

Marine Asset Management Plan 2019



Asset Overview	Useful Life	Length	CRC
Swimming Pontoon	8 yrs	1 ea	\$ 35,000
Boat Ramps	20 yrs	4 ea	\$ 1,870,000
Boat Ramp Matting	20 yrs	53.25 m2	\$ 64,961
Fishing Platform	20 yrs	2 ea	\$ 280,000
Jetties	30 yrs	7 ea	\$ 2,530,000
Seawall - Concrete	20 yrs	50 m	\$ 125,750
Seawall - Ferricrete	30 yrs	320 m	\$ 1,300,000
Seawall - Limestone	40 yrs	2,605 m	\$17,101,240
Seawall - Sheet Pile	50 yrs	606 m	\$ 1,516,050
Seawall - Rock	60 yrs	337 m	\$ 1,320,000
Revetment Wall	80 yrs	202 m	\$ 1,159,127
Current Replacement Value			\$27,302,128

Renewal Period

- Backlog \$ 125,750 (0.46%)
- 15 year renewal \$ 8,636,800 (31.63%)
- Beyond 2035 \$18,539,578 (67.91%)

Total Current Replacement Cost \$27,302,128

Renewal Budget

- Total Required Renewals (15 years) \$ 8,762,550
- Total IFP Renewal Budget (15 years) \$ 8,827,600
- Total Renewal Surplus (15 years) \$ 65,050

IFP Budgets 2019/20 to 2033/34

- Operating & Maintenance \$ 522,150
- New & Expansion Capital Works \$ 208,000







- Marine infrastructure renewal financial figures are based on 'remaining useful life'
- Remaining useful life uses the estimated life expectancy of the asset before it will need to be replaced. Factors determining remaining useful life include (but not limited to) condition, environment, maintenance and levels of service
- The boat ramp at Sykes Foreshore was upgraded in 2018/19 to include flex matting—which extends the existing ramp by a further 2.4m at a cost of \$64,960
- Flex matting also assists in the prevention of sea bed erosion
- As per the below image the seawall at Frank Buswell Foreshore is currently under reconstruction with an allocated renewal budget of \$2,130,000 over a five year period.

- 3.92 km of constructed seawalls
- Externally valued in June 2018
- High level of confidence regarding replacement value
- Financial data and values obtained from AssetFinda reporting system as at January 2019. All figures exclude GST.



1.32km of marine walls identified for replacement in the 15 year renewal period— all of which are located in the Leschenault Inlet.



Image	Description	Locations	Image	Description	Locations
	<p>Boat Ramps</p> <p>Used for launching boats or water craft from trailers.</p> <p>Example: Pelican Point</p>	<ul style="list-style-type: none"> • Stirling Street • Pelican Point • Leschenault Inlet • Sykes Foreshore 		<p>Jetties</p> <p>A landing or small pier which boats can dock or be moored.</p> <p>Example: Stirling Street</p>	<ul style="list-style-type: none"> • Marlston Waterfront • Stirling Street • Pat Usher Foreshore • Sykes Foreshore • Pelican Point • Queens Gardens
	<p>Fishing Platform</p> <p>Designated for the use of recreational fishing with the docking of boats prohibited.</p> <p>Example: Stirling Street</p>	<ul style="list-style-type: none"> • Turkey Point • Stirling Street 		<p>Swimming Pontoon</p> <p>A floating platform or dock used for leisure and recreation purposes with the docking of boats prohibited.</p> <p>Example: Koombana Beach</p>	<ul style="list-style-type: none"> • Koombana Beach
	<p>Seawalls</p> <p>A structure separating land and water ways.</p> <p>Designed to prevent coastal erosion and other damage due to wave action and storm surge, such as flooding.</p> <p>Example: Pat Usher Foreshore (Leschenault Inlet)</p>	<ul style="list-style-type: none"> • Hayward Street • Marlston Waterfront • Hungry Hollow • Koombana Bay • Pelican Point • Leschenault Inlet 		<p>Revetment Wall</p> <p>A sloping structure placed in such a way to absorb incoming water or to protect existing functions of the shoreline and slope as defence against erosion.</p> <p>Example: Koombana Foreshore</p>	<ul style="list-style-type: none"> • Koombana Foreshore <p><i>The revetment wall image of Koombana was taken during construction in June 2017. The Revetment wall was back filled and covered with sand once the rock had been laid.</i></p>



The Leschenault Inlet is a remnant of the lower section of the Leschenault Estuary which was separated from the main water body by the construction of the inner harbour in the 1970's. The inlet is approximately 1.9km long and up to 200m wide. Seawalls within the inlet are located in the vicinity of;

- > 1. Sykes Foreshore
- > 2. Koombana Drive
- > 3. Frank Buswell Foreshore
- > 4. Queens Gardens
- > 5. Pat Usher Foreshore
- > 6. Lot 681 / Lucianna Park
- > 7. The Plug

69.91% of all seawalls are located within the Leschenault Inlet

