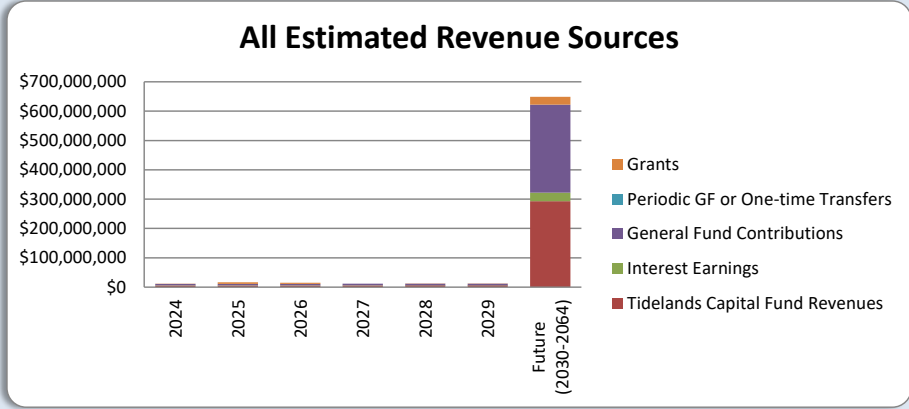
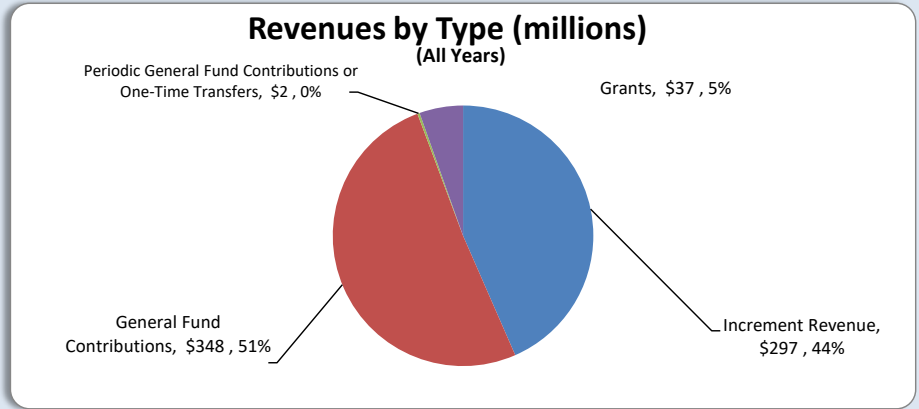


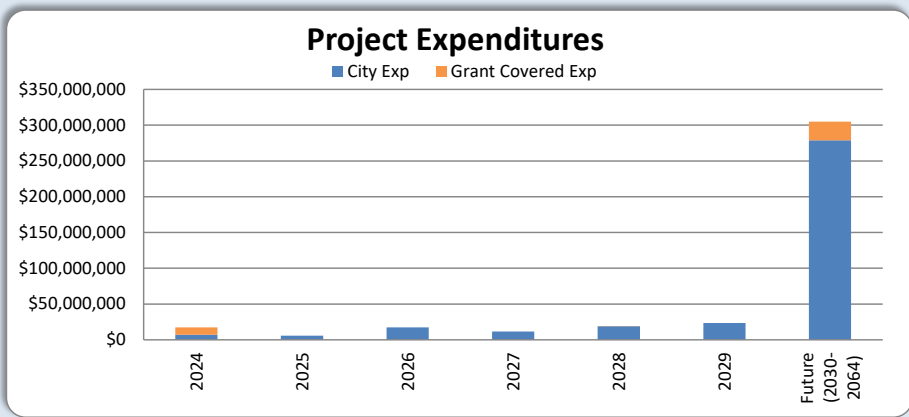
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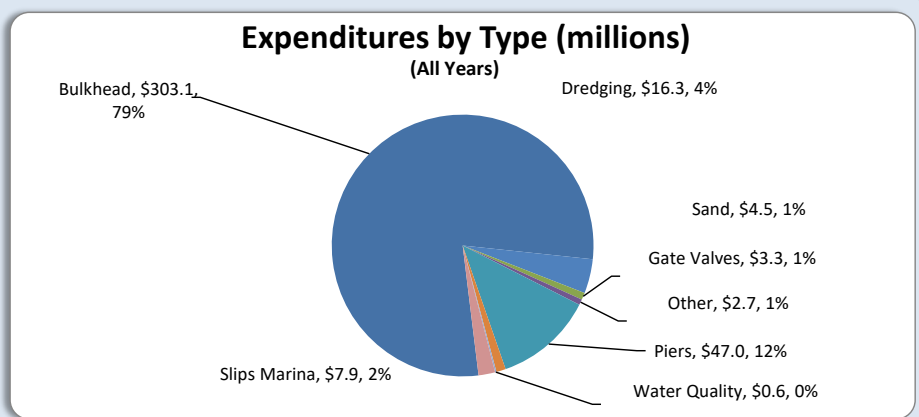
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# HARBOR & BEACHES MASTER PLAN PROJECTS

Last Updated: 03/14/2024

Ref #	Project	Category	Units Measurement	Total Units	Today's Unit Cost	Current Age:	Estimated Useful Life	Years to Start	Project Estimate	FY Design Start Year	FY Const Start Year	FV Cost Est @2.5% Growth	External Contributions	Net Proposed Cost
<b>UTILITIES</b>														
32	Tide Gate Valves (Peninsula): Replace	Gate Valves	EA	62	\$50,000	**	25	3	\$3,100,000	2025	2027	\$3,338,361		\$3,338,361
<b>SUBTOTAL</b>									<b>\$3,100,000</b>			<b>\$3,338,361</b>	<b>\$0</b>	<b>\$3,338,361</b>
<b>BULKHEAD/STRUCTURES</b>														
39	Lower Castaways: Bulkhead Replace	Bulkhead	LF	265	\$10,000	**	80	10	\$2,650,000	2032	2034	\$3,392,224		\$3,392,224
41	Balboa Island, N, S, E & GC: Boardwalk & Perimeter Drainage System only (Little Island not include ~42k SF)	Other	SF	92,000	\$25	**	80	4	\$2,300,000	2026	2028	\$2,538,770		\$2,538,770
45	Balboa Island: Replace Seawall GC	Bulkhead	LF	3,026	\$12,000	94	81	10	\$36,312,000	2026	2034	\$46,482,430		\$46,482,430
46	Balboa Island: Replace Seawall W	Bulkhead	LF	1,470	\$12,000	94	80	4	\$17,640,000	2026	2028	\$19,471,259		\$19,471,259
47	Balboa Island: Replace Seawall N, S & E	Bulkhead	LF	6,700	\$12,000	94	82	15	\$80,400,000	2026	2039	\$116,443,173		\$116,443,173
61	Bulkhead (American Legion): Replace	Bulkhead	LF	336	\$10,000	67	95	32	\$3,360,000	2053	2056	\$7,404,623		\$7,404,623
65	Bulkhead (West Newport): Replace	Bulkhead	LF	1,722	\$10,000	**	80	2	\$17,220,000	2023	2026	\$18,091,763		\$18,091,763
66	Bulkhead (Corona Del Mar): Replace	Bulkhead	LF	175	\$10,000	**	80	21	\$1,750,000	2042	2045	\$2,939,268		\$2,939,268
67	Bulkhead (Promontory Bay): Replace	Bulkhead	LF	1,158	\$10,000	59	80	21	\$11,580,000	2042	2045	\$19,449,558		\$19,449,558
69	Bulkhead (Rhine Wharf): Replace	Bulkhead	LF	343	\$10,000	64	80	16	\$3,430,000	2036	2040	\$5,091,854		\$5,091,854
