Part A—Relevant Maps/Figures

Figure 1-1. Newport Bay and surrounding watershed

Figure A-2. San Diego Creek watershed and land use data

Figure A-3. Santa Ana-Delhi Channel watershed and land use data

Figure A-4. Entire Newport Bay watershed and land use data

Figure A-5. Residence time for Newport Bay during neap tide

Figure A-6. Residence time for Newport Bay during spring tide.

Figure A-7. Rhine Channel storm drains and Newport Plating facility site.

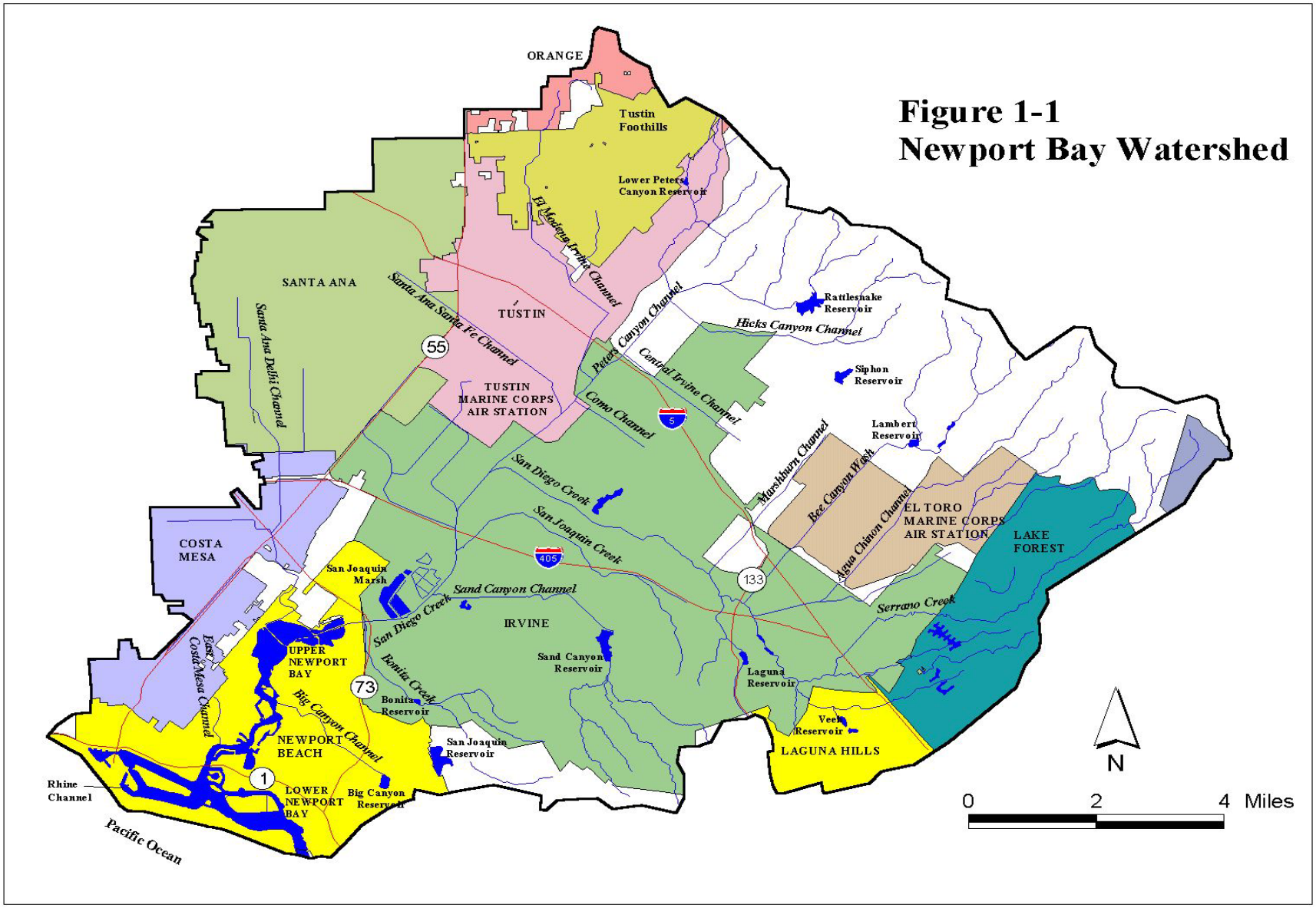


Figure 1-1
Newport Bay Watershed
ORANGE
Tustin Foothills
Lower Peters Canyon Reservoir
El Modena Irvine Channel
SANTA ANA
Santa Ana Santa Fe Channel
Santa Ana Delhi Channel
TUSTIN
55
TUSTIN MARINE CORPS AIR STATION
Peters Canyon Channel
Central Irvine Channel
Como Channel
5
Rattlesnake Reservoir
Hicks Canyon Channel
Siphon Reservoir
Lambert Reservoir
Marshburn Channel
Bee Canyon Wash
Agua Chinon Channel
EL TORO MARINE CORPS AIR STATION
LAKE FOREST
San Diego Creek
San Joaquin Creek
405
133
COSTA MESA
San Joaquin Marsh
