

1 Sedimentation basin

2 Vegetated filtration wetland (VFW)

3 Cascade outlet

4 Surface flow wetland (SFW)

5 Crested weir outlet

6 Sub-surface flow wetland (SSF)

7 Proposed rock bund

8 Repositioned park benches

9 Paperbark grove

10 Retain existing launch area

11 Stormwater inlet removed and diverted

12 High-flow bypass

Planting Mix 1 - Fringing vegetation between existing grass area and lake low water level <1m height - where views are to be retained and other nominated areas

Planting Mix 2 - Vegetated Filtration Wetland <1m height

Planting Mix 3 - SF & SSF Wetlands <1m height

Planting Mix 4 - Landscape integration Planting <1m height

Mulch pathway connection

Rock rip-rap

Existing footpath to be retained

Stormwater inlets from catchment

Lake water circulation

Treatment wetland flow direction

Indicative park boundary

Proposed top of bank

Lake water level (date of survey - August 2017)

Proposed trees

Trees to be removed

Existing park benches to be retained or repositioned

Sight lines to lake to be retained

Proposed high-flow bypass connection

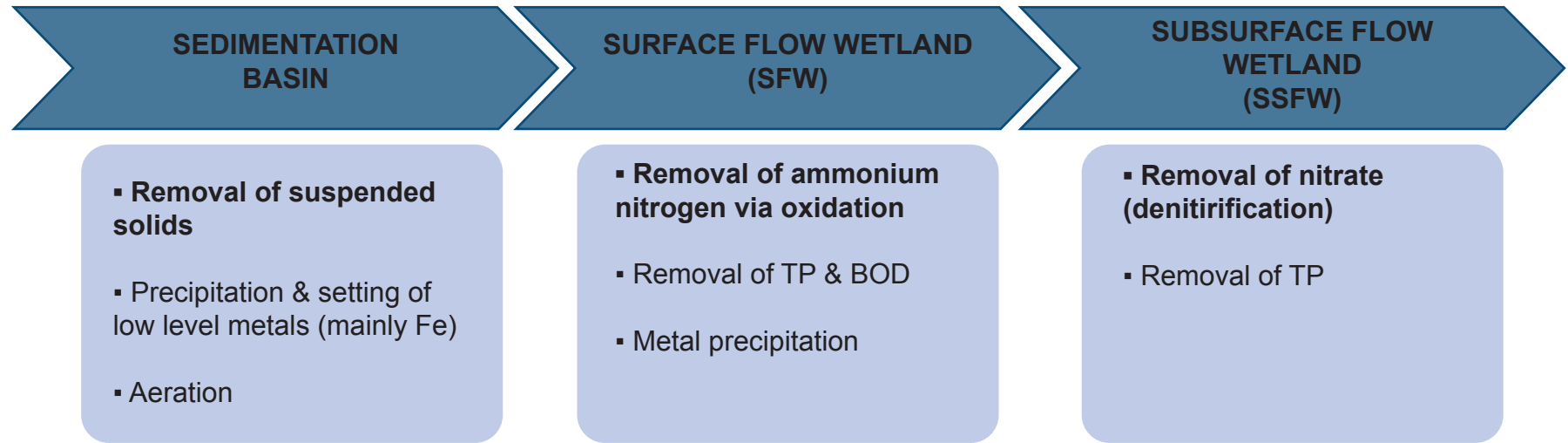
Proposed hydraulic control

Proposed pipe connections

Proposed low flow pumping of lake water to main wetland for water quality improvement

Proposed circulation pump

TREATMENT PROCESS SCHEMATIC



PREDICTED POLLUTANT REMOVAL

			MAIN TREATMENT WETLAND PERFORMANCE			
			Pollutant Removal (median effluent conc. - cell outlet)			
Parameter	Unit	Aquatic Discharge Targets (ANZECC freshwater guidelines) ¹	Influent conc. (Lake water)	Surface Flow Wetland (SFW 1 & 2)	Subsurface Flow Wetland (SSF) (effluent to the Lake)	% REMOVAL THROUGH THE SYSTEM
Total Nitrogen (TN)	mg/L	0.35	2.6	1.0	0.83	67%
Nitrate Nitrogen	mg/L	0.01	0.27	0.12	0.05	83%
Ammonium Nitrogen	mg/L	0.01	1.1	0.3	0.18	84%
Total Phosphorus (TP)	mg/L	0.01	1.4	1.07	0.9	32%

¹Default trigger values applicable to southern Western Australia - Freshwater lakes & reservoirs ecosystem type