71	Bulkhead (Street Ends - Peninsula): Replace	Bulkhead	LF	2,217	\$10,000	**	80	2	\$22,170,000	2023	2026	\$23,292,356		\$23,292,356
27	Bulkhead (Balboa Yacht Basin): Replace	Bulkhead	LF	1,370	\$10,000	39	80	41	\$13,700,000	2062	2065	\$37,705,009		\$37,705,009
37	Bulkhead (Marina Park): Replace	Bulkhead	LF	857	\$10,000	9	90	81	\$8,570,000	2101	2105	\$0		\$0
<b>SUBTOTAL</b>									<b>\$221,082,000</b>			<b>\$302,302,287</b>	<b>\$0</b>	<b>\$302,302,287</b>
<b>PUBLIC PIERS - REPAIR / REPLACE</b>														
11	Public Pier (15th St): Float only	Piers	EA	1	\$75,000	**	20	1	\$75,000	2021	2025	\$76,875		\$76,875
12	Public Pier (19th St): Float only	Piers	EA	1	\$80,000	**	20	1	\$80,000	2021	2025	\$82,000		\$82,000
13	Public Pier (Coral Ave): Float only	Piers	EA	1	\$90,000	38	20	1	\$90,000	2021	2025	\$92,250		\$92,250
14	Public Pier (Fernando St): Float only	Piers	EA	1	\$60,000	**	20	1	\$60,000	2021	2025	\$61,500		\$61,500
15	Public Pier (M St): Float only	Piers	EA	1	\$70,000	**	20	1	\$70,000	2021	2025	\$71,750		\$71,750
16	Public Pier (Opal Ave): Float & Gangway only	Piers	EA	1	\$85,000	**	20	1	\$85,000	2021	2025	\$87,125		\$87,125
17	Public Pier (Park Ave): Float & Gangway only	Piers	EA	1	\$85,000	**	20	1	\$85,000	2021	2025	\$87,125		\$87,125
18	Public Pier (Washington St): Float only	Piers	EA	1	\$70,000	**	20	1	\$70,000	2021	2025	\$71,750		\$71,750
28	Ocean Piers Biennial Maintenance - (Balboa & Newport)	Piers	EA	1	550,000	83	0	1	\$550,000	2024	2025	\$563,750		\$563,750
29	Public Pier (29th St): Pier, Gangway & Float	Piers	EA	1	\$250,000	**	20	1	\$250,000	2022	2024	\$256,250		\$256,250
30	Public Pier (Emerald Ave): Float only	Piers	EA	1	\$90,000	37	20	1	\$90,000	2021	2025	\$92,250		\$92,250
31	Public Pier (Sapphire Ave): Float & Gangway only	Piers	EA	1	\$95,000	**	20	1	\$95,000	2021	2025	\$97,375		\$97,375
42	Balboa Yacht Basin Slips: Replace	Slips Marina	EA	172	\$35,000	38	40	1	\$6,020,000	2023	2025	\$6,170,500		\$6,170,500
52	Public Pier (15th St): Pier & Gangway (aluminum only)	Piers	EA	1	\$150,000	**	40	16	\$150,000	2037	2040	\$222,676		\$222,676
