Lake Taupo Long-Term Monitoring Programme

2018-2019

Prepared for Waikato Regional Council

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Executive summary

Waikato Regional Council commissioned a long-term programme to monitor water quality of Lake Taupo with the expectation that the trophic status will slowly change to reflect changes in land use within the lake's catchments. The monitoring programme was designed to detect change through assessment of the lake's water quality. This programme commenced in October 1994 and is conducted by NIWA with field assistance from the Department of Internal Affairs, Taupo Harbourmaster's Office. This report presents the results for the July 2018 – June 2019 monitoring period.

The long-term monitoring programme uses the historical mid-lake site, Site A. Previous work determined that the near-shore water quality was very similar to the mid-lake water quality.

The maximum water temperature at 10 m depth in the summer of 2019 was 21.1°C, lower than the previous year (21.7 °C, the highest on record), while the maximum at 0 m depth (21.3°C) was above the average (20.4 °C).

The winter water temperature minima at 0 and 10 m depth in the winter of 2018 (11.4°C and 11.2°C, respectively) were higher than all years since records start, with the exception of 1998 and 1999. Nevertheless, oxygen concentrations, temperatures and bottom water nutrient concentrations indicated full water column mixing in the winter of 2018, unlike the previous monitoring year. The mixing season, as defined by the water column temperature gradient, lasted about 5 weeks. However, the average temperature difference between surface and bottom water layers during winter was above the average since 1995. As was the case in previous monitoring years, mixed layers and the thermocline were most clearly defined in the cooling part of the year, from February to June.

The winter 2018 mean water surface temperature, 11.7°C, was 0.3°C above the long-term average and the summer 2019 mean, 20.9°C, was 1.5°C above the long-term average. However, there were no statistically significant trends since 1995 in summer (January-March), winter (July-September) or annual mean water surface temperatures.

During July 2018 oxygen at 150 m dropped to 6.4 g m^{-3}, before winter mixing increased the bottom water oxygen concentrations. Oxygen concentrations in the hypolimnion had only been lower in 2001.

There was a statistically significant correlation between the winter mean chlorophyll *a* and the winter mean temperature difference between shallow and deep water layers (as observed over the historical time series), with low temperature gradients during winters associated with enhanced algal growth. Longer mixing seasons may result in higher wintertime algal biomass by delaying the accumulation of dissolved nutrients in the bottom water in spring and keeping them available for algal growth in the surface layer, explaining the correlation between the mean winter temperature depth gradient and wintertime chlorophyll concentrations.

Secchi depth was highest in February 2019 (23 m), which was 4 m higher than the previous monitoring year, coinciding with fairly low chlorophyll *a* (0.3 mg m^{-3}, similar to the minimum in the previous monitoring year). The maximum Secchi depth was above the long-term annual mean maximum Secchi depth (19.3 m).

Total, dissolved organic and particulate nitrogen peaked in 2013 and decreased almost every year since then. Also total phosphorus, and its various forms, has declined since 2013.

The maximum hypolimnetic NO_3-N and DRP concentrations reached in the autumn of 2018, before the winter mixing started (August 2018), were above average for NO_3-N and below average for DRP. The low hypolimnetic nutrient concentrations measured during winter in 2018 suggested complete mixing during the winter period (also shown by temperature and oxygen depth profiles), unlike results from the previous monitoring year. In June 2019 the hypolimnetic DRP concentration recorded (30 mg m^{-3}) was almost twice the highest annual maximum recorded to date (16 mg m^{-3}). Although hypolimnetic concentrations are expected to be high around this time, the exceptionally high DRP concentration is difficult to explain. In the same sample NO_3-N was unusually low (0.5 mg m^{-3}) and the NH_4-N concentration was unusually high (9 mg m^{-3}).

1 Introduction

A long-term monitoring programme of Lake Taupo's water quality was commissioned by Waikato Regional Council in October 1994 in the expectation that the trophic state of the lake would change to reflect changes in land use within the lake's catchment. This programme is conducted by NIWA with field assistance from the Department of Internal Affairs, Taupo Harbourmaster's Office. Various additions and improvements to the monitoring methodology have occurred with advances in available technology but the core monitoring parameters remain unchanged (Appendix 1). This report presents data from the routine mid-lake monitoring station from July 2018 to June 2019.

In two earlier reports (Gibbs 2005, 2006), data were included from two additional offshore sites representing those historically sampled in the 1974-76 assessments of lake water quality (White et al. 1980) (Figure 1) to evaluate spatial variability of water quality across the lake. Results from these two additional sites showed that, in general, there were minimal differences between the sites in seasonal variation and that data collected from Site A (mid lake) was representative of the main body of the lake. In addition, a comparison of upper water column nutrient and chlorophyll *a* concentrations and algal abundance was made between Site A and near-shore sites in Whangamata Bay (Kinloch) and Whakaipo Bay (Figure 1), over a 2-year period from February 2007 up to June 2009 (Gibbs 2010a). That study determined that, although there were small differences, the near-shore water quality was similar to the mid-lake water quality. This report presents data from Site A only.

The monitoring programme examines algal species composition and biomass, upper water layer water quality, whole water column water quality, and dissolved nutrient concentrations in bottom water. To understand the processes contributing to changes in water quality and trophic state, the upper water column (0-10 m depth) is sampled for nutrients, chlorophyll *a*, phytoplankton species composition and water clarity at 2-3 weekly intervals, and full depth profiles are carried out twice a year, around the onset of stratification and at the end of the stratified period. The first profile is taken in spring or early summer when thermal stratification has become established and is stable, the second profile is taken in autumn the following year before thermal stratification begins to break down, as the thermocline deepens.

This report is a less comprehensive version compared with Taupo's long-term water quality monitoring programme reports but meets all performance standards. A more comprehensive report will be produced in 2024, which will summarise data for the five-year period ending June 2023.

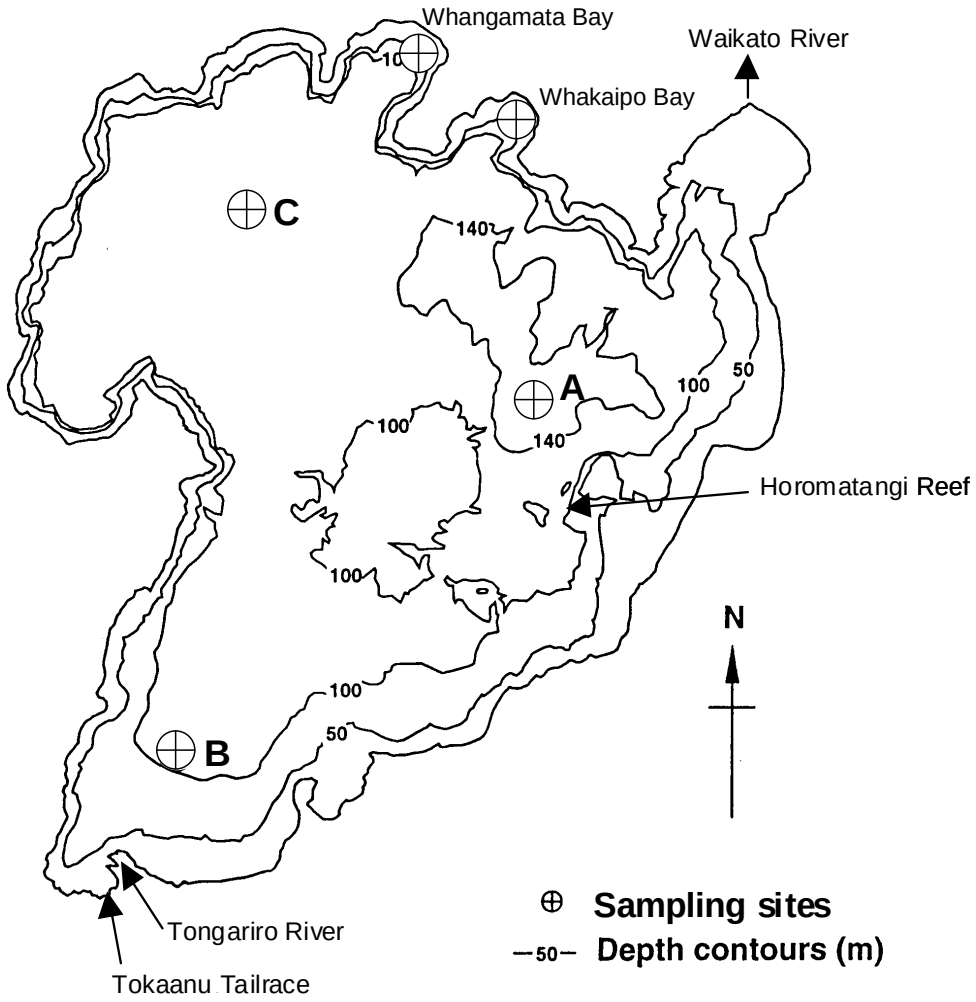

Figure 1: Site map of Lake Taupo. Showing location of the routine monitoring site at mid lake (A), and the two additional sites at Kuratau Basin (B) and the Western Bays (C) sampled during the three-year period 2002-2004. The near-shore comparison sites at Whangamata Bay and Whakaipo Bay sampled during a two-year period (2007-2009) are also shown.

2 Methods

Detailed method descriptions are given in Appendix 1. The parameters routinely measured or derived by calculation from component parameters at 2-3 weekly intervals are:

- Depth-related temperature and dissolved oxygen (DO), using a RBR XR420f CTD profiler until January 2008, thereafter using a RBR XR620f CTD profiler, and from February 2016 a RBR Maestro profiler/logger, with a fast response oxygen sensor, and Wi-fi download. Additional parameters of conductivity and chlorophyll fluorescence, and since January 2008, PAR, and since February 2016 turbidity and CDOM, recorded by the profiler sensors, are available at NIWA and will only be reported as appropriate.
- Water clarity by Secchi disc depth (20 cm black and white quartered).
- Chlorophyll *a*, nitrate+nitrite-nitrogen (indicated as NO_3-N because nitrate concentrations are typically much higher than of nitrite), ammoniacal-N (NH_4-N), dissolved organic N (DON), particulate-N (PN), dissolved reactive phosphorus (DRP), dissolved organic phosphorus (DOP), particulate phosphorus (PP), and algal species composition (cell counts and biovolume) in integrated-tube water samples from the top 10 m. Concentrations of total nitrogen (TN) and total phosphorus (TP) are estimated by summing the respective measured fractions. Zooplankton net hauls from 100 m (63 µm mesh) are preserved in 4% formalin and stored pending analysis.

Since 2000, water samples have also been collected using a van Dorn water bottle from just above the lake bed (150 m) for analysis of NO_3-N, NH_4-N, and DRP to assess nutrient accumulation rates in the hypolimnion and to assess the extent of winter mixing.

From the 2010/2011 monitoring period, inclusive, water samples have also been collected by a van Dorn water sampler from a depth of 50 m for analysis of chlorophyll *a* to assess the species composition and biomass of the phytoplankton in the deep chlorophyll maximum around or below the thermocline.

Whole water column sampling is carried out twice a year (in spring and autumn), and the parameters measured (or derived by calculation from component parameters) at 10 m depth intervals from the surface down to 150 m depth are:

- Conductivity, pH, temperature, DO, DRP, DOP, PP, TP, NO_3-N, NH_4-N, DON, PN, TN, total suspended solids (SS), volatile suspended solids (VSS), particulate carbon (PC), and dissolved organic carbon (DOC).

Additional parameters measured twice yearly in water samples from specific depths (1, 10, 50, 100 and 140 m) are:

- Algal species composition (cell counts and biovolume).

Details of data handling and the treatment of values that are near analytical detection limits are described in Appendix 1.

2.1 Report contents

This report presents the results from the 2018-2019 period, from winter 2017 to winter 2018, and refers to data in previous annual monitoring reports from 1995 to 2018 for inter-annual comparisons, and archived historical data since 1974 held by NIWA. The methods used are as per the 1994/95 report (Gibbs 1995), with minor modifications, and are included in Appendix 1. Temperature and dissolved oxygen data from the past twenty four years are given in Appendix 2 and nutrient data are in Appendix 3. Graphical presentations of time-series of data collected since the start of this monitoring programme are updated and presented in figures in the text. Phytoplankton species composition and biovolume data are included in Appendix 4, which contains phytoplankton data since 2006, and are discussed in the text. Historical (before 1994) nitrate and dissolved reactive phosphorus data from spring and autumn full lake profiles are presented in Appendix 5 for reference.

