

HARBOR & BEACHES MASTER PLAN PROJECTS

Last Updated: 02/08/2023

2023

Attachment A

Ref #	Project	Category	Units Measurement	Total Units	Today's Unit Cost	Current Age:	Estimated Useful Life	Project Estimate	FY Design Start Year	FY Const Start Year	FV Cost Est @2.5% Growth	External Contributions	Net Proposed Cost
UTILITIES													
32	Tide Gate Valves (Peninsula): Replace	Gate Valves	EA	39	\$50,000	**	25	\$1,950,000	2025	2030	\$2,317,937		\$2,317,937
SUBTOTAL								\$1,950,000			\$2,317,937	\$0	\$2,317,937
BULKHEAD/STRUCTURES													
8	Bulkhead (American Legion): Repair	Bulkhead	LF	1	\$1,700,000	66	40	\$1,700,000	2019	2022	\$1,742,500		\$1,742,500
39	Lower Castaways: Bulkhead Only	Bulkhead	LF	265	\$7,000	**	80	\$1,855,000	2025	2027	\$2,047,573		\$2,047,573
41	Balboa Island, N, S, E & GC: Boardwalk & Perimeter Drainage System only (Little Island not include ~42k SF)	Other	SF	92,000	\$25	**	80	\$2,300,000	2026	2030	\$2,733,977		\$2,733,977
45	Balboa Island, N, S, E & GC: Replace Seawall SBF	Bulkhead	LF	4,386	\$7,000	93	81	\$30,703,596	2026	2028	\$34,738,301		\$34,738,301
46	Balboa Island, N, S, E & GC: Replace Seawall GC and EBF	Bulkhead	LF	4,386	\$7,000	93	80	\$30,703,596	2026	2028	\$34,738,301		\$34,738,301
47	Balboa Island, N, S, E & GC: Replace Seawall NBF	Bulkhead	LF	4,386	\$7,000	93	82	\$30,703,596	2026	2030	\$36,496,927		\$36,496,927
61	Bulkhead (American Legion): Replace	Bulkhead	LF	336	\$7,000	66	80	\$2,352,000	2051	2070	\$7,506,872		\$7,506,872
65	Bulkhead (West Newport): Replace	Bulkhead	LF	1,722	\$7,000	**	80	\$12,054,000	2023	2041	\$18,800,126		\$18,800,126
66	Bulkhead (Corona Del Mar): Replace	Bulkhead	LF	175	\$7,000	**	80	\$1,225,000	2042	2045	\$2,108,925		\$2,108,925
67	Bulkhead (Promontory Bay): Replace	Bulkhead	LF	1,158	\$7,000	58	80	\$8,106,000	2042	2045	\$13,955,058		\$13,955,058
69	Bulkhead (Rhine Wharf): Replace	Bulkhead	LF	343	\$7,000	63	80	\$2,401,000	2046	2049	\$4,562,603		\$4,562,603
71	Bulkhead (Street Ends - Peninsula): Replace	Bulkhead	LF	2,217	\$7,000	**	80	\$15,519,000	2023	2056	\$35,055,107		\$35,055,107
27	Bulkhead (Balboa Yacht Basin): Replace	Bulkhead	LF	1,370	\$7,000	38	80	\$9,590,000	2063	2065	\$27,053,344		\$27,053,344
37	Bulkhead (Marina Park): Replace	Bulkhead	LF	857	\$7,000	8	80	\$5,999,000	2093	2095	\$35,497,451		\$35,497,451
SUBTOTAL								\$155,211,788			\$257,037,064	\$0	\$257,037,064
PUBLIC PIERS - REPAIR / REPLACE													
11	Public Pier (15th St): Float only	Piers	EA	1	\$60,000	**	20	\$60,000	2021	2025	\$63,038		\$63,038
12	Public Pier (19th St): Float only	Piers	EA	1	\$100,000	**	20	\$100,000	2021	2025	\$105,063		\$105,063
13	Public Pier (Coral Ave): Float only	Piers	EA	1	\$75,000	38	20	\$75,000	2021	2025	\$78,797		\$78,797
14	Public Pier (Fernando St): Float only	Piers	EA	1	\$60,000	**	20	\$60,000	2021	2025	\$63,038		\$63,038
15	Public Pier (M St): Float only	Piers	EA	1	\$100,000	**	20	\$100,000	2021	2025	\$105,063		\$105,063
16	Public Pier (Opal Ave): Float only	Piers	EA	1	\$60,000	**	20	\$60,000	2021	2025	\$63,038		\$63,038
17	Public Pier (Park Ave): Float only	Piers	EA	1	\$60,000	**	20	\$60,000	2021	2025	\$63,038		\$63,038
18	Public Pier (Washington St): Float only	Piers	EA	1	\$60,000	**	20	\$60,000	2021	2025	\$63,038		\$63,038
28	Ocean Piers Maintenance (Balboa and Newport)	Piers	EA	1	500,000	83	0	\$500,000	2023	2024	\$512,500		\$512,500