Sand Canyon Channel
Serrano Creek
IRVINE
East Costa Mesa Channel
UPPER NEWPORT BAY
San Diego Creek
Bonita Creek
73
Sand Canyon Reservoir
Laguna Reservoir
Big Canyon Channel
Bonita Reservoir
Veeh Reservoir
NEWPORT BEACH
San Joaquin Reservoir
LAGUNA HILLS
1
Rhine Channel
LOWER NEWPORT BAY
Big Canyon Reservoir
Pacific Ocean
N
0
2
4 Miles

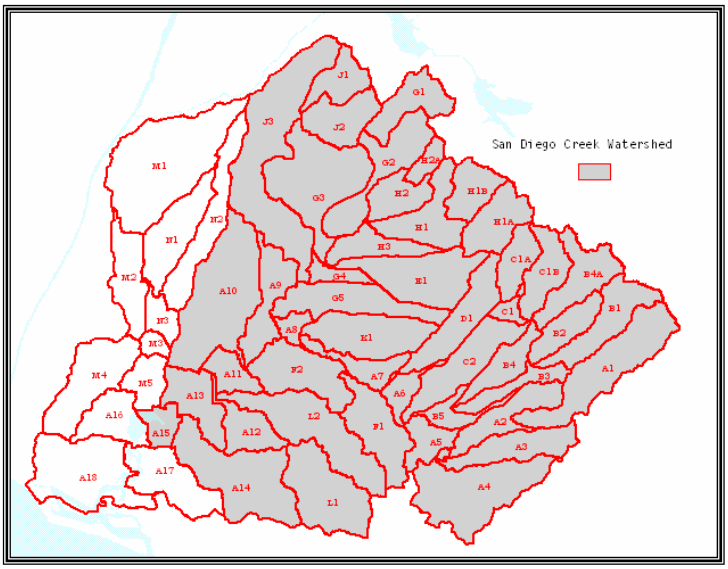


Figure A-2. San Diego Creek watershed land use data (as of January 2001). (Source: OCPFRD GIS Dept.)

San Diego Creek Land Use# - Jan 2001

Landuse	Acres	Total sq_miles	% using sq miles	% using acres
Agricultural	5091.90	7.96	6.55	6.54
Commercial	6381.47	9.97	8.20	8.20
Education and Religion	203.26	0.32	0.26	0.26
Industrial	3965.55	6.2	5.10	5.10
No Available Data	21910.06	34.23	28.15	28.16
Recreational	237.28	0.37	0.30	0.30
Residential-Income	11668.20	18.23	14.99	14.99
Trans., Comm. and Utility	1177.28	1.84	1.51	1.51
Vacant Land	15811.34	24.71	20.32	20.32
Roads*	11369.70	17.76	14.61	14.61
Total watershed	**77818.53**	**121.59**	**100.00**	**100.00**