2.2 Statistical evaluation

Simple statistical evaluation of data has been made using Microsoft Excel® and linear regression results have been reported to ± 95% confidence limits. Statistical significance (p), where used, includes the coefficient of determination (R^2) and the number of data points used (n). For details see Statistical Methods, Appendix 1.

2.3 "Trend" definition

As in previous reports, the word "trend" is used in the context of a change between the start and the end of a time series data set where the use of a linear regression analysis shows a statistically significant difference from the null hypothesis of there being no change. It should be noted that in environmental data, as long as the data possess sufficient resolution, there is always a trend across any time period, and whether the trend is statistically significant depends on the number of data collected. Therefore, statistically significant trends are not necessarily meaningful. A statistically significant positive trend suggests that the actual trend over the tested period was not likely to be a negative one. Statistical significance says nothing about how large or how important a trend is, or how well the trend is given by the regression. Use of the word "trend" is a statistical one. It does not imply any valid extrapolation of the observed change beyond the period of the data set being examined by the linear regression.

3 Results and discussion

3.1 Temperature and mixing

The time-series of temperature at 0, and 10 m depth (epilimnion) and 130 m depth (hypolimnion) collected in the monitoring programme since 1994 are presented in Figure 2. Annual maximum temperatures at 0 m depth were between 17.9°C and 22.7°C (Figure 2). In most winters the water column becomes isothermal and mixing occurs, but mixing was incomplete in the winter of 1998. The maximum at 10 m depth in the summer of 2019 was 21.1°C, lower than the previous year (21.7 °C, the highest on record), while the maximum at 0 m depth (21.3°C) was above the average (20.4 °C). The winter minima at 0 and 10 m depth in 2018 (11.4°C and 11.2°C, respectively) were higher than all years since records start, with the exception of only 2 years (1998 and 1999).

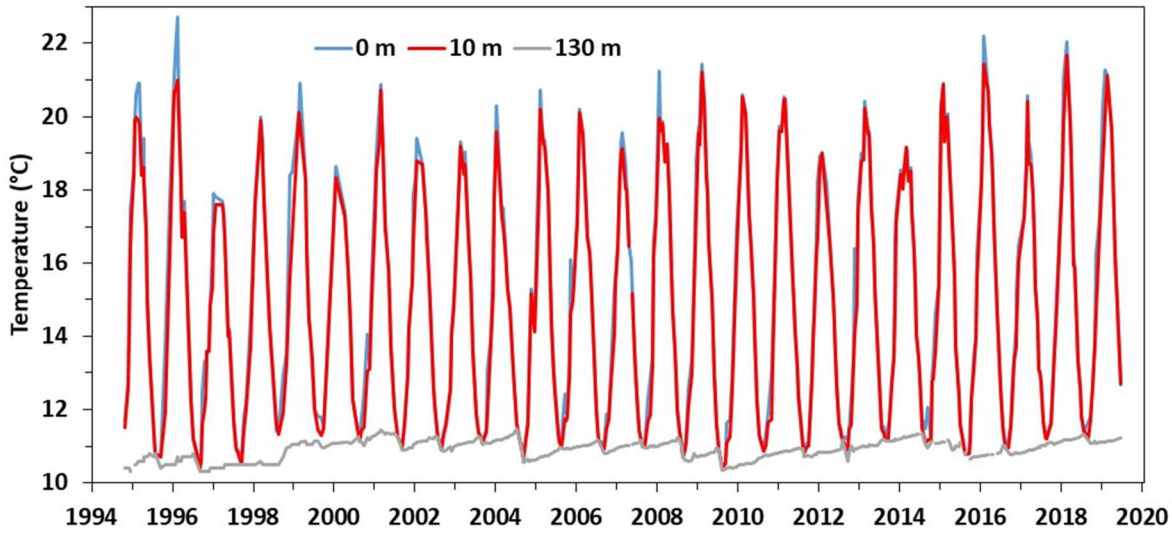

Figure 2: Time-series temperature data. Water temperatures at 0, 10 and 130 m. X-axis tick marks indicate 1 January of each year.

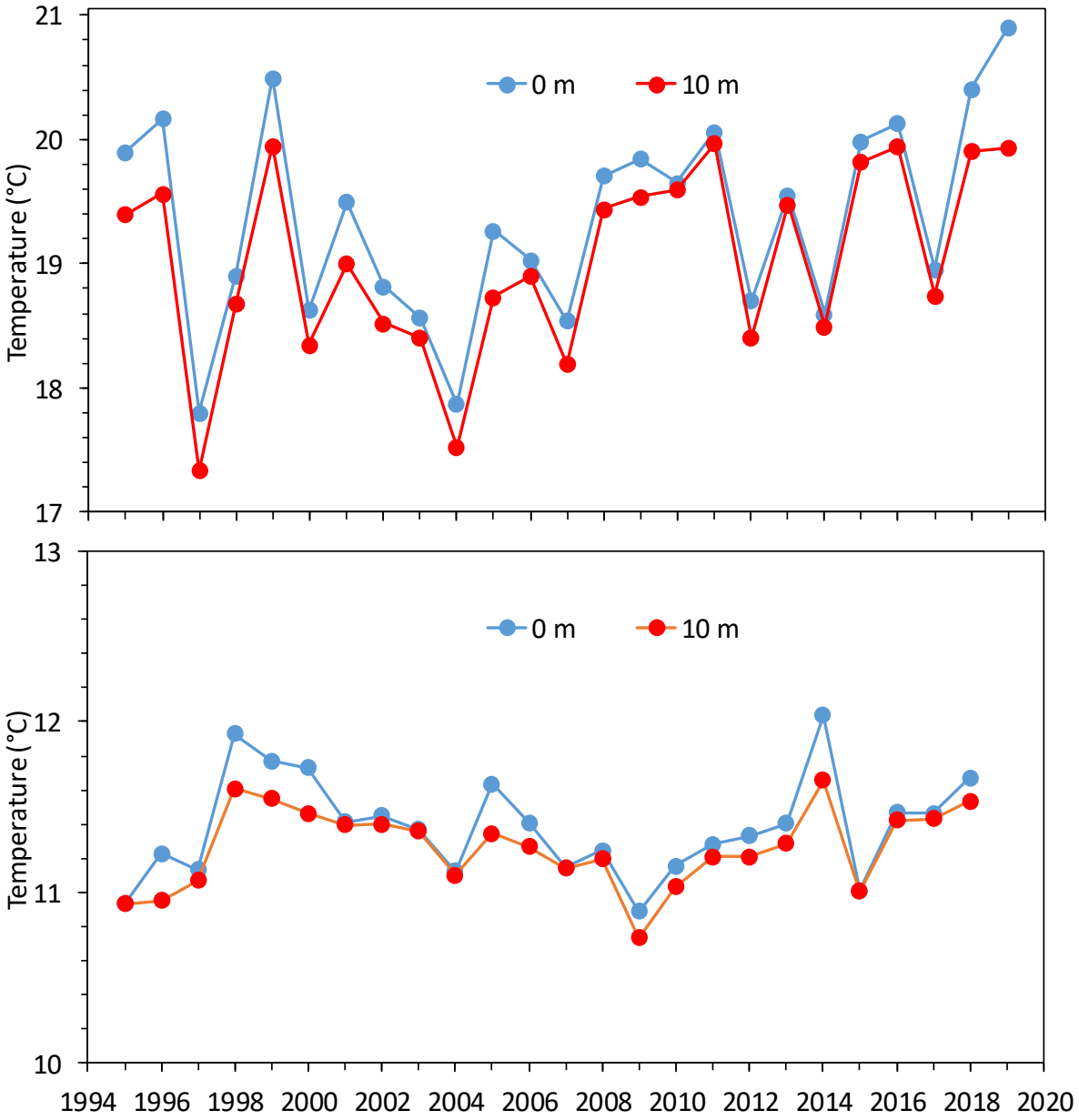

Figure 3: Mean A) summer (January-March) and B) winter (July-September) water temperatures at 0 and 10 m depth.

Summers were cooler in the early 2000s (Figure 3). The summer of 2019 was warmer than the previous year. In the monitoring year 2018-2019 the surface temperature was highest in January (21.3°C; see also Figure 17) and lowest in July (11.4°C). There has been no statistically significant change in annual mean water surface temperatures since 1995 (Figure 18).

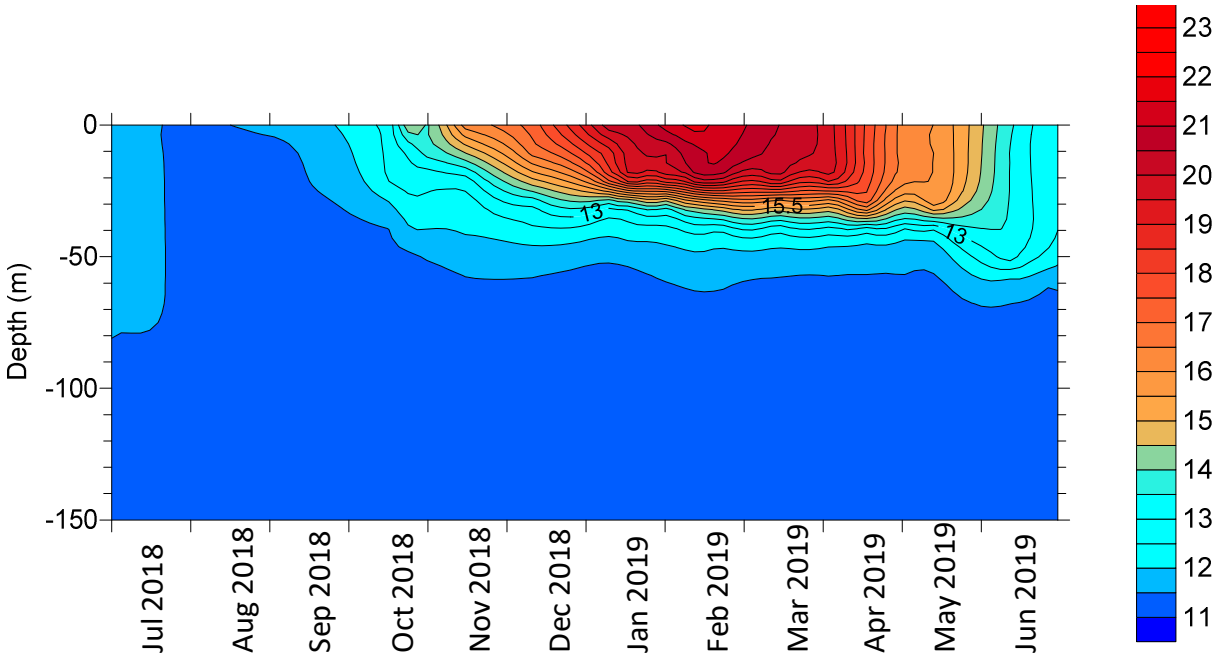

Figure 4: Contour plot of water temperatures (°C) from July 2018 to June 2019.

A contourplot (Figure 4) shows the almost homothermal water column from end of July to September 2018, the onset of stratification in September-October 2018, the deepening of the thermocline during the first half of summer, and the reduction in stratification during autumn 2019 before the overturn starting in the following winter. The 11°C isotherm did not disappear during winter 2018, unlike in the previous monitoring year (Verburg and Albert 2019). The mixing period in the winter of 2018, defined by the temperature difference between 20 m and 130 m depth being less than 0.3°C, lasted about 5 weeks during July-August. The average temperature difference between 20 m and 130 m depth in July-October 2017 was 0.71°C, higher than the long term mean of 0.47°C. It was higher than in the two winters of 2016-2018 (0.43°C and 0.57°C; Verburg and Albert 2017, Verburg and Albert 2018), as a result of a later start of full water column mixing and an earlier onset of stratification. The water column was thermally most homogenous on 28 August 2018 with a temperature difference of 0.03°C between 20 m and 130 m depth.