74	Public Pier (19th St): Pier Platform & Gangway	Piers	EA	1	\$70,000	**	40	16	\$70,000	2037	2040	\$103,915		\$103,915
53	Public Pier (Coral Ave): Pier only	Piers	EA	1	\$125,000	38	40	16	\$125,000	2037	2040	\$185,563		\$185,563
54	Public Pier (Emerald Ave): Pier only	Piers	EA	1	\$125,000	37	40	16	\$125,000	2037	2040	\$185,563		\$185,563
55	Public Pier (Fernando St): Pier only	Piers	EA	1	\$125,000	**	40	16	\$125,000	2037	2040	\$185,563		\$185,563
56	Public Pier (M St): Pier only	Piers	EA	1	\$175,000	38	40	16	\$175,000	2037	2040	\$259,788		\$259,788
57	Public Pier (Opal Ave): Pier only	Piers	EA	1	\$125,000	**	40	16	\$125,000	2037	2040	\$185,563		\$185,563
58	Public Pier (Park Ave): Pier only	Piers	EA	1	\$125,000	**	40	16	\$125,000	2037	2040	\$185,563		\$185,563
59	Public Pier (Sapphire Ave): Pier only	Piers	EA	1	\$125,000	**	40	16	\$125,000	2037	2040	\$185,563		\$185,563
60	Public Pier (Washington St): Pier only	Piers	EA	1	\$150,000	**	40	16	\$150,000	2037	2040	\$222,676		\$222,676
62	Public Pier (Rhine Wharf): Float only	Piers	EA	1	\$200,000	16	40	23	\$200,000	2045	2047	\$352,922		\$352,922
64	Public Pier (Grand Canal, Balboa Ave): Pier Platform	Piers	EA	1	\$25,000	6	20	14	\$25,000	2037	2038	\$35,324		\$35,324
68	Public Pier (Rhine Wharf): Pier Platform & Gangway (aluminum) only	Piers	EA	1	\$140,000	16	50	33	\$140,000	2055	2057	\$316,239		\$316,239
70	Marina Park Slips: Replace	Slips Marina	EA	23	\$35,000	8	40	31	\$805,000	2052	2055	\$1,730,755		\$1,730,755
72	Public Pier (Balboa Marina West): Float only	Piers	EA	1	\$400,000	2	40	40	\$400,000	2062	2064	\$1,074,026		\$1,074,026
73	Public Pier (Balboa Marina West): Gangway (aluminum)	Piers	EA	1	\$70,000	0	50	50	\$70,000	2072	2074	\$240,598		\$240,598
26	Public Pier (Central Ave): Pier Platform & Gangway (aluminum) only	Piers	EA	1	\$140,000	6	50	43	\$140,000	2065	2067	\$404,813		\$404,813
75	Public Pier (Central Ave): Float only	Piers	EA	1	\$200,000	6	40	33	\$200,000	2055	2057	\$451,770		\$451,770
10	Ocean Pier: Replace Newport	Piers	EA	1	\$20,000,000	83	85	3	\$20,000,000	2024	2027	\$21,537,813		\$21,537,813
23	Ocean Pier: Replace Balboa	Piers	EA	1	\$15,000,000	83	85	13	\$15,000,000	2034	2037	\$20,677,666		\$20,677,666