29	Public Pier (29th St): Pier, Gangway & Float	Piers	EA	1	\$150,000	**	20	\$150,000	2022	2024	\$153,750		\$153,750
30	Public Pier (Emerald Ave): Float only	Piers	EA	1	\$75,000	37	20	\$75,000	2021	2025	\$78,797		\$78,797
31	Public Pier (Sapphire Ave): Float only	Piers	EA	1	\$60,000	**	20	\$60,000	2021	2025	\$63,038		\$63,038
42	Balboa Yacht Basin Marina (Slips): Replace	Slips	Slips	172	\$35,000	38	40	\$6,020,000	2023	2025	\$6,324,763		\$6,324,763
52	Public Pier (15th St): Pier	Piers	EA	1	\$125,000	**	20	\$125,000	2031	2034	\$164,011		\$164,011
53	Public Pier (Coral Ave): Pier only	Piers	EA	1	\$125,000	38	20	\$125,000	2031	2034	\$164,011		\$164,011
54	Public Pier (Emerald Ave): Pier only	Piers	EA	1	\$125,000	37	20	\$125,000	2031	2034	\$164,011		\$164,011
55	Public Pier (Fernando St): Pier only	Piers	EA	1	\$125,000	**	20	\$125,000	2031	2034	\$164,011		\$164,011
56	Public Pier (M St): Pier only	Piers	EA	1	\$150,000	38	20	\$150,000	2031	2034	\$196,813		\$196,813
57	Public Pier (Opal Ave): Pier only	Piers	EA	1	\$125,000	**	20	\$125,000	2031	2034	\$164,011		\$164,011
58	Public Pier (Park Ave): Pier only	Piers	EA	1	\$125,000	**	20	\$125,000	2031	2034	\$164,011		\$164,011
59	Public Pier (Sapphire Ave): Pier only	Piers	EA	1	\$125,000	**	20	\$125,000	2031	2034	\$164,011		\$164,011
60	Public Pier (Washington St): Pier only	Piers	EA	1	\$150,000	**	20	\$150,000	2031	2034	\$196,813		\$196,813
62	Public Pier (Rhine Channel): Float only	Piers	EA	1	\$200,000	16	30	\$200,000	2034	2037	\$282,595		\$282,595
64	Public Pier (Grand Canal, Balboa Ave): Pier Platform	Piers	EA	1	\$25,000	6	20	\$25,000	2037	2038	\$36,207		\$36,207
68	Public Pier (Rhine Channel): Gangway only	Piers	EA	1	\$70,000	**	40	\$70,000	2044	2047	\$126,611		\$126,611
70	Marina Park Slips: Replace	Slips	EA	23	\$40,000	8	40	\$920,000	2052	2055	\$2,027,456		\$2,027,456
72	Public Pier (Balboa Marina West): Float only	Piers	EA	1	\$200,000	2	40	\$200,000	2059	2062	\$523,915		\$523,915
73	Public Pier (Balboa Marina West): Gangway	Piers	EA	1	\$70,000	2	40	\$70,000	2059	2062	\$183,370		\$183,370
26	Public Pier (Central Ave): Gangway and Float	Piers	EA	1	\$250,000	6	40	\$250,000	2055	2057	\$578,831		\$578,831
10	Ocean Pier: Newport	Piers	EA	1	\$20,000,000	83	85	\$20,000,000	2024	2027	\$22,076,258		\$22,076,258
23	Ocean Pier: Balboa	Piers	EA	1	\$15,000,000	83	85	\$15,000,000	2030	2033	\$19,201,268		\$19,201,268
SUBTOTAL								\$45,290,000			\$54,315,169	\$0	\$54,315,169
DREDGING													
2	Grand Canal Dredging and Beach Maintenance	Dredging	CY	1	\$1,500,000	**	20	\$1,500,000	2037	2039	\$2,226,758		\$2,226,758
9	Dredging: Lower Bay (Channels - Ongoing Maintenance)	Dredging	CY	1,200,000	\$19	**	30	\$22,800,000	2019	2023	\$23,370,000	\$10,000,000	\$13,370,000
25	Dredging: Newport Island Area (Channels) - TBD	Dredging	CY	20,000	\$150	**	50	\$3,000,000	2028	2030	\$3,566,057		\$3,566,057
43	Dredging (Balboa Yacht Basin):	Dredging	CY	25,600	\$70	38	40	\$1,792,000	2023	2025	\$1,882,720		\$1,882,720
48	Dredging: Upper Bay Catch Basins	Dredging	CY	500,000	\$30	14	21	\$15,000,000	2027	2030	\$17,830,286	\$17,830,286	\$0
49	Dredging: Upper Bay Channels	Dredging	CY	250,000	\$30	14	21	\$7,500,000	2027	2030	\$8,915,143	\$8,915,143	\$0
SUBTOTAL								\$51,592,000			\$57,790,965	\$36,745,429	\$21,045,536

