Water analysis spreadsheet	Client:	Darcy Ocker	Date received:	11 March 2021
	Address:		Date analysed:	11 March 2021
	Contact:		Collected/delivered:	Delivered

Two sets of samples, consisting of u ted water and EMAWS processed water.
A dilution series (10^{-1} and 10^{-2}) was prepared for each sample, using autoclaved deionised water
A 100 µl volume of each dilution was plated out onto selective media for *E. coli* and *Enterococci*
Additionally, the most dilute of each sample was plated onto non-selective media plates to assess total microbial numbers
Selective media plates were incubated at 37˚C for 48 hours and TMA plates for five days at ambient temperature

Results

Freshwater samples	Undiluted	10^{-1} dilution	10^{-2} dilution	Mean	Cells/100 ml
E. coli					
Control (chilled)	Lawn	422	42	4210	4210000
Post filtration	Lawn	355	38	3675	3675000
EMAWS - low flow	0	0	0	0	0
EMAWS- high flow	0	0	0	0	0
Control (ambient)	Lawn	389	34	3645	3645000
Non filtered	Lawn	322	29	3060	3060000
Enterococci					
Control (chilled)	121	18	1	151	150500
Post filtration	119	14	0	130	129500
EMAWS - low flow	0	0	0	0	0
EMAWS - high flow	0	0	0	0	0
Control (ambient)	109	12	0	115	114500
Non filtered	127	19	2	159	158500

Seawater samples	Undiluted	10^{-1} dilution	10^{-2} dilution	Mean	Cells/100 ml
E. coli					
Control (chilled)	19	4	0	30	29500
Post filtration	13	3	0	22	21500
EMAWS - low flow	0	0	0	0	0
EMAWS - high flow	0	0	0	0	0
Control (ambient)	12	1	0	11	11000
Enterococci					
Control (chilled)	21	3	0	26	25500
Post filtration	19	3	0	25	24500
EMAWS - low flow	0	0	0	0	0
EMAWS - high flow	0	0	0	0	0
Control (ambient)	25	4	0	33	32500

Total microbial analysis

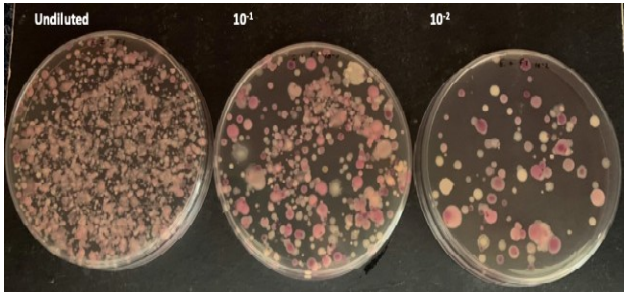
Control (chilled)	196	19600	19,600,000
Post filtration	60	6000	6,000,000
EMAWS - low flow	10	1000	1,000,000
EMAWS- high flow	1	100	100,000
Control (ambient)	168	16800	16,800,000
Non filtered	147	14700	14,700,000

Efficiency of treatment for total bacterial removal

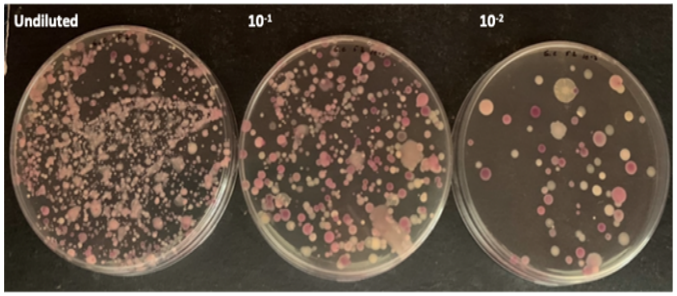
Filtration	64.8%
EMAWS - low flow	94.1%
EMAWS- high flow	99.4%

Sample images - Freshwater *E. coli* plates (*E. coli* colonies are stained pink/purple)

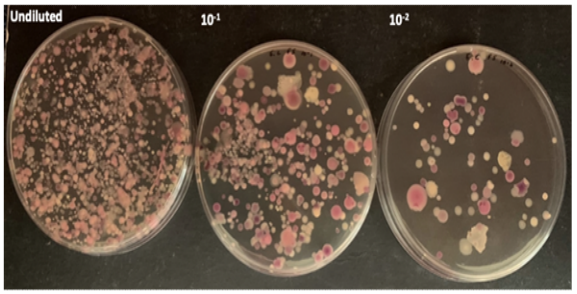
Control - chilled



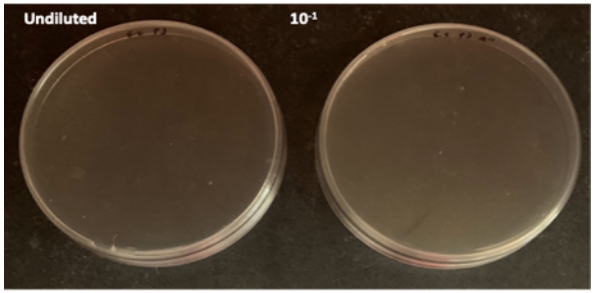
Filtered



Control - ambient



Hydrotron - low flow



Hydrotron - high flow