Temperature depth profiles (Figure 5) show cooling from 5 July to 28 August 2018, with the water column most isothermal on 28 August 2018, followed by warming until 31 January 2019. The lake surface cooled from February 2019 until the end of the monitoring year. The surface mixed layer was less defined in November 2018 until January 2019 than in the rest of the year. The surface mixed layer ranged from 16 m deep in November 2018 to 50 m deep in June 2019. In general, the mixed layer became shallower as the lake warmed and the difference between surface and deep water became greater, and the reverse happened during cooling in the autumn. As was the case in previous monitoring years (Verburg and Albert 2018), mixed layers and the thermocline were most clearly defined in the cooling part of the year, from February to June.

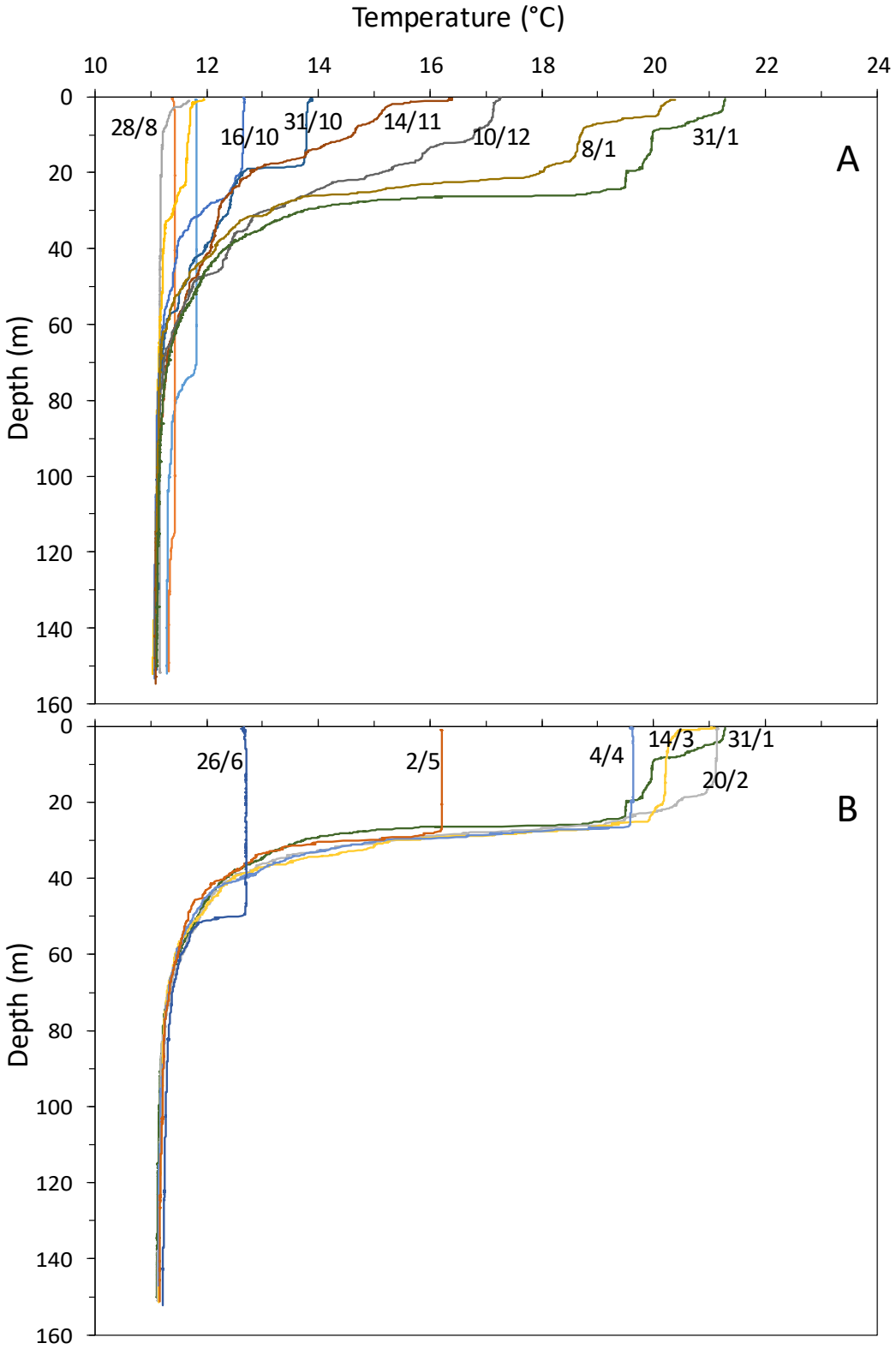

Figure 5: Temperature profiles. A) Cooling from 5 July to 28 August 2018, with the water column mostly isothermal on 25 July and 28 August 2018, followed by warming until 31 January 2019. B) Surface layer cooling, and deepening of the thermocline, from 31 January 2019 to 26 June 2019.

3.1.1 Trends in temperature and mixing

There have been no statistically significant trends since 1995 in summer (January-March), winter (July-September) or annual mean water surface temperatures (Figure 6), unlike many other lakes around the world (O'Reilly et al. 2015). The winter 2018 mean water surface temperature, 11.7°C, was 0.3°C above the long-term average and the summer 2019 mean, 20.9°C, was 1.5°C above the long-term average.

Vertical mixing in the water column during winters appears to have increased in Lake Taupo since 1994, which is the opposite of what would be expected in a deep lake in a warming climate (Verburg and Hecky 2009). Climate warming tends to result in lake surface temperatures warming faster than deep temperatures. In Lake Taupo, temperature differences between 20 m depth and 130 m depth ($T_{20m} - T_{130m}$) that were <0.3°C have occurred only in the months of July to October since 1995. $T_{20m} - T_{130m}$ <0.2°C has occurred as well in each of the months from July to October and in no other months. However, the decrease in the average $T_{20m} - T_{130m}$ in July-October (Figure 7) since 1995 was not statistically significant, unlike in past years until 2017 (Verburg and Albert 2018), and the 2018 winter value was well above the trend line. It must be kept in mind that the number of CTD casts per winter (July-October) were not the same between years (varied from a minimum of four in 1995 to a maximum of eight in 2005, average 5.7) and that CTD casts were not equally spaced in time through each winter period, which may have resulted in a bias. The Taupo Automatic Monitoring Buoy has provided water temperature profiles at fixed time intervals (Verburg 2016) with high frequency (1 minute) since March 2015, but that is too short for analysis of long-term changes in heat content and the mixing regime.

The winter mixing period, as defined by the time between first and last depth profile in which $T_{20m} - T_{120m}$ was <0.3°C (here the difference with temperature at 120 m depth was used instead of 130 m, to increase data availability, because of a few profiles that did not quite reach 130 m depth), appears to have increased (Figure 8, $R^2 = 0.15$), although the statistical significance of the trend is weak ($p < 0.1$). However, the mixing season in 2018, 34 days, was shorter than in most years since 2000, and below the long-term average of 42 days. It has decreased since 2014, when the winter mixing period (nearly 3 months) was the longest since 1995. This analysis is from necessity imprecise. On average there were 3.1 profiles per year where $T_{20m} - T_{120m}$ was <0.3°C. In 1997 there was only one profile where $T_{20m} - T_{120m}$ was <0.3°C. Therefore, the mixing period in 1997 is shown in Figure 8 as zero days. We don't know what temperature gradients may have been shortly before or after these dates or in the intervening periods. Therefore, the estimate of the duration of the mixing period is imprecise and is likely to be an underestimate. Data from the Taupo Automatic Monitoring Buoy, because of its far higher measurement frequency, are more suitable to derive estimates of the duration of the mixing period and its intensity. An alternative way of estimating the duration of the mixing period with the data available, is by adding half of the days between the first and last depth profile in which $T_{20m} - T_{120m}$ was <0.3°C, and the previous and next depth profile (i.e., the last and first day when $T_{20m} - T_{120m}$ was >0.3°C, respectively, before and after the winter mixing), shown in Figure 9. This method accounts for sometimes relatively long periods between profile dates. The winter mixing period in 2017 estimated this way was 55 days, below the average of 64 days. However, the trend estimated this way was not statistically significant.

Without further research it is not known what has driven the long-term changes in mean winter temperature depth gradients and the potential for mixing. Increased or prolonged winter mixing is likely to have had implications for algal growth in the lake. Lower mean winter temperature depth gradients allow a greater rate of return of nutrients, which accumulate during summer in the hypolimnion by decomposition of organic material produced in the epilimnion, back to the epilimnion where these nutrients are used by algae to grow. As a result, the algal biomass is greatest during winter in Lake Taupo and the mean algal biomass during winter is correlated with the mean winter temperature depth gradient (Figure 10).

There was a statistically significant correlation ($p < 0.05$) between the winter mean chlorophyll *a* and the winter mean temperature difference between 20 and 130 m depth (Figure 10), confirming that winters with low temperature gradients enhance algal growth. After the data for the winter of 2017 presented an outlier in this relationship, with higher mean winter chlorophyll *a* than expected from the temperature depth gradient, the data point for the winter of 2018 was close to the trend line. The inter-annual variability in winter mixing that has occurred since 1995 resulted in a more than two fold range in mean winter chlorophyll *a*. The finding of increased algal biomass as a result of increased potential for vertical mixing across years underlines the importance of a consistent long term monitoring program with sufficient sampling frequency.

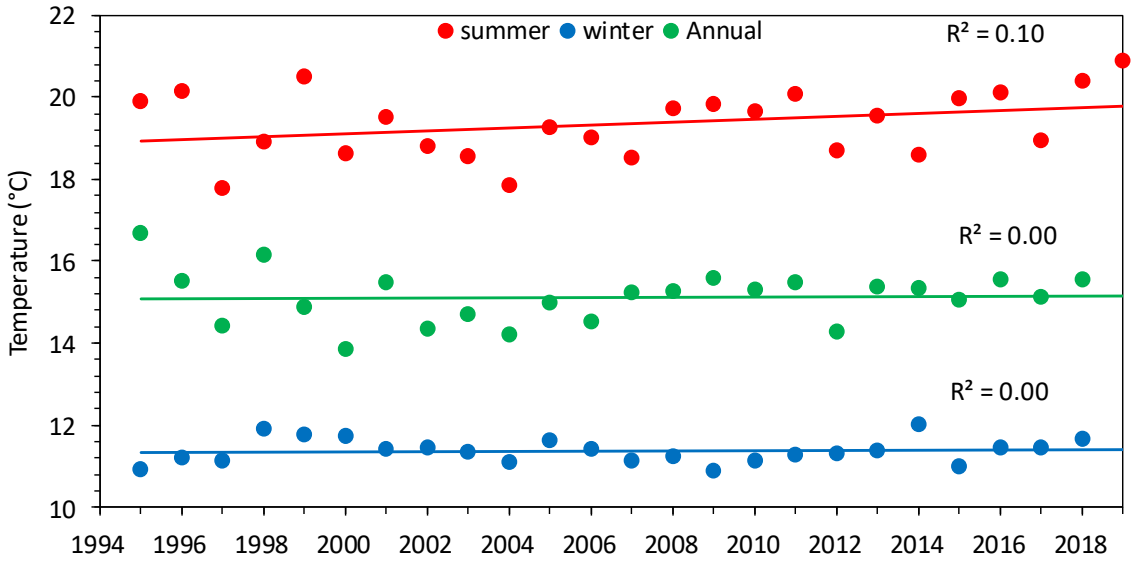

Figure 6: **Water surface temperature trends.** Mean winter (July-September), summer (January-March) and annual surface temperatures.