76	Public Swim Float (10th St): Replace	Piers	EA	1	\$35,000	3	20	18	\$35,000	2040	2041	\$54,588		\$54,588
77	Public Swim Float (Ruby Ave): Replace	Piers	EA	1	\$35,000	3	20	18	\$35,000	2040	2041	\$54,588		\$54,588

Ref #	Project	Category	Units Measurement	Total Units	Today's Unit Cost	Current Age:	Estimated Useful Life	Years to Start	Project Estimate	FY Design Start Year	FY Const Start Year	FV Cost Est @2.5% Growth	External Contributions	Net Proposed Cost
<b>SUBTOTAL</b>									<b>\$45,965,000</b>			<b>\$56,664,036</b>	<b>\$0</b>	<b>\$56,664,036</b>
<b>DREDGING</b>														
2	Dredging & Beach Maintenance (Grand Canal)	Dredging	CY	1	\$1,500,000	**	10	3	\$1,500,000	2025	2027	\$1,615,336		\$1,615,336
9	Dredging (Lower Bay Channels): Ongoing Maintenance	Dredging	CY	1,200,000	\$19	**	30	1	\$22,800,000	2019	2024	\$22,800,000	\$10,000,000	\$12,800,000
25	Bathymetry Survey (Newport Island Channels)	Dredging	EA	1	\$75,000	**	**	2	\$75,000	2026	2026	\$78,797		\$78,797
43	Dredging (Balboa Yacht Basin)	Dredging	CY	25,600	\$70	38	40	1	\$1,792,000	2023	2025	\$1,836,800		\$1,836,800
48	Dredging (Upper Bay Catch Basins)	Dredging	CY	500,000	\$30	14	20	6	\$15,000,000	2027	2030	\$17,395,401	\$17,395,401	\$0
49	Dredging (Upper Bay Channels)	Dredging	CY	250,000	\$30	14	21	6	\$7,500,000	2027	2030	\$8,697,701	\$8,697,701	\$0
<b>SUBTOTAL</b>									<b>\$48,667,000</b>			<b>\$52,424,035</b>	<b>\$36,093,102</b>	<b>\$16,330,933</b>
<b>FERRY &amp; WHARF REPAIR / REPLACE</b>														
35	Ferry Landing, Bulkhead & Restroom (Agate Ave)	Bulkhead	EA	1	\$1,500,000	93	60	4	\$1,500,000	2026	2028	\$1,655,719		\$1,655,719
36	Ferry Landing & Bulkhead (Palm St)	Bulkhead	EA	1	\$1,500,000	93	60	4	\$1,500,000	2026	2028	\$1,655,719		\$1,655,719
<b>SUBTOTAL</b>									<b>\$3,000,000</b>			<b>\$3,311,439</b>	<b>\$0</b>	<b>\$3,311,439</b>
<b>WATER QUALITY</b>														
20	Water Quality: TMDL Compliance	Water Quality	LS	1	\$200,000	**	Ongoing	1	\$200,000	2024	2024	\$205,000		\$205,000
33	Vessel Sewage Pumpout Replacement (4 locations)	Water Quality	EA	5	\$23,000	3	7	4	\$115,000	2027	2028	\$126,938	\$86,250	\$40,688