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FERRY & WHARF REPAIR / REPLACE													
35	Ferry Landing - Agate Avenue	Bulkhead	EA	1	\$0	93	60	\$0	2026	2028	\$0		\$0
36	Ferry Landing - Palm Street	Bulkhead	EA	1	\$0	93	60	\$0	2026	2028	\$0		\$0
SUBTOTAL								\$0			\$0	\$0	\$0
WATER QUALITY													
20	Water Quality: TMDL Compliance:	Water Quality	LS	1	\$200,000	**	Ongoing	\$200,000	2024	2024	\$205,000		\$205,000
33	Vessel Sewage Pumpouts Replacements	Water Quality	EA	5	\$21,255	**	7	\$106,275	2027	2028	\$120,240	\$102,031	\$18,209
SUBTOTAL								\$306,275			\$325,240	\$102,031	\$223,209
BEACH NOURISHMENT - HARBOR & OCEAN													
22	Central Peninsula Sand Nourishment (Ocean Beach)	Sand	CY	1,000,000	\$15	**	20	\$15,000,000	2022	2024	\$15,375,000		\$15,375,000
44	Surfside/Sunset Beach Sand Nourishment Stage 14	Sand	LS	1	\$300,000	0	7	\$300,000	2028	2030	\$356,606		\$356,606
51	Public Bay Beaches: Sand Nourishment (25k yards)	Other	CY	25,000	\$50	7	25	\$1,250,000	2028	2031	\$1,523,004		\$1,523,004
SUBTOTAL								\$16,550,000			\$17,254,609	\$0	\$17,254,609
GRAND TOTAL								\$270,900,063			\$389,040,985	\$36,847,460	\$352,193,524

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COMPLETED													
38	Seawall (Balboa Island N & S): Extend Cap	Bulkhead	LF	7,000	\$100	93	20	\$0	2014	2017	\$0		\$0
40	Seawall (Balboa Island, West End): Extend Cap	Bulkhead	LF	1,300	\$100	93	20	\$0	2014	2017	\$0		\$0
50	Bulkhead (Edge Water Ln) Extend Cap	Bulkhead	LF	145	\$303	6	20	\$0	2017	2017	\$0		\$0
63	Ferry Landings (Agate Ave & Palm St): Replace?	Other	EA	1	\$0	93	75	\$0	2020	2022	\$0		\$0
1	Arches Drain: Dry Weather Diversion	Drain	LS	1	\$860,000	6	80	\$0	2017	2019	\$0	\$820,000	\$0
3	Bilge Pumpout Dock/Oil Collection Center	Water Quality	LS	2	\$100,000	**	15	\$0	2018	2020	\$0		\$0
5	Public Swim Float (10th St)	Other	EA	1	\$30,000	**	20	\$0	2018	2020	\$0		\$0
6	Public Swim Float (Ruby Ave. N Bay Font)	Other	EA	1	\$30,000	**	20	\$0	2018	2020	\$0		\$0
7	Bilge Pumpout Dock/Oil Collection Center	Water Quality	EA	1	\$20,000	0	0	\$0	2018	2021	\$0		\$0
TOTAL					\$1,040,503			\$0			\$0	\$0	\$0

POTENTIAL PROJECTS													
	Onshore Mooring Enhancements	Moorings						\$0			\$0		\$0
	Multiple Vessel Mooring System (MVMS) - City Owned	Moorings	EA	6	\$45,000	**	20	\$270,000	2024	2024	\$270,000		\$270,000
	Mooring Field Realignment / Optimization	Moorings	EA	800	\$400	0	0	\$320,000	2024	2026	\$344,605		\$344,605
	Navigation Markers: Convert Federal Stationary Markers to Floats	Other	LS	1	\$60,000	**	0	\$60,000	2030	2030	\$71,321	\$74,932	(\$3,611)
	Lower Castaways Public Park	Park											
	Restroom (Ferry Landing @ Agate Avenue)	Water Quality											
	Fire Boat	Safety											
TOTAL					\$105,400			\$650,000			\$685,926	\$74,932	\$610,994

** denotes "unknown".