WATER QUALITY — VASSE RIVER

1856. Hon Dr Steve Thomas to the parliamentary secretary to the Minister for Water:

I refer to the Vasse River as it flows though Busselton, and I ask:

(a) what plan does the Government have in place to improve the water quality in the Vasse River;

(b) what budget does the Government have in place to improve the water quality in the Vasse River;

(c) is the Government measuring the level of phytoplankton in the Vasse River;

(d) if yes to (c), in what locations is the testing occurring and at what frequencies;

(e) please table the results of the testing in part (c) for 2021, 2022 and 2023;

(f) to which Government department(s) is any testing from part (c) being reported;

(g) are these reports made publicly available;

(h) what dredging has been done in the Vasse River to improve water quality and what dredging is planned in the future;

(i) how is the success of the dredging being measured;

(j) how much phoslock has been used in the river and how much is planned to be used;

(k) how is the success of the use of Phoslock being measured and please table those measurements;

(l) has any used Phoslock been removed from the river; and

(m) how many toxic algal or phytoplankton blooms have been recorded in the Vasse River in 2021, 2022 and 2023?

Hon Matthew Swinbourn replied:

(a) The Vasse Wonnerup Wetlands and Geographe Bay Water Quality Improvement Plan (2010). In addition, the multiple agency Vasse Taskforce coordinates water quality improvement actions in the Vasse Geographe catchment including the Lower Vasse River.

(b) The Revitalising Geographe Wetlands project budget has been around $1.6 million annually since 2015. The specific budget on the Lower Vasse River varies annually depending on remediation works undertaken.

(c) Yes.

(d) Fortnightly at three locations (upstream of Bussell Highway, downstream of Strelly Street Bridge and downstream of the Causeway Bridge).

(e) Data below are summarised by both biovolume which relates to the guideline and cell counts which relate to the actual number of phytoplankton cells counted in each sample.

Please note VASR1 is Vasse river 1 measuring site, which is located downstream of Strellly St and upstream of the Causeway bridge. VASR2 is Vasse River 2 measuring site at the footbridge between the Causeway bridge and Camilleri St. Data from the third measuring site was not included due to no algal or phytoplankton bloom activity.

Year	Site	Total Cyanobacteria Biovolume (mm^3/L)	
		Winter Minimum	Summer Maximum
2021	VASR1	0	93
2022	VASR1	0	47
2023	VASR1	0.01	171
2021	VASR2	0	134
2022	VASR2	0	34
2023	VASR2	0	183

Year	Site	Total Cyanobacteria Counts (cells/mL)	
		Winter Minimum	Summer Maximum
2021	VASR1	94	810,000

2022	VASR1	25	5,000,000
2023	VASR1	148	1,800,000
2021	VASR2	32	690,000
2022	VASR2	34	6,200,000
2023	VASR2	47	1,700,000

(f) Department of Health and the City of Busselton.

(g) No.

(h) Stage 1 and 2 dredging undertaken by the City of Busselton in 2022 and 2023 with Stage 3 proposed for 2024.

(i) Water quality monitoring in the river.

(j) Forty tonnes of phoslock has been applied to the Lower Vasse River over two periods in November and December 2023.

(k) Water quality and phytoplankton monitoring.

(l) Phoslock is not removed from the river once it has been applied. The phoslock remains in the sediment where it can continue to bind phosphate.

(m) In each of those years there has been an ongoing blue-green algae bloom lasting several months over summer. It is not practical to divide this continuous presence into separate blooms although the species composition changes over time in response to changes in supply of nutrients, light, temperature and salinity change.