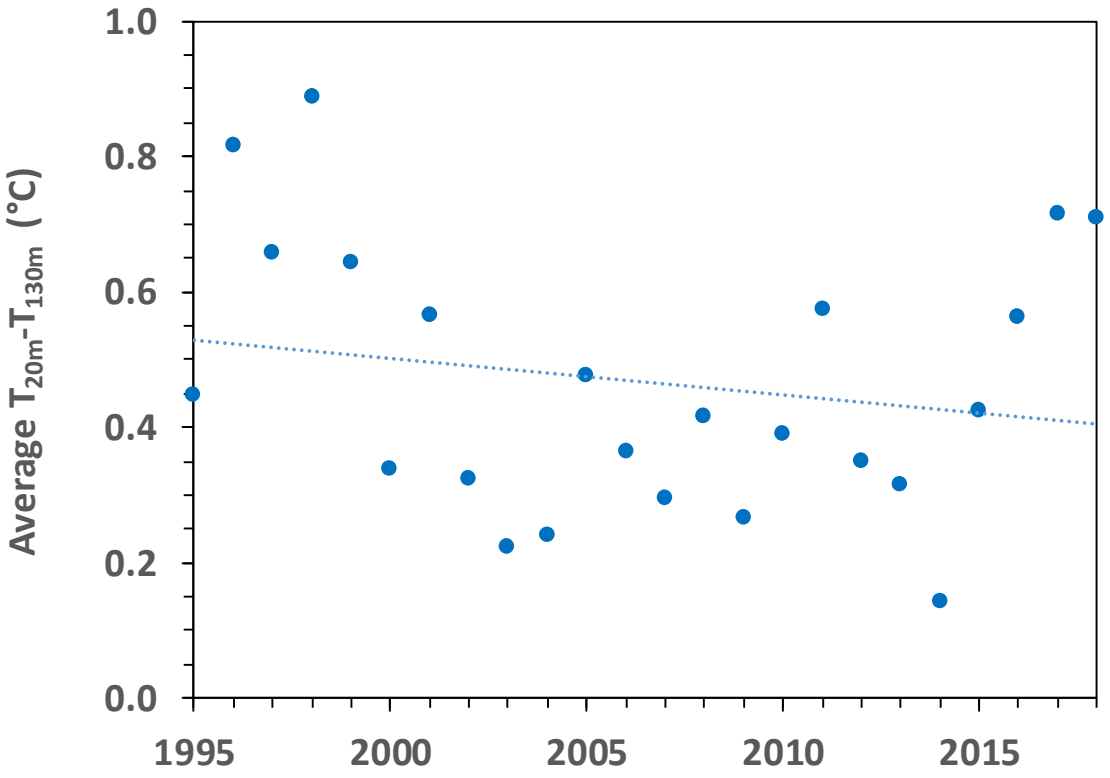

Figure 7: The average difference between temperatures at 20 m depth and at 130 m depth during July to October. The trend is not statistically significant.

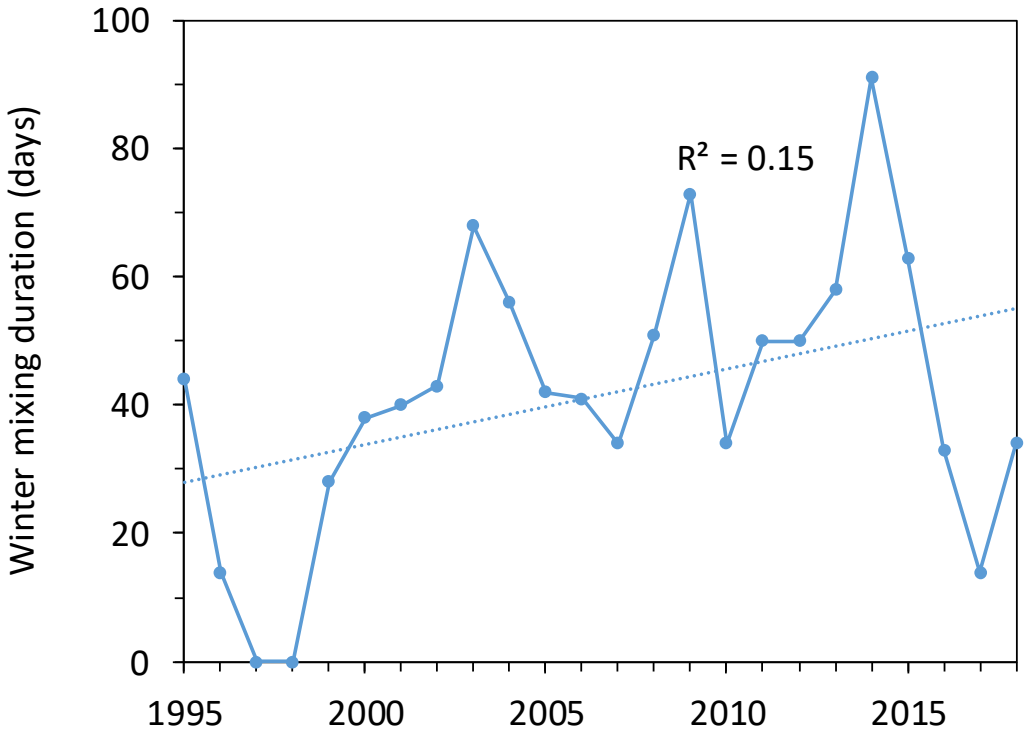

Figure 8: Number of days of winter mixing periods (T_{20m}-T_{120m} < 0.3°C). R^2 = 0.15, p < 0.1.

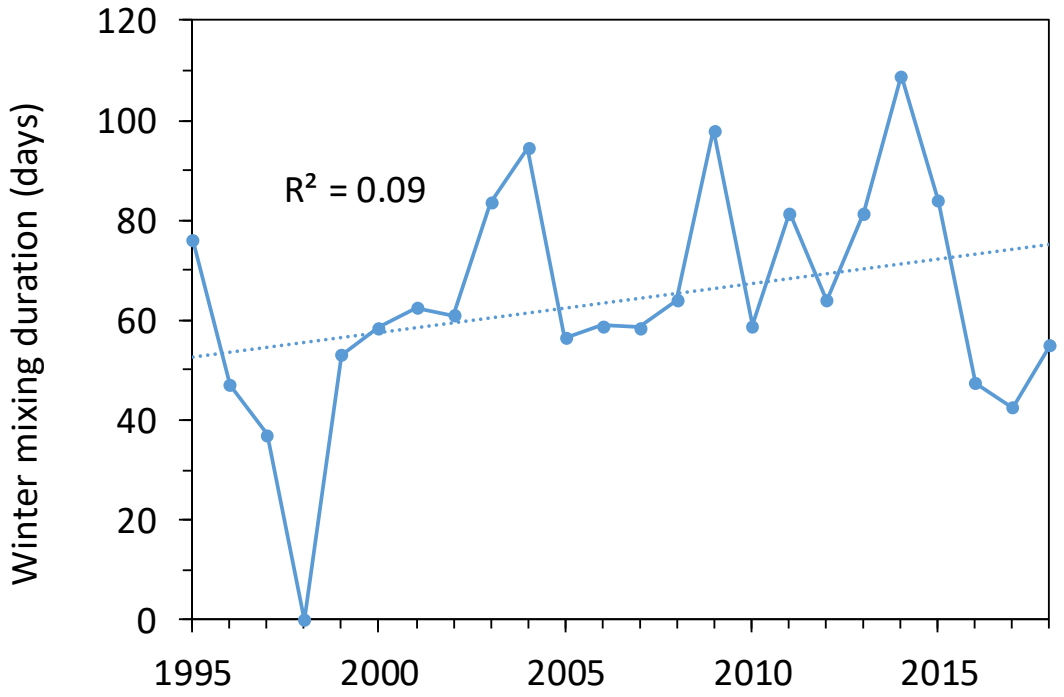

Figure 9: Number of days of winter mixing periods (T_{20m}-T_{120m} < 0.3°C). Same as Figure 8, but including half of the days before the first mixed temperature profile, and half of the days after the last mixed temperature profile, until the next temperature profile. The trend is not statistically significant.

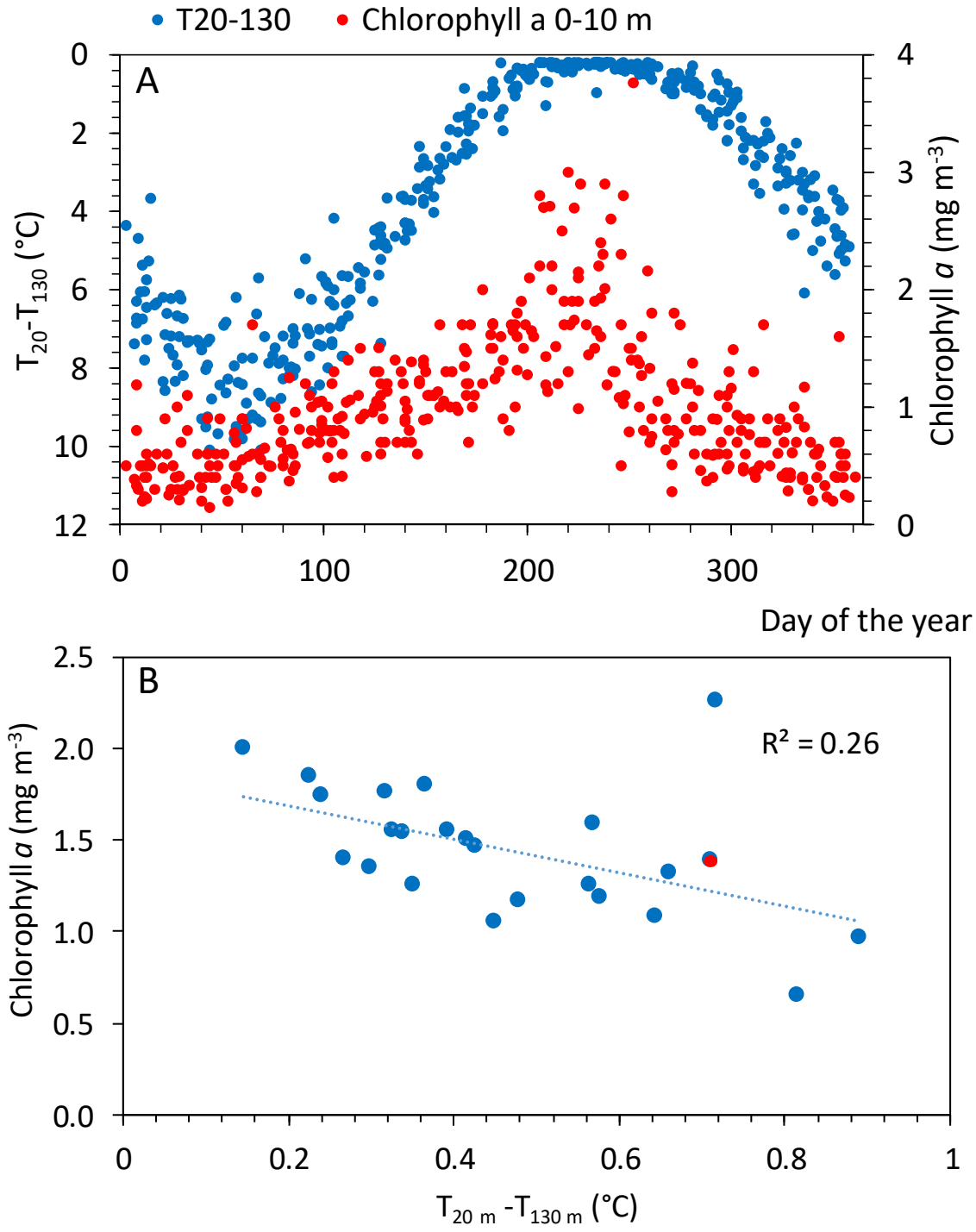

Figure 10: The relationship between water column stratification and chlorophyll *a*. Data since 1995. A. Chlorophyll *a* reaches peak values when the temperature difference between 20 and 130 m depth becomes smallest over the year. B. Winter (July-October) mean chlorophyll *a* concentration against the mean temperature difference T_{20m}-T_{130m} during winter. Winter of 2018 indicated by red dot. $R^2 = 0.26$, $p < 0.05$.

