139	130	118	117	133	163	146	184
	CB-0865 ^(1, 2, 3)	Stairway															89	200	152	205
	CB-0880 ^(1, 3)	Bluff/Seawall				145	135	76	130	134	104	115	126	113	86	130	109	158	191	185
	OS-0900 ⁽³⁾	Base of Revetment				81	52	0	0	9	6	45	17	49	35	63	41	62	99	95
	OS-0915 ^(1, 2)	Stairway															77	189	117	142
	OS-0930 ⁽¹⁾	Base of Revetment	Jan 1972	67	104	110	51	50	65	39	86	64	71	92	61	82	63	189	149	151
	OS-1000	Access Road	Sep 1965	230	239	214			135	168	153	183	175	193	167	190	161	203	196	218
	OS-1030	Access Road	Oct 1963	390	400	258			332	282	262	243	260	229	260	261	256	245	277	241
	OS-1070	Access Road	Oct 1973	465	450	409			493	485	391	415	422	429	415	435	391	434	409	452

Note:

⁽¹⁾ Transect crosses RBSP receiver site (shown in **red type**).

⁽³⁾ Transect used for monthly beach width measurements.

⁽⁵⁾ Beach widths prior to 1997 should be considered as approximate.

⁽²⁾ New transect established to support RBSP in Spring 2001.

⁽⁴⁾ Transect locations are indicated in Figures 10a and 10b.