

## Appendix – LFG Gutowsky

### Supplementary Data

Calculating habitat availability as availability changes

Table 1- An example of actual temperatures recorded at the thermal logger chain and acoustic biotelemetry receiver in the Columbia Reach of Kinbasket Reservoir (UTM: E 422033, N 5760824). Data are fitted by a 3<sup>rd</sup> order polynomial. Precision could be substantially improved with additional temperature data along the vertical depth gradient.

Logger ID (depth)	Date		
	2010-08-09	2010-08-10	2010-08-11
2148-(91.5 m)	4.6	4.6	4.6
3212(61 m)	6.1	6.9	7.0
7680(30.5 m)	11.7	11.9	12.4
6968(surface)	15.3	16.4	16.2
Line of best fit	$y = -0.7444x^3 + 23.433x^2 - 251.77x + 1030.6$	$y = -0.3042x^3 + 10.425x^2 - 133.13x + 720.93$	$y = -0.3374x^3 + 11.113x^2 - 136.34x + 725.31$

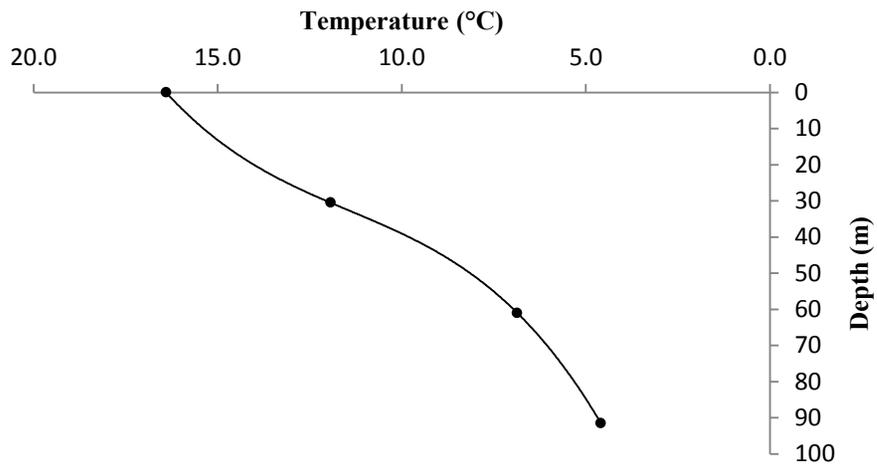


Figure 1- The line of best fit ( $R^2 = 1$ ) for the estimated temperature gradient at the thermal logger chain and acoustic biotelemetry receiver in the Columbia Reach of Kinbasket Reservoir (UTM: E 422033, N 5760824), taken 9 August 2010.

Table 2- Based on the line of best fit, the estimated depth at which a given temperature (at 1°C intervals) will be found.  $\Delta$ Depth for a given temperature category provided the vertical distribution (m) of temperatures which were then converted to a percent of the total water column.

Temperature (°C)	Date		
	2010-08-09	2010-08-10	2010-08-11
4	108.4761	102.34184	102.47083
5	81.72831	84.708492	85.129116
6	62.52398	70.649226	71.477307
7	49.50381	59.607724	60.898369
8	41.30844	51.027665	52.775267
9	36.57852	44.352728	46.490961
10	33.95472	39.026592	41.428416
11	32.07767	34.492936	36.970594
12	29.58803	30.195439	32.500458
13	25.12646	25.57778	27.400971
14	17.33361	20.083638	21.055096
15	4.850130	13.156692	12.845796
16	NA	4.2406214	2.1560333
17	NA	NA	NA