3.2 Dissolved oxygen

During summer, dissolved oxygen decreases - in deep water because of consumption during decomposition of organic matter, and in shallower water because warmer water can contain less oxygen and a surplus is released to the atmosphere (Figure 11). Because Lake Taupo is large and has a long residence time (11 years), oxygen consumption is likely mostly based on autochthonous carbon, i.e., carbon fixed in the lake by phytoplankton, as opposed to organic matter entering from the catchment. During winter, dissolved oxygen increases in the bottom water because of mixing with shallower water richer in oxygen. Since 1994 dissolved oxygen during summer rarely dropped below 6.5 g m^{-3} at any depth. However, in the present monitoring year during July 2018 oxygen at 150 m dropped to 6.4 g m^{-3}, before winter mixing increased the bottom water oxygen concentrations. Oxygen concentrations in the hypolimnion had only been lower in 2001. Dissolved oxygen in the hypolimnion reached a maximum in August 2018, during the winter mixing, and thereafter declined until it was 7.2 g m^{-3} at 130 m depth and 7.1 g m^{-3} at 150 m depth in June 2018.

Figure 12 shows the average concentrations of oxygen in the water column were highest during winter, as expected. Unlike the previous year, oxygen was thoroughly mixed throughout the water column in the winter of 2018. Full column mixing replenished oxygen concentrations in the deeper parts of the hypolimnion after declining during the previous summer. Oxygen concentrations in the hypolimnion started to decrease from about September 2018 and continued to decrease until June 2019. Figure 12 also shows the relatively high dissolved oxygen at around 30 m depth during summer, just above the depth of the deep chlorophyll maximum.

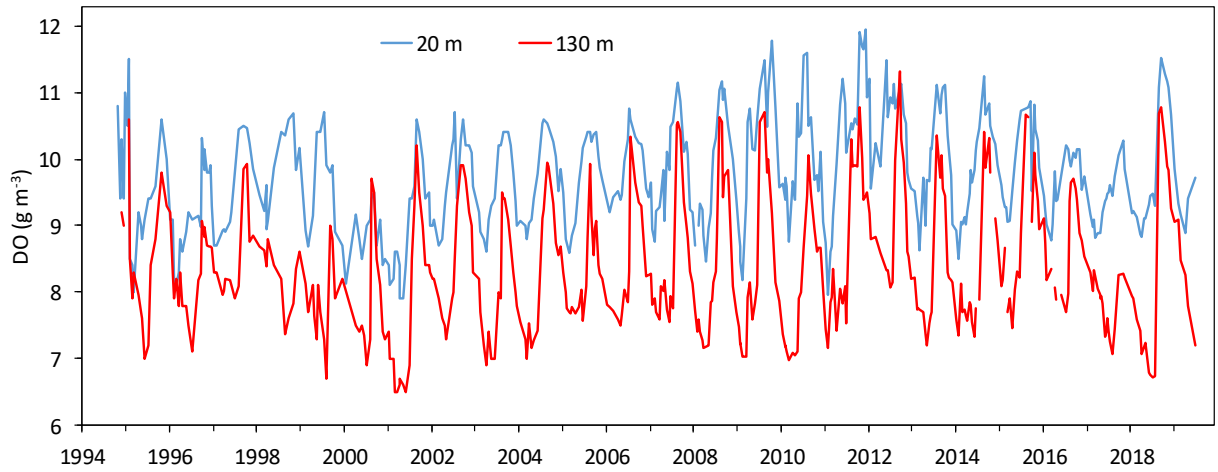

Figure 11: Dissolved oxygen at 20 m and 130 m depth.

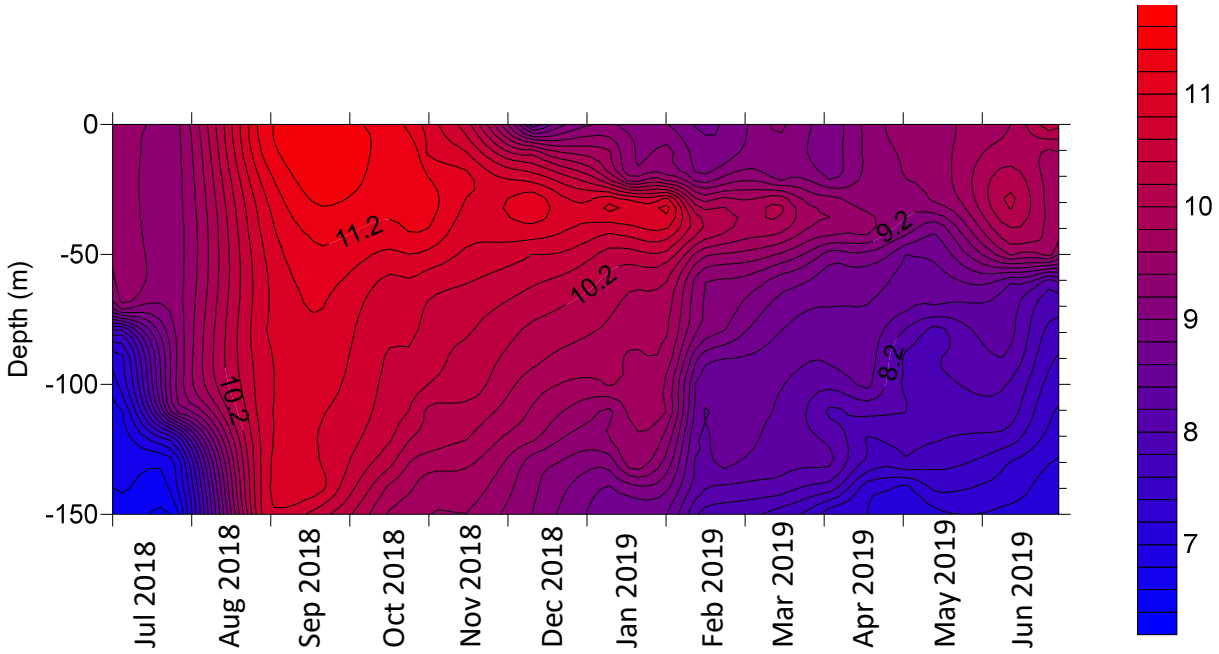

Figure 12: Contour plot of oxygen (g m^{-3}), July 2018 – July 2019.

Deep water annual minimum oxygen concentrations were low in this monitoring year. While they were increasing between 1999 and 2016 (Figure 13), they have been decreasing since 2016. The annual minima at 110, 130 and 140 m were only lower in 2001.

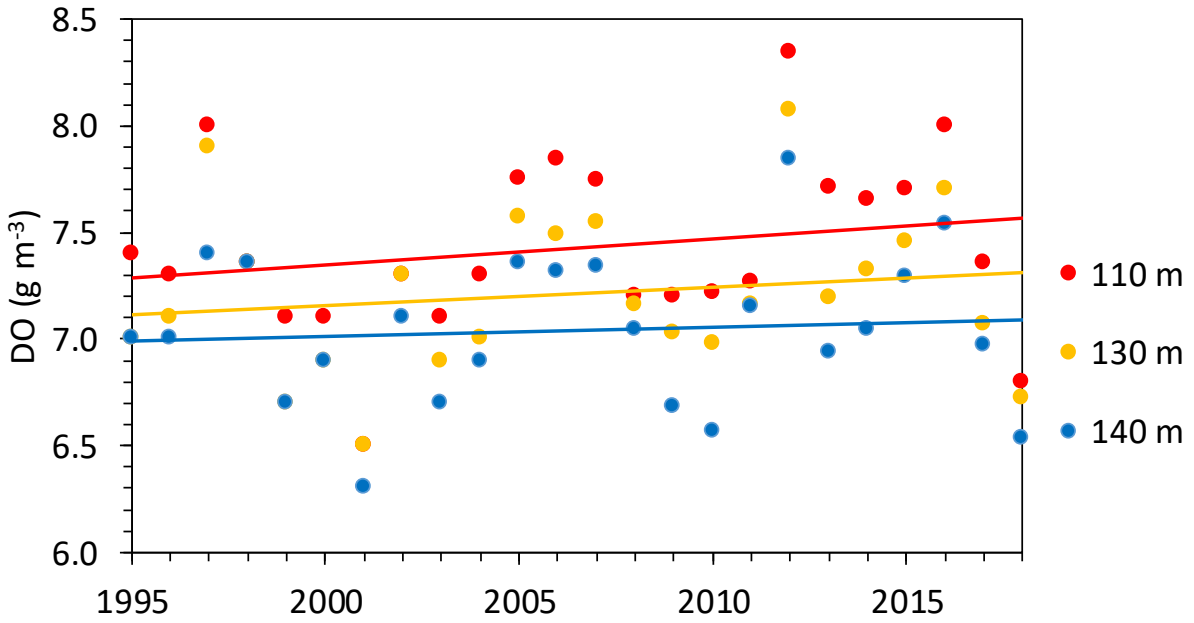

Figure 13: Annual minimum dissolved oxygen concentrations. Trends of minimum oxygen concentrations in the hypolimnion are not statistically significant.

3.3 Secchi depth

In this monitoring year, because of logistical issues Secchi depth was not measured in August and September 2018, the months when it is usually lowest, typically coinciding with the maximum chlorophyll *a* concentration.

Secchi depth was highest in February 2019 (23 m), which is 4 m higher than the previous monitoring year (Figure 14 and Figure 17), coinciding with fairly low chlorophyll *a* (0.3 mg m^{-3}, similar to the minimum in the previous monitoring year). The maximum Secchi depth was above the long-term annual mean maximum Secchi depth, 19.3 m. There has been no statistically significant trend in annual mean Secchi depth nor in annual maximum or minimum Secchi depth, or in the difference between the annual minimum and maximum, over the period since 1994.

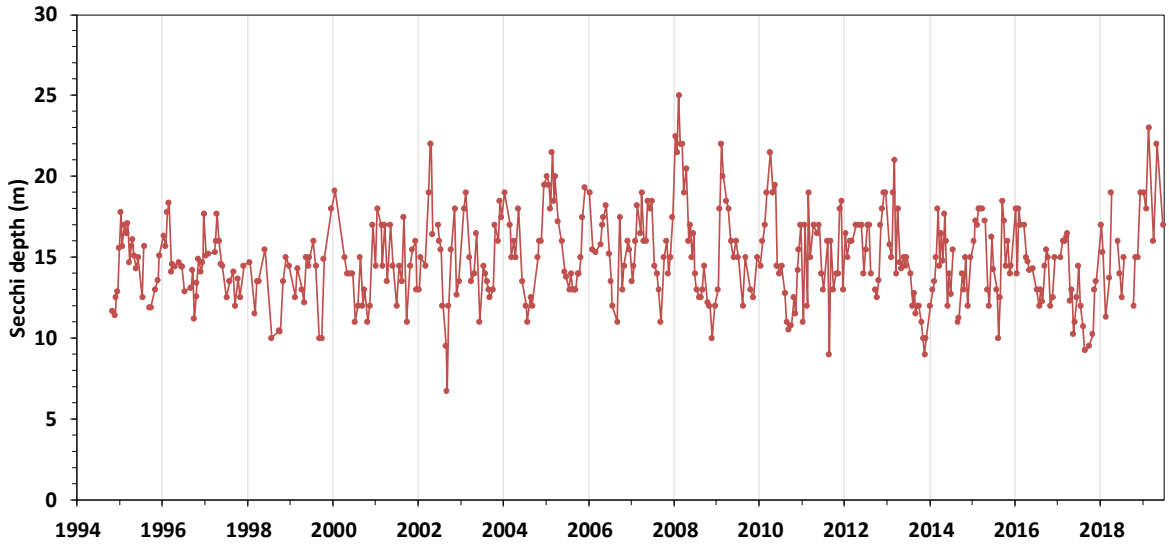

Figure 14: Time series of Secchi depth.

3.4 Phytoplankton

The maximum chlorophyll *a* concentration measured in July 2018 was 2.6 mg m^{-3} (Figure 15 and Figure 17). Mean chlorophyll *a* during winter (July-October) was 1.4 mg m^{-3}. The three highest chlorophyll measurements coincided with the lowest Secchi depths in the monitoring year. The maximum at 50 m depth was higher than recorded in most years (Figure 15). Chlorophyll was low, below 1 mg m^{-3}, from October 2018 to May 2019 (Figure 17). There was a reasonable inverse correlation between annual means of Secchi depth and chlorophyll *a* concentrations after 2000 (R^2 = 0.35). Chlorophyll *a* concentrations were lower between 1995 and 2000. There has been no statistically significant trend in chlorophyll *a* concentration since 2000 (Figure 18). There was no statistically significant trend in the day of the year at which chlorophyll *a* was highest and the average day was 14 August. The annual maximum chlorophyll at 50 m depth is correlated with chlorophyll at 0-10 m (R^2 = 0.72), but the minima are not correlated. This is because when chlorophyll is at its maximum, during winter, the water column is typically well mixed. Therefore, typically only during summer are chlorophyll concentrations at 30 to 50 m depth higher than in the surface layer.