#Does not include Santa Ana-Delhi and subwatersheds A15, A16, A17, A18

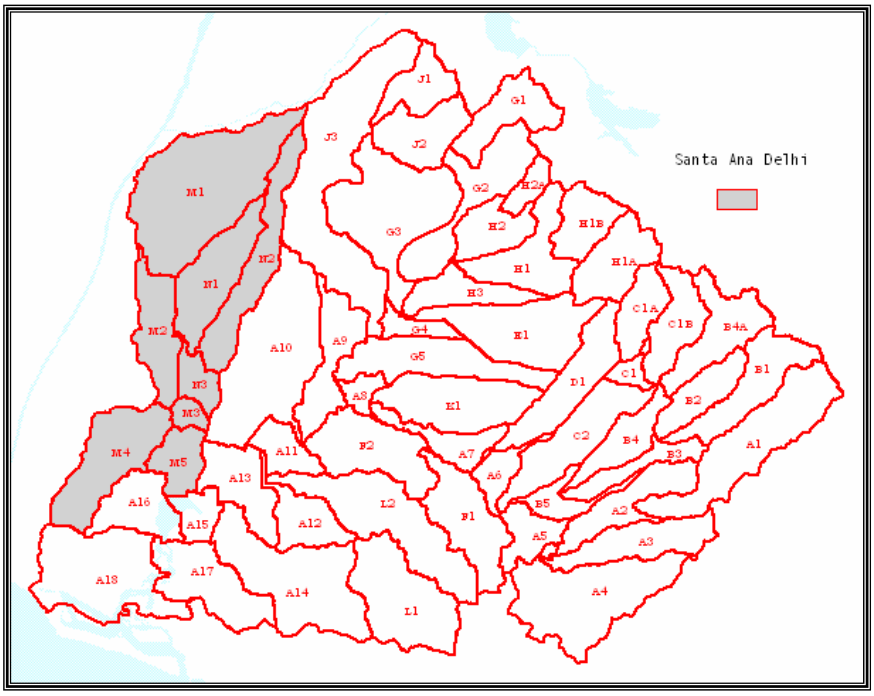


Figure A-3. Santa Ana Delhi watershed land use data (as of January 2001) (Source: OCPFRD GIS dept.)

Santa Ana Delhi = sum of sub-watersheds N1 ,N2, N3, M1, M2, M3, M4, M5

Landuse	Acres	Total sq_miles	% using sq miles	% using acres
Commercial	2397.83	3.75	16.61	16.60
Education and Religion	160.50	0.25	1.11	1.11
Industrial	1102.27	1.72	7.62	7.63
No Available Data	1060.35	1.66	7.35	7.34
Recreational	178.15	0.28	1.24	1.23
Residential-Income	5285.79	8.26	36.58	36.58
Trans., Comm. and Utility	98.70	0.15	0.66	0.68
Vacant Land	825.17	1.29	5.71	5.71
Roads*	3338.54	5.21	23.07	23.11
Total Watershed	**14448.75**	**22.58**	**99.96**	**100.00**

*Approximate figure based on the length of the centerline and the width of the ROAD
14448.75 is the total area of the watershed