78	Oil Collection / Hazmat Center (Marina Park)	Water Quality	EA	1	\$400,000	0	25		\$400,000	2025	2026	\$400,000		\$400,000
<b>SUBTOTAL</b>									<b>\$715,000</b>			<b>\$731,938</b>	<b>\$86,250</b>	<b>\$645,688</b>
<b>BEACH NOURISHMENT - HARBOR &amp; OCEAN</b>														
22	Central Peninsula Sand Nourishment (Ocean Beach)	Sand	CY	1,000,000	\$15	**	20	4	\$15,000,000	2025	2028	\$16,557,193	\$12,417,895	\$4,139,298
44	Surfside/Sunset Beach Sand Nourishment Stage 14	Sand	LS	1	\$300,000	0	7	6	\$300,000	2025	2030	\$347,908		\$347,908
51	Public Bay Beaches: Sand Nourishment (annual)	Other	LS	1	\$125,000	**	Ongoing	1	\$125,000	2025	2025	\$128,125		\$128,125
<b>SUBTOTAL</b>									<b>\$15,425,000</b>			<b>\$17,033,226</b>	<b>\$12,417,895</b>	<b>\$4,615,331</b>
<b>MISCELLANEOUS</b>														
79	Mooring Field Optimization (C Field pilot)	Moorings	LS	1	\$450,000	**	**	2	\$450,000	2024	2026	\$472,781		\$472,781
80	Lower Castaways Plan													
<b>SUBTOTAL</b>									<b>\$450,000</b>			<b>\$472,781</b>	<b>\$0</b>	<b>\$472,781</b>
<b>GRAND TOTAL</b>									<b>\$338,404,000</b>			<b>\$436,278,104</b>	<b>\$48,597,247</b>	<b>\$387,680,857</b>

<b>COMPLETED</b>														
38	Seawall (Balboa Island N & S): Extend Cap	Bulkhead	LF	7,000	\$100	94	20		\$0	2014	2017	\$0		\$0
40	Seawall (Balboa Island, West End): Extend Cap	Bulkhead	LF	1,300	\$100	94	20		\$0	2014	2017	\$0		\$0
50	Bulkhead (Edgewater) Extend Cap	Bulkhead	LF	145	\$303	7	20		\$0	2017	2017	\$0		\$0
1	Arches Drain: Dry Weather Diversion	Drain	LS	1	\$860,000	7	80	1	\$0	2017	2019	\$0	\$839,500	\$0
3	Bilge Pumpout Dock/Oil Collection Center (BYB)	Water Quality	LS	2	\$100,000	**	15	1	\$0	2018	2020	\$0		\$0
5	Public Swim Float (10th St)	Other	EA	1	\$30,000	**	20	1	\$0	2018	2020	\$0		\$0
6	Public Swim Float (Ruby Ave NBF)	Other	EA	1	\$30,000	**	20	1	\$0	2018	2020	\$0		\$0
7	Bilge Pumpout Dock/Oil Collection Center	Water Quality	EA	1	\$20,000	0	0	1	\$0	2018	2021	\$0		\$0
8	Bulkhead (American Legion): Repair	Bulkhead	LS	1	\$1,200,000	66	40	1	\$0	2019	2023	\$0		\$0
<b>TOTAL</b>					<b>\$1,040,503</b>				<b>\$0</b>			<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