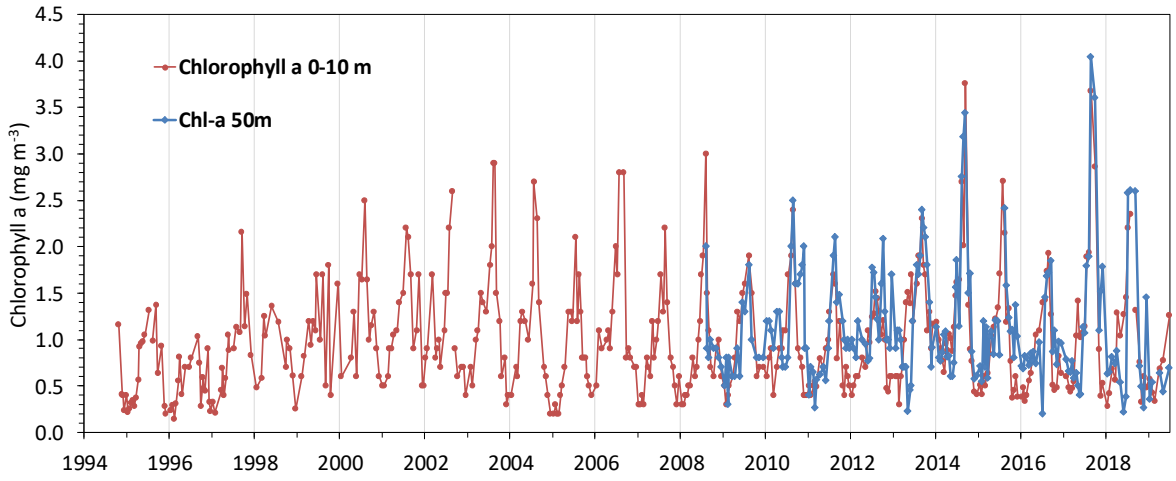

Figure 15: Time series of chlorophyll *a* concentrations.

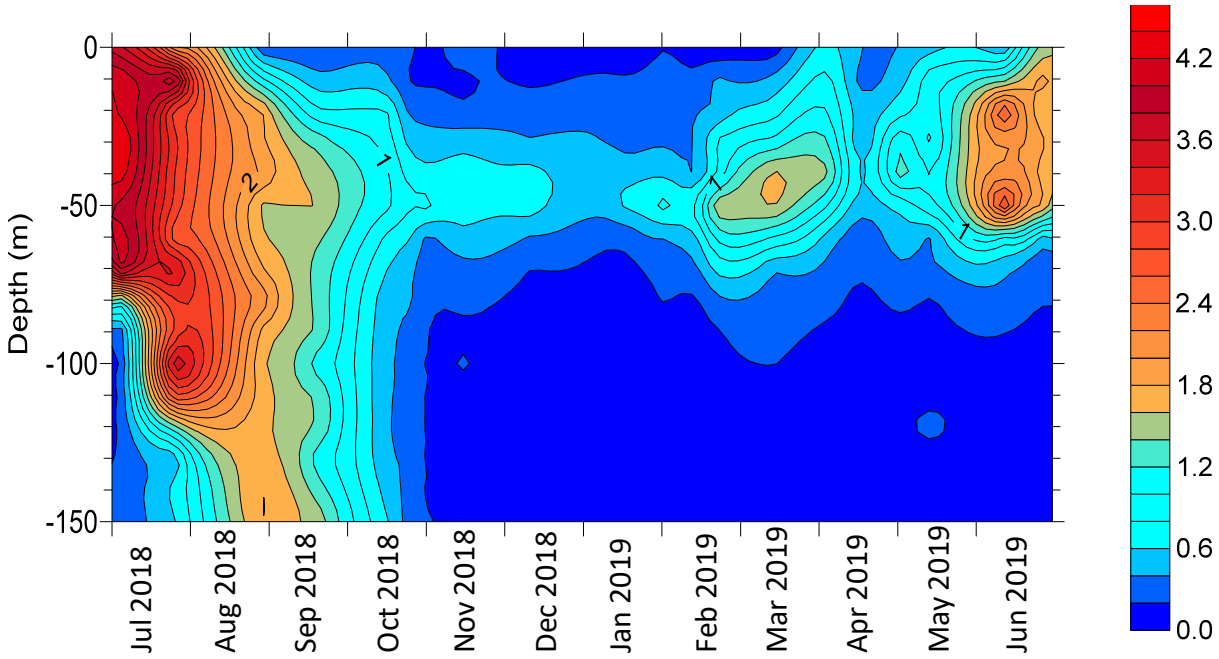

Figure 16: Contour plot of *in situ* chlorophyll fluorescence. July 2018 – June 2019. Showing the deep chlorophyll maximum at about 50 m depth during summer, and the partially mixed water column with relative high fluorescence during winter.

During summers a distinct peak in chlorophyll *a* occurs well below the thermocline, at around 30-50 m depth (Figure 16), the deep chlorophyll maximum (DCM). During winters chlorophyll increases and is typically more homogeneous through the water column. Figure 16 also shows the low chlorophyll during summer in the surface layer.

Below the euphotic zone, by definition, no net productivity by algal cells can occur. Below a certain depth, there is not enough light for photosynthesis to balance respiration. It is usually assumed, as a rule of thumb, that the depth at which light is less than 1% of that at the surface, is the depth of the euphotic zone. In Lake Taupo this is typically around 40-60 m depth (Leach et al. 2018).

3.5 Nutrients in the upper water layer

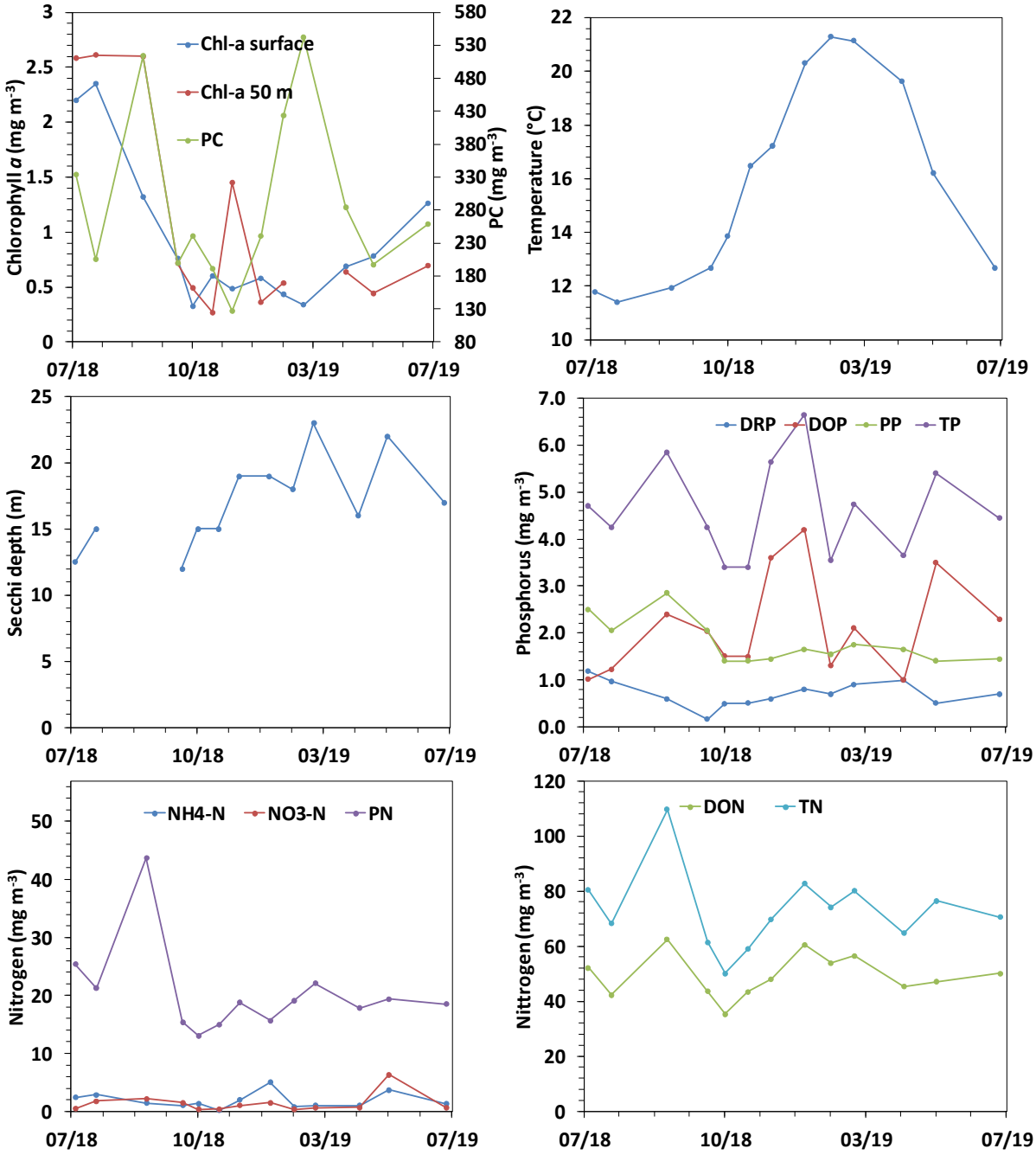

Figure 17: Temperature, Secchi depth, and concentrations of nutrients and chlorophyll *a* in the upper 10 m water layer during 2018-2019.

Seasonal patterns in nutrients in 2018-2019 are shown in Figure 17. Concentrations of PN and PP were highest in September.

Total, dissolved organic and particulate nitrogen peaked in 2013 (Figure 18) and decreased almost every year since then. Also, total phosphorus, and its various forms, have declined since 2013.

Table 1: Mean water quality variables since 1995, compared with this monitoring year's values. Averages of the 0-10 m layer (units: m for Secchi depth and mg m^{-3} for remaining variables). W:A is the ratio (in %) of the winter value to the annual mean value, showing the proportional increase or decrease during winter.

Variable	1995-2018				2018-2019			
	Winter	Summer	Annual	W:A	Winter	Summer	Annual	W:A
Chlorophyll *a*	1.6	0.5	1.0	68	2.0	0.4	0.9	110
Secchi depth	13.0	16.7	14.9	-13	13.8	20.0	17.0	-19
TP	6.0	4.7	5.3	14	4.9	5.0	4.6	7
TN	84.6	86.7	83.4	2	86.1	79.0	72.9	18
DRP	1.5	0.8	1.1	36	0.9	0.8	0.7	31
NO_3-N	2.1	0.7	1.1	87	1.5	0.8	1.4	9
PP	2.6	1.7	2.1	23	2.5	1.7	1.8	39
PN	25.3	21.2	22.7	12	30.1	19.0	20.4	48
PC	237.0	238.8	230.7	3	350.5	401.8	288.7	21

TP, DRP and NO_3-N in winter 2018-2019 were lower than average (Table 1) and were lower than during the winters in the 5 preceding years. TN in winter 2018-2019 was slightly higher than average. However, summer and annual means of TN in 2018-2019 were below average.

Since 1995, PP, PN, and PC were typically higher during winter than during summer, consistent with higher chlorophyll *a* and lower Secchi depth. However, this was not the case for PC in 2018-2019. The difference between winter and summer values is on average more pronounced for PP than for PN, but this was not the case in 2018-2019 (see seasonal ratios in Table 1).

Chlorophyll *a*, PN and PC were higher in the winter of 2018 than the average in previous years.