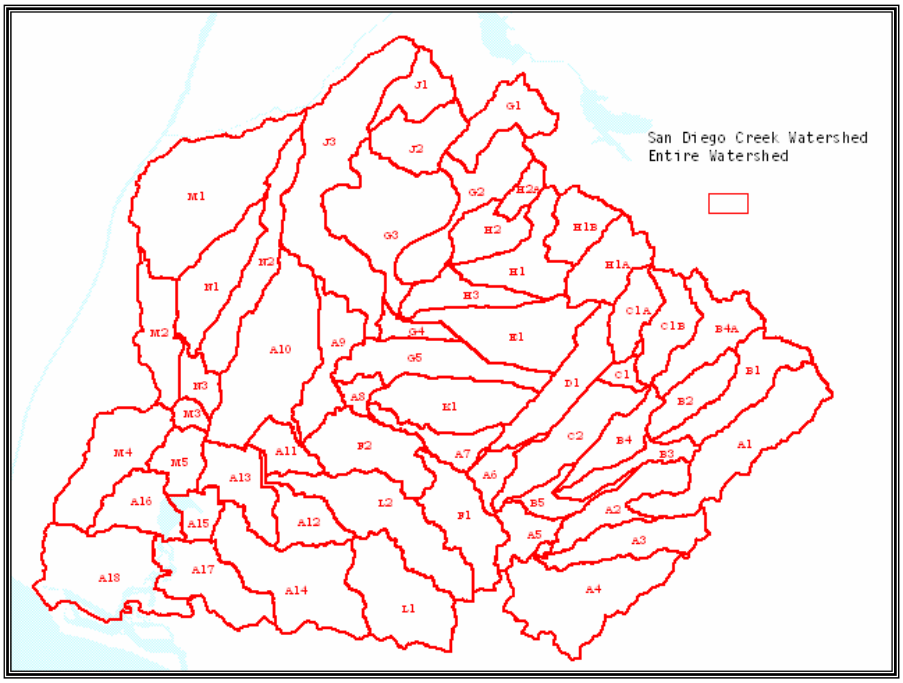


Figure A-4. Entire Newport Bay watershed land use data (as of January 2001) (Source: OCPFRD GIS dept.)

Entire Newport Bay watershed

Landuse	Acres	Total sq_miles	% using sq miles	% using acres
Agricultural	5146.911	8.04	5.21	5.21
Commercial	9640.795	15.06	9.75	9.75
Education and Religion	406.257	0.63	0.41	0.41
Industrial	5263.535	8.22	5.32	5.35
No Available Data	23461.998	36.66	23.74	23.85
Recreational	529.514	0.83	0.54	0.54
Residential-Income	19420.282	30.34	19.64	19.74
Trans., Comm. and Utility	1326.735	2.07	1.34	1.35
Vacant Land	17393.645	27.18	17.60	17.68
Roads*	15773.57	24.64	15.95	16.04
Total watershed	**98847.148**	**154.45**	**99.49**	**99.93**
	98363.242	**153.67**		

*Approximate figure based on the length of the centerline and the width of the ROW

