

1 **Supplementary Material**

2

3 **Methane and nitrous oxide sources and emissions in a**
4 **subtropical freshwater reservoir, South East**
5 **Queensland, Australia**

6

7 **Katrin Sturm^a, Zhiguo Yuan^a, Badin Gibbes^b and Alistair Grinham^{a, b*}**

8 *Corresponding author email: a.grinham@uq.edu.au

9

10 Authors addresses:

11 ^a Advanced Water Management Centre (AWMC), The University of Queensland,
12 Level 4, Gehrmann Building, Brisbane, Queensland 4072, Australia

13 ^b School of Civil Engineering, The University of Queensland, Level 5, Advanced
14 Engineering Building, Brisbane, Queensland 4072, Australia

15

16 **Supplementary Material**

17 Table S1: Gold Creek Dam storage capacity curve showing surface area, cumulative volume and storage

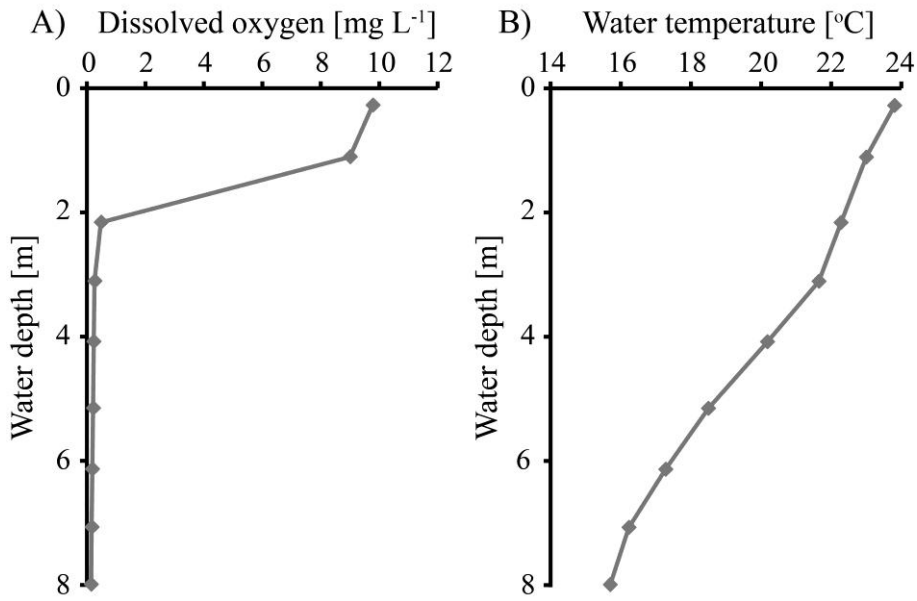
18 capacity at 1 m resolution from stream bed to full supply level.

Water depth (m)	Depth contour (m AHD)	Surface area (ha)	Cumulative Volume (ML)	Storage capacity (%)
11.75	81	0.06	0	0
10.75	82	0.31	1.69	0.2
9.75	83	1.04	8.08	1.0
8.75	84	2.35	24.59	3.0
7.75	85	3.55	53.89	6.6
6.75	86	4.94	96.15	11.7
5.75	87	6.37	152.54	18.6
4.75	88	7.82	223.37	27.2
3.75	89	9.32	308.96	37.7
2.75	90	11.07	410.79	50.1
1.75	91	13.33	532.61	65.0
0.75	92	16.34	680.71	83.0
0	92.75	19.35	819.73	100

19

20

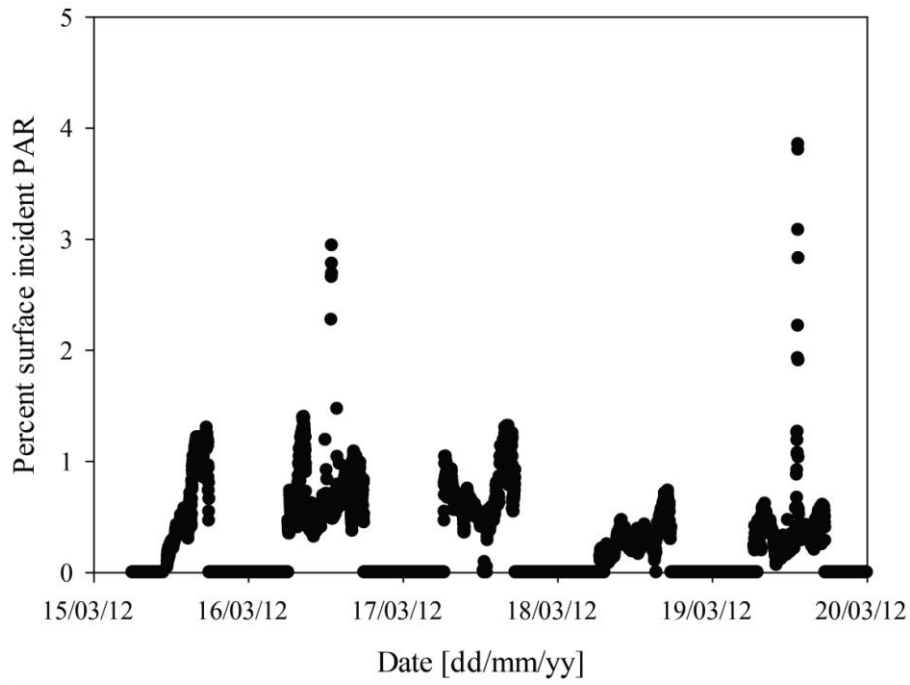
21 Figure S1: Water depth profile of dissolved oxygen (A) and water temperature (B) from the deep
22 monitoring site.



23

24

25 Figure S2: Long term underwater light logger measurements from the shallow monitoring site at 1.25 m
26 depth.



27