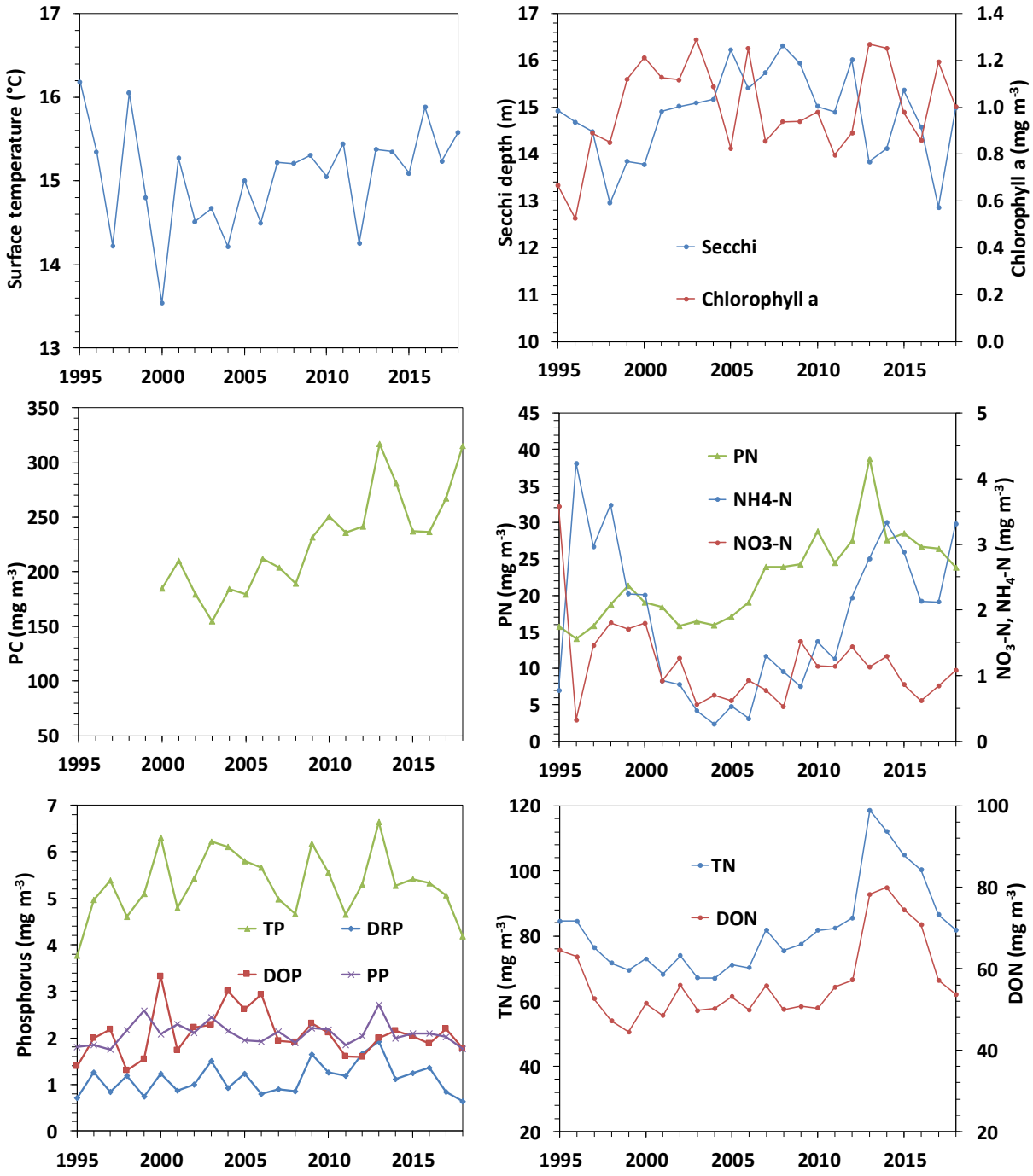

Figure 18: Annual means for temperature, Secchi depth, and concentrations of nutrients and chlorophyll *a* in the upper 10 m water layer since 1995.

3.6 Nutrient accumulation in the hypolimnion

During summer when the lake is stratified (i.e., does not mix vertically) organic material sinks out from the phototrophic layer followed by decomposition in bottom water. As a result, dissolved nutrients (mainly NO_3-N and DRP) accumulate in the hypolimnion. During the winter overturn, these accumulated nutrients are mixed through the entire water column and their concentrations drop in the hypolimnion. In contrast, NH_4 concentrations in the bottom water often increase during the

winter overturn because of mixing with shallower water where NH_4 concentrations are higher during summer than in the hypolimnion. Whereas NO_3 gets mixed upward during winter, NH_4 gets mixed down in the water column. During summer, NH_4-N concentrations in bottom water remain low probably because of nitrification at the sediment-water interface. NO_3-N and DRP accumulate in a low ratio (around 5), as a result of denitrification.

Longer mixing seasons may result in higher wintertime algal biomass by delaying the accumulation of dissolved nutrients in the bottom water in spring and keeping them available for algal growth in the surface layer, explaining the correlation between the mean winter temperature depth gradient and wintertime chlorophyll concentrations (Figure 10B).

The maximum hypolimnetic NO_3-N and DRP concentrations reached before the winter mixing started in August 2018, were above average for NO_3-N and below average for DRP (Figure 19). The low hypolimnetic nutrient concentrations during winter in 2018 suggested complete mixing during the winter period, as was also shown by temperatures and oxygen, and unlike the previous monitoring year. There was an unusually high peak in NH_4-N concentration in October, soon after the mixing. In June 2019 the DRP concentration (30 mg m^{-3}) almost twice the highest annual maximum that has been measured to date (16 mg m^{-3}). Although hypolimnetic concentrations are expected to be high around this time, the exceptionally high DRP concentration is difficult to explain because NO_3-N was unusually low (0.5 mg m^{-3}) in the same sample. However, the NH_4-N concentration was also high in this sample (9 mg m^{-3}).

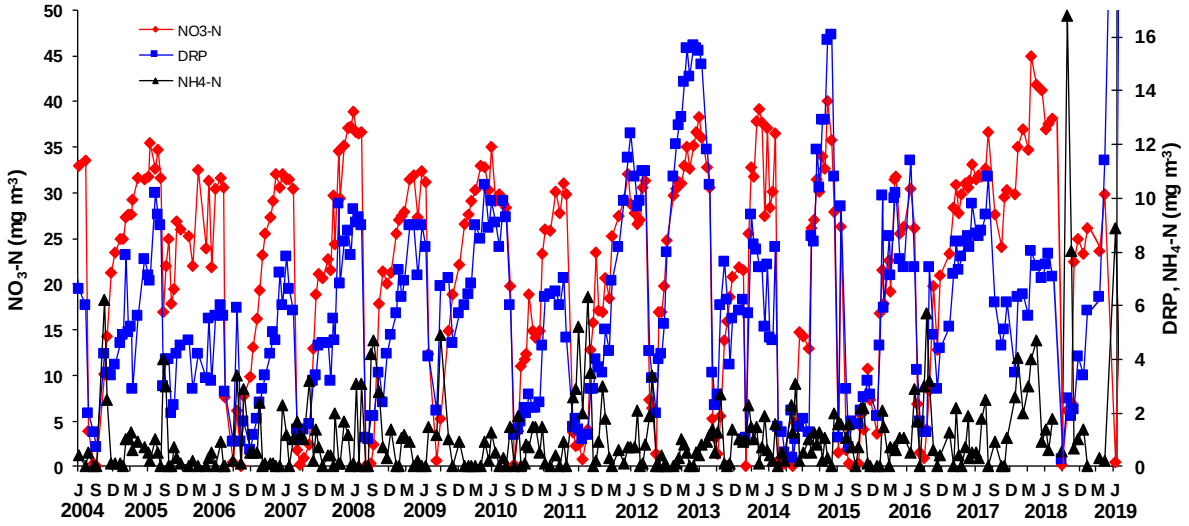

Figure 19: Time series bottom water nutrient data. DRP, NO_3-N and NH_4-N concentrations in the hypolimnion (150 m depth) of Lake Taupo since winter mixing of 2004. The DRP concentration of 30 mg m^{-3} on 26 June 2019 is outside the range of the right vertical axis.

4 Summary

The maximum water temperature at 10 m depth in the summer of 2019 was 21.1°C, lower than the previous year (21.7 °C, the highest on record), while the maximum surface temperature (21.3°C) was above the average (20.4 °C).

The winter water temperature minima at 0 and 10 m depth in the winter of 2018 (11.4°C and 11.2°C, respectively) were higher than all years since records start, with the exception of two years (1998 and 1999). Nevertheless, oxygen concentrations, temperatures and bottom water nutrient concentrations indicated full water column mixing in the winter of 2018, unlike the previous monitoring year. The mixing season, as defined by the water column temperature gradient, lasted about 5 weeks. However, the average temperature difference between surface and bottom water layers during winter was above the long-term average. As was the case in previous monitoring years, mixed layers and the thermocline were most clearly defined in the cooling part of the year, from February to June.

The winter 2018 mean water surface temperature, 11.7°C, was 0.3°C above the long-term average and the summer 2019 mean, 20.9°C, was 1.5°C above the long-term average. However, there were no statistically significant trends since 1995 in summer (January-March), winter (July-September) or annual mean water surface temperatures.

During July 2018 oxygen at 150 m dropped to 6.4 g m^{-3}, before winter mixing increased the bottom water oxygen concentrations. Oxygen concentrations in the hypolimnion had only been lower in 2001.

There was a statistically significant correlation between the winter mean chlorophyll *a* and the winter mean temperature difference between shallow and deep water layers, with low temperature gradients during winters associated with enhanced algal growth. Longer mixing seasons may result in higher wintertime algal biomass by delaying the accumulation of dissolved nutrients in the bottom water in spring and keeping them available for algal growth in the surface layer, explaining the correlation between the mean winter temperature depth gradient and wintertime chlorophyll concentrations.

Secchi depth was highest in February 2019, 23 m, which is 4 m higher than the previous monitoring year, coinciding with fairly low chlorophyll *a* (0.3 mg m^{-3}, similar to the minimum in the previous monitoring year). The maximum Secchi depth was above the long-term annual mean maximum Secchi depth, 19.3 m.

Total, dissolved organic and particulate nitrogen peaked in 2013 and decreased almost every year since then. Also, total phosphorus, and its various forms, has declined since 2013.

The maximum hypolimnetic NO_3-N and DRP concentrations reached before the winter mixing started in August 2018, were above average for NO_3-N and below average for DRP. The low hypolimnetic nutrient concentrations during winter in 2018 suggested complete mixing during the winter period, as was also shown by temperatures and oxygen, unlike the previous monitoring year. In June 2019 an hypolimnetic DRP concentration was recorded (30 mg m^{-3}) almost twice the highest annual maximum recorded to date (16 mg m^{-3}). Although hypolimnetic concentrations are expected to be high around this time, the exceptionally high DRP concentration is difficult to explain as in the same sample NO_3-N was unusually low (0.5 mg m^{-3}). However, the NH_4-N concentration was also high in this sample (9 mg m^{-3}).

5 Acknowledgements

Heath Cairns and employees of the Taupo Harbourmaster's Office carried out the field work.

Water samples were processed in the NIWA chemistry laboratory and analytical results were provided by Graham Bryers, Margaret McMonagle, and team. Quality control was provided by Mike Crump, Lab Manager. Phytoplankton dominance and enumeration results were provided by Karl Safi and Helen Brider from NIWA Algal Services.