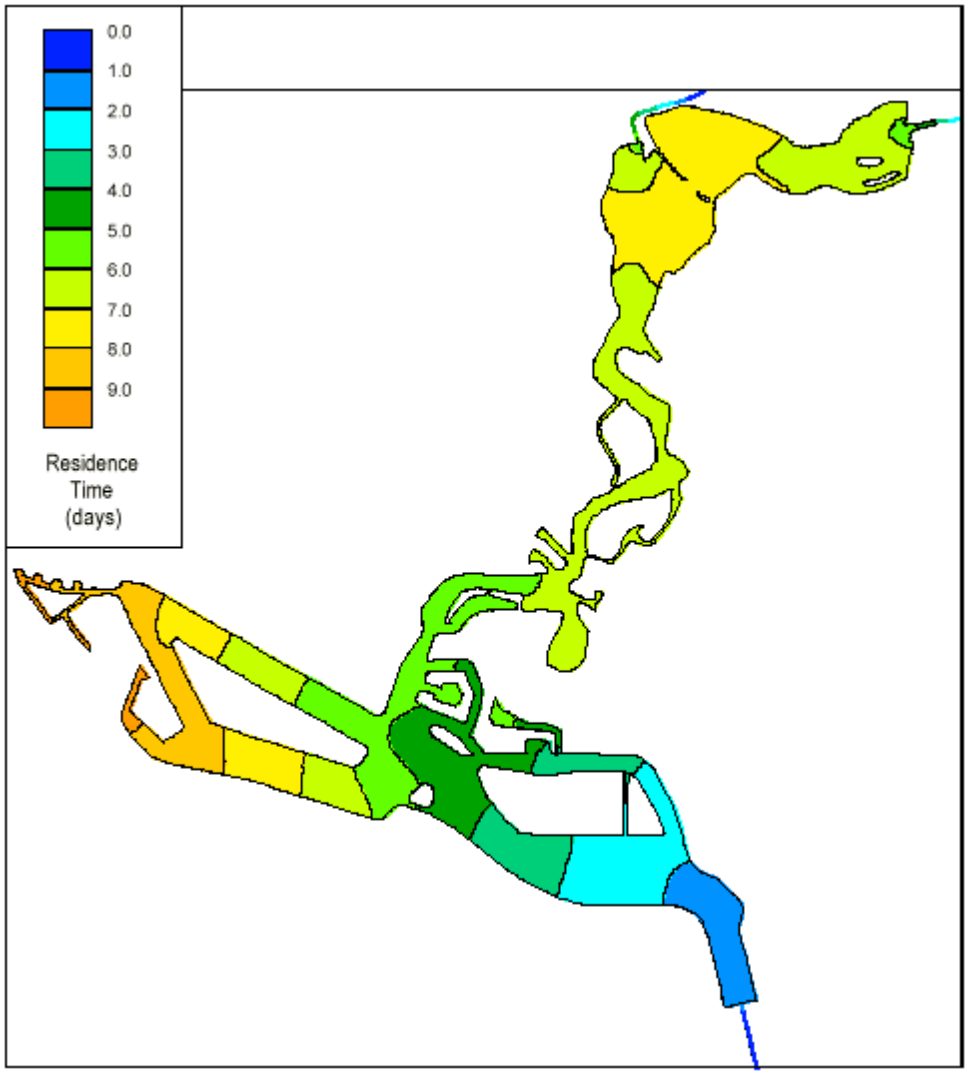


Figure A-5. Residence time for Newport Bay during neap tide conditions. (Source: RMA 2001)