<b>POTENTIAL PROJECTS</b>														
A	Onshore Mooring Enhancements	Moorings							\$0			\$0		\$0
B	Multiple Vessel Mooring System (MVMS) - City Moorings	Moorings	EA	6	\$45,000	**	20		\$270,000	2024	2024	\$270,000		\$270,000
C	Mooring Field Optimization	Moorings	EA	500					\$0			\$0		\$0
<b>TOTAL</b>					<b>\$45,000</b>				<b>\$270,000</b>			<b>\$270,000</b>	<b>\$0</b>	<b>\$270,000</b>

\*\* denotes "unknown".

## HARBOR & BEACHES MASTER PLAN SOURCES AND USES PROFORMA

	8	9	10	11	12	13
	2024	2025	2026	2027	2028	2029
<b>AFFORDABILITY ASSUMPTIONS</b>						
Tidelands Capital Fund Revenues	5,694,443	5,779,860	5,866,558	5,954,556	6,043,875	6,134,533
Growth Assumption	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Debt Service as % of Revenues	21.95%	21.63%	21.31%	20.99%	15.33%	8.15%
Harbor Capital Balance as % of Debt Service	3205.84%	3935.01%	3597.00%	3452.17%	3733.20%	4398.07%
<b>HARBOR CAPITAL SOURCES</b>						
	Budgeted					
Beginning Harbor Capital Balance	37,111,810	40,072,981	49,187,610	44,962,535	43,152,073	34,594,053
<b>Sources</b>						
Increment Revenue Projections	5,258,302	5,393,936	5,420,255	5,483,806	5,603,302	5,745,802
Interest Earnings	436,141	385,924	446,303	470,751	440,573	388,731
General Fund Contributions	4,715,000	4,832,875	4,953,697	5,077,539	5,204,478	5,334,590
Periodic GF or One-time Transfers						
Grants	1,000,000	5,500,000	3,500,000	-	8,625	47,438
<b>Total Sources (does not include grants):</b>	<b>11,409,443</b>	<b>16,112,735</b>	<b>14,320,255</b>	<b>11,032,096</b>	<b>11,256,977</b>	<b>11,516,560</b>
<b>Uses</b>						
Debt Service	(1,250,000)	(1,250,000)	(1,250,000)	(1,250,000)	(926,659)	(500,000)
Other Fiscal Charges	-	-	-	-	-	-
Project Uses	(7,198,272)	(5,748,106)	(17,295,330)	(11,592,558)	(18,888,338)	(23,620,273)
Transfers Out	-	-	-	-	-	-
Less: Cash Proj Funding						
<b>Total Uses:</b>	<b>(8,448,272)</b>	<b>(6,998,106)</b>	<b>(18,545,330)</b>	<b>(12,842,558)</b>	<b>(19,814,997)</b>	<b>(24,120,273)</b>
<b>Projected Harbor Capital Balance</b>	<b>40,072,981</b>	<b>49,187,610</b>	<b>44,962,535</b>	<b>43,152,073</b>	<b>34,594,053</b>	<b>21,990,339</b>