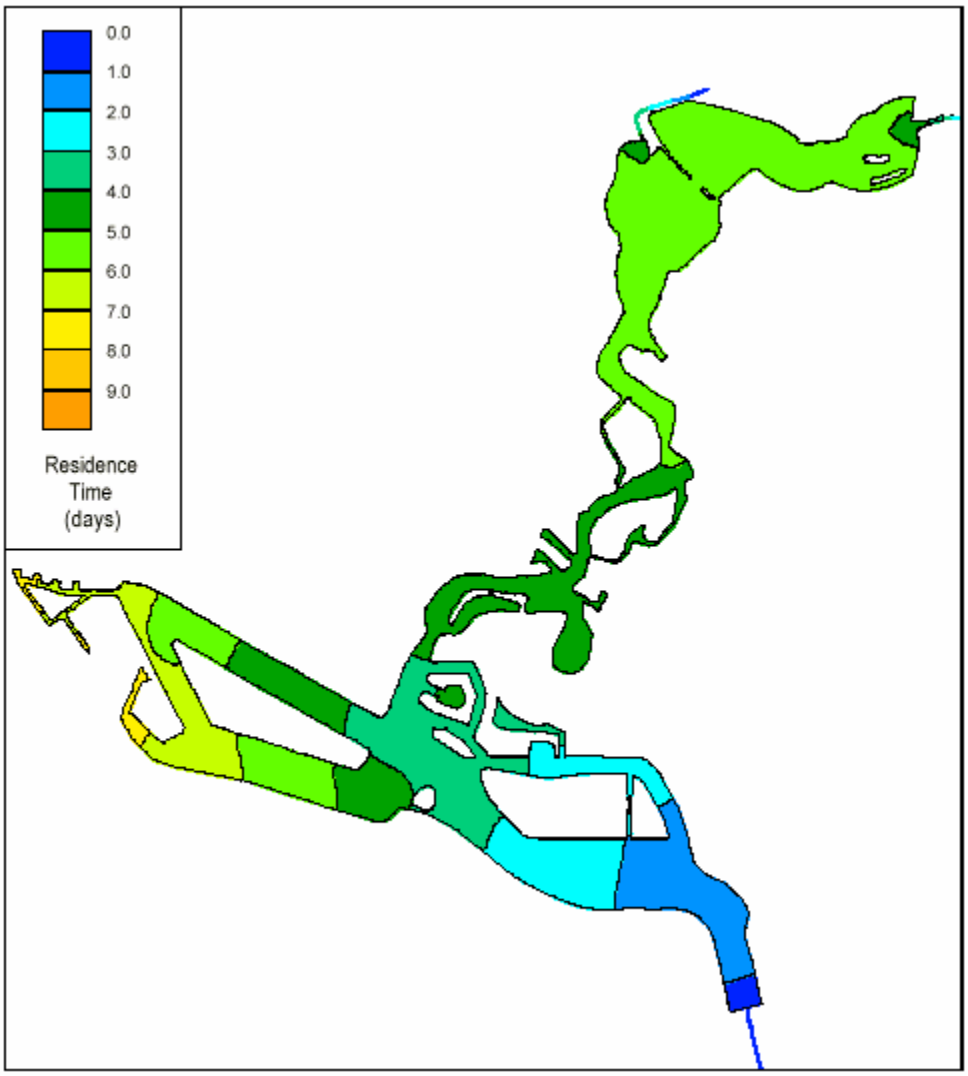
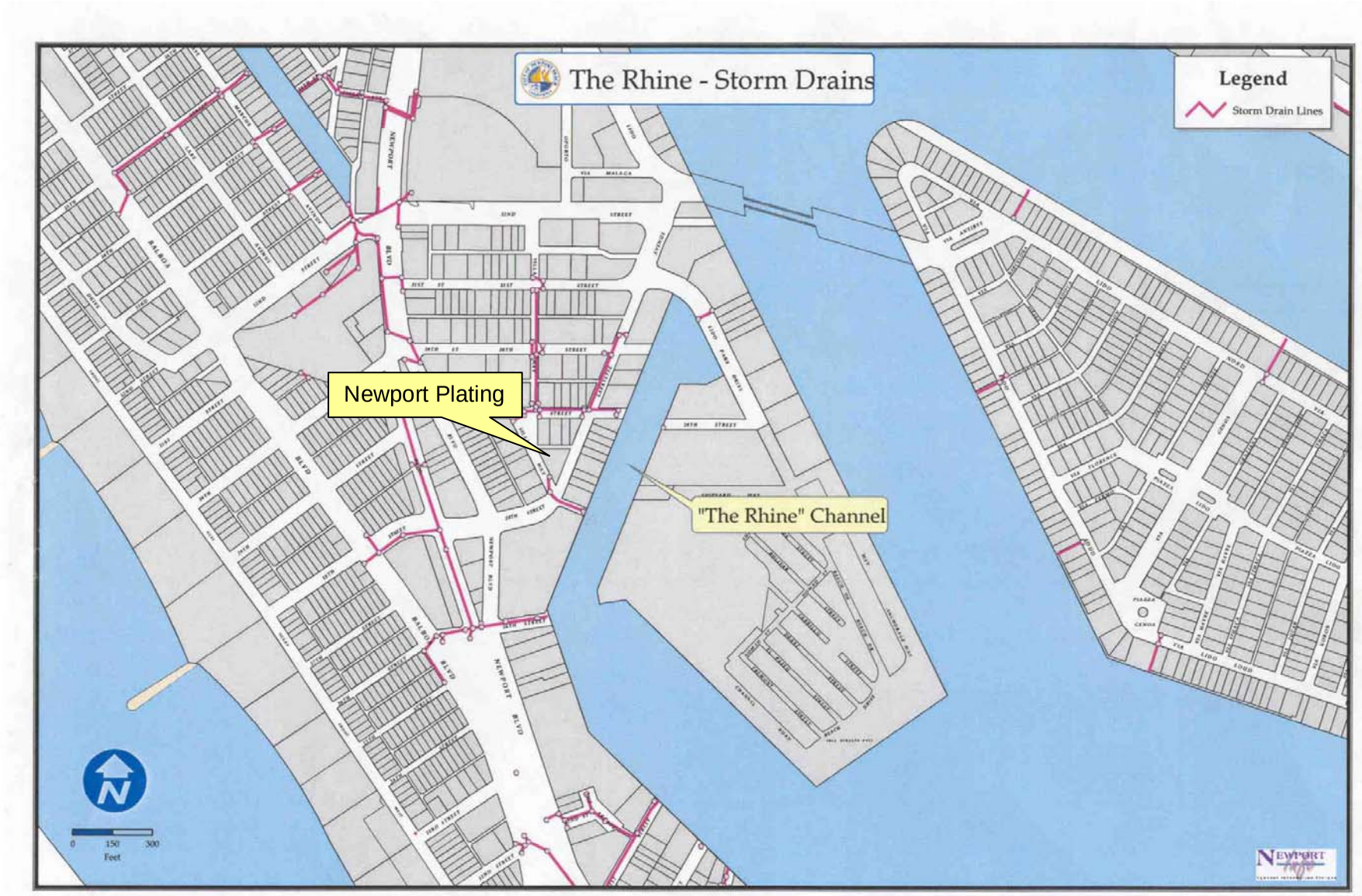


Figure A-6. Residence time for Newport Bay during spring tide conditions. (Source: RMA 2001)


The Rhine - Storm Drains
Legend
Storm Drain Lines
Newport Plating
"The Rhine" Channel
0
150
300
Feet