6 Glossary of abbreviations and terms

BOD	Biochemical Oxygen Demand: the rate of oxygen consumption associated with biological decomposition and chemical processes and in the water column.
VHOD	Volumetric Hypolimnetic Oxygen Demand: the net rate of oxygen loss associated with biological, chemical and physical processes in the hypolimnion of a lake in the absence of a temperature change.
Phytoplankton	Microscopic free-floating aquatic plants (algae).
Cyanobacteria	Blue-green algae. These are potentially toxic. They can adjust their depth in the water column using small gas bladders (gas vacuoles), and some species can use (i.e., fix) atmospheric nitrogen for growth when nutrient nitrogen in the water column is depleted.
Zooplankton	Small to microscopic free-swimming aquatic animals which graze on phytoplankton or smaller zooplankton.
Biomass	The living mass of the phytoplankton or zooplankton populations.
Thermal stratification	Separation of a water column into two layers by temperature – warmer water on top.
Thermocline	The boundary zone or temperature gradient between the two layers in a thermally stratified water column.
Epilimnion	The upper water column in a thermally stratified water column.
Hypolimnion	The lower water column in a thermally stratified water column.
Metalimnion	The thermocline zone — of variable thickness.
Euphotic zone	The upper water column in which there is sufficient light for photosynthesis and hence phytoplankton growth.
Euphotic depth	Lower limit of phytoplankton growth where light levels are 1% of surface irradiance.
Hydrothermal eruption	Sudden release of superheated water from volcanic vents in the bed of the lake. The source Is most likely infiltrating lake water heated by hot rocks. The heated water includes dissolved salts leached from the rocks and sediment.
Nutrients	Essential dissolved inorganic nitrogen and phosphorus compounds which can be used directly by plants for growth.
Ammoniacal nitrogen	Sum of ammonium ion (NH_4^+) plus free (unionised) ammonia (NH_3). Some amines (NH_2^-) may be included as interference during analysis. Symbol, NH_4-N.
Nitrate nitrogen	Used in this report as the sum of nitrate (NO_3^-) plus nitrite (NO_2^-). Symbol, NO_3-N.

DIN	Dissolved Inorganic Nitrogen: the sum of NH_4-N + NO_3-N.
DON	Dissolved Organic Nitrogen: the soluble nitrogen other than DIN.
PN	Particulate Nitrogen: includes phytoplankton and other detritus.
TN	Total Nitrogen: Sum of DIN + DON + PN.
NO_x	Gaseous oxides of nitrogen, including N_2O, NO, NO_2.

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Appendix 1 - Site map, sampling strategy and methods

Site map

Lake monitoring sites were originally established using land-based markers (Figure 20). These have now been defined using GPS and corrected for curvature using WGS84 convention.

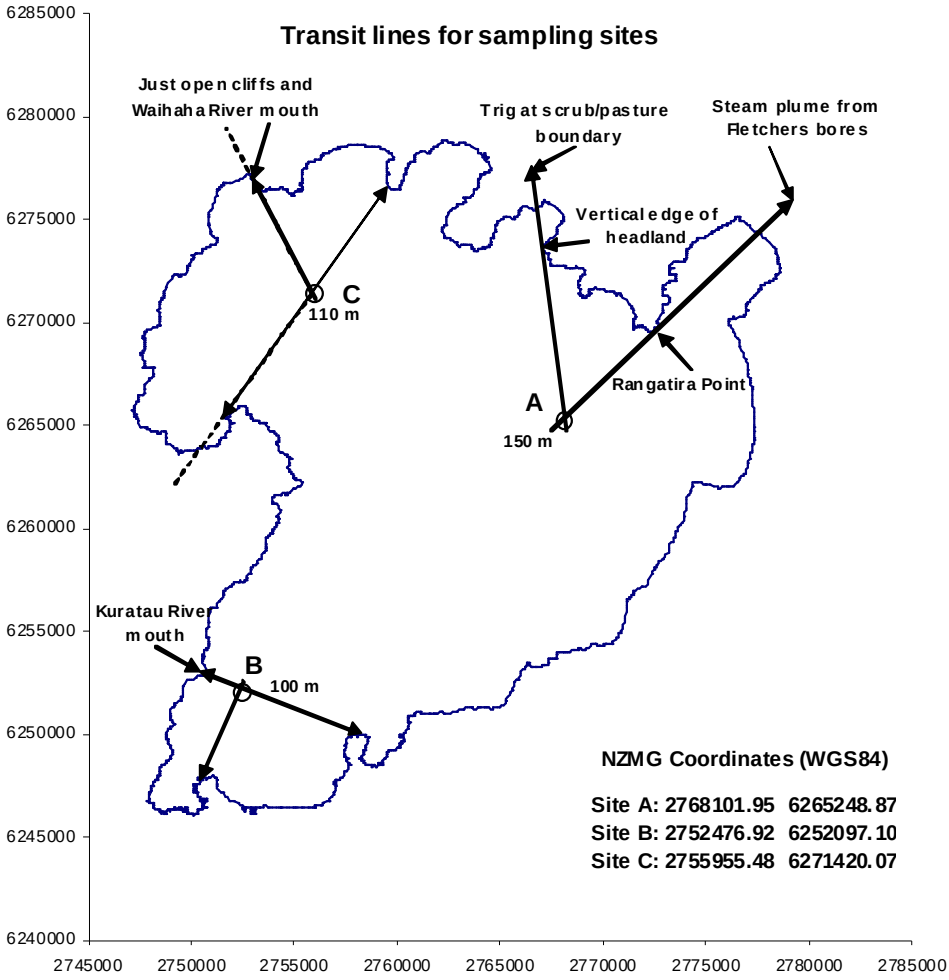

Figure 20: Site map of Lake Taupo. Site map of Lake Taupo showing location of the routine monitoring site at mid lake (A). Two additional sites at Kuratau Basin (B) and the Western Bays (C) were sampled between January 2002 and December 2004 inclusive. Data from those sites have been retained with the Site A data presented in the appendices. Map coordinates are in NZ Map Grid with WGS84 correction. Lat. Long WGS 84 corrected co-ordinates of "Site A" are 38° 46'.810 S; 175° 58'.440 E.

The following section has been copied from Gibbs 1995, and was modified after 1998.

Methods

The sampling site was selected in the central basin of Lake Taupo (Site Map) with a water depth of about 160 m. This site is more than 5 km from the nearest land.

For the monitoring of Lake Taupo, which mixes in winter between July and October, a full water column sampling is carried out in spring, to give sufficient time for thermal stratification to establish a stable hypolimnion. Autumn sampling is generally done in April, before lake surface cooling breaks down the thermocline leading to the winter mixing.

At each of these biannual samplings, a detailed profile of DO and temperature was measured. Prior to 1998, measurements were made at 1 m depth intervals through the full depth of the water column using an in situ recording Applied Microsystems STD-12 profiler fitted with a Royce DO sensor, and compared with manual measurements of DO and temperature made at 10 m depth intervals from the surface to the bottom of the lake using a Yellow Springs Instrument (YSI) model 58 dissolved oxygen meter fitted with a stirred Model 5739 probe on a 160 m cable. Subsequent to 1998, a Richard Brancker Research (RBR) model TD410 conductivity-temperature-depth (CTD) profiler fitted with a stirred YSI model 5739 DO sensor was used. In January 2002, the TD410 CTD profiler was upgraded to an RBR model XR420f freshwater CTD profiler fitted with the YSI model 5739 DO sensor and a Seapoint chlorophyll fluorescence probe. The DO sensor was calibrated regularly by NIWA, Rotorua staff and chlorophyll fluorescence was converted to chlorophyll *a* from extracted chlorophyll *a* analyses of water samples collected beside the profiler.

In January 2008, the XR420f profiler was upgraded to a RBR model XR620f freshwater profiler/logger with improved sensitivity. The new profiler is fitted with a Sea Point chlorophyll fluorescence probe and a Li-Cor underwater photosynthetically active radiance (PAR) sensor to measure in situ light levels and light extinction (Kd) associated with the vertical distribution of algal biomass within the lake water column. In the new system the YSI dissolved oxygen (DO) sensor was replaced with an Oxyguard DO sensor, with a temperature sensor, fitted to a separate RBR logger attached to the profiling frame.

Cross-calibration between the two profilers confirmed the quality of the data and the XR420f was retained as a back-up.

In February 2016 the depth profiler was upgraded to a RBR Maestro profiler/logger, now with all new sensors integrated in the same instrument. The logger includes temperature, freshwater conductivity, turbidity, CDOM, chlorophyll, and fast response oxygen sensors, and Wi-fi download.

The following parameters were also measured (or calculated from component parameters) as profiles from water samples collected using a van Dorn water sampling bottle starting at 1 m and then at 10 m intervals from 10 m to the bottom of the lake:

DO, chlorophyll *a*, dissolved reactive phosphorus (DRP), dissolved organic phosphorus (DOP), particulate phosphorus (PP), total phosphorus (TP), nitrate+nitrite nitrogen (NO_3-N)*, ammoniacal nitrogen (NH_4-N), dissolved organic nitrogen (DON), particulate nitrogen (PN), total nitrogen (TN), urea nitrogen (Urea-N), total suspended solids (SS), volatile suspended solids (VSS), particulate carbon (PC) and dissolved organic carbon (DOC). (* Little, if any, nitrite is ever found in the Lake Taupo water column, hence the use of NO_3-N in the report).

Note: TN and TP values are the summation of all other N and P components, respectively, excluding Urea-N which is part of the DON component. DON and DOP are calculated as the total dissolved nutrient minus the inorganic dissolved nutrients.

Additional parameters measured but not as complete profiles were:

Water clarity (by Secchi disc depth) and algal species composition and abundance on water samples from 1, 10, 50, 100, and 150 m.

Determinations on the water samples were made with the standard methods routinely used for freshwater analysis by NIWA on a Lachat FIA flow injection analyser and C/N analyser.

Algal species composition and abundance were obtained by settling a measured volume of sample (up to 100 mL) in Utermöhl tubes and counting on an inverted microscope. Biovolume was estimated from cell volume tables calculated from the cell dimensions of each species. Dominance was estimated from relative biovolumes with the highest biovolume assigned dominance 1 as most common and the lowest biovolume assigned the dominance 10 as rare. Professional judgement was used to relate dominance between samplings.

Since 2007, dominance is no longer used and the algal data are reported in cell counts and biovolume.

Data for the long term monitoring programme were scheduled to be collected from the mid-lake sampling station at 2 weekly intervals. The practicality of achieving this target was limited by the weather and in reality, data were generally collected at about 2-3 weekly intervals. Parameters measured were:

DO and temperature profiles at 1 m depth intervals to the bottom of the lake by RBR profiler, water clarity as Secchi disc depth, and a 10 m tube water sample was collected for measurement of chlorophyll *a*, NO_3-N, NH_4-N, , DRP, TDN, TDP, PP, PN, PC, and algal species dominance. TN and TP were calculated as the sum of their components. Chlorophyll fluorescence, conductivity, and PAR data from the profiler are archived but not routinely included in this report.

From 2000, near-bottom water samples from 150 m were collected using a van Dorn water sampling bottle and analysed for DRP, NO_3-N, and NH_4-N.

Data handling and less than detection limit values

All data in this report have been processed and manipulated on Excel spreadsheets. Contour plots were made in Surfer. For the calculation of annual means and long term trends, results below the detection limit (<DL) were replaced by a value of half of the detection limit. These changes were not made in the data sheets in de appendices.

Statistical methods

Copied from Gibbs (2005).
In this report we have used linear regressions and associated statistical tests to examine trends. The key result of these procedures is the coefficient of determination (R^2), which measures the amount of variability in the data that is accounted for by the regression. Another is the p-value (defined as the probability of obtaining a trend at least as extreme as was obtained if in fact there was no trend at all). This can be used as a weight of evidence against the hypothesis that there was in fact no trend

(or rather, an opposite trend since there will always be a trend in continuous environmental data with sufficient resolution). This weight is strong when p is small, meaning that a trend at least as large as that measured could have occurred merely by chance—we have only a limited number of data from which to infer the strength of any trend, so our measurements always are uncertain to some degree. So, if p is low enough (taken as less than 5% in this report, which is the usual practice), it is conventional to say that the measured trend is "statistically significant", and that convention is followed in this report. However, it is important (and often not realised) to note that the p-value cannot be used as an absolute weight of evidence. This is because it tends to decrease as the number of samples taken in a given period is increased.

Appendix 2 - Temperature and dissolved oxygen data

Includes accumulated data since 1994.

* represents data missing or invalid.

For completeness, additional data from Kuratau Basin (Site B) and Western Bays (Site C) collected for the period between January 2002 and December 2004 are included as separate sheets following the mid-lake data from Site A for those years.

NOTE following July 2018 sampling the Maestro CTD profiler (80282) was returned to Hamilton for testing then sent to RBR for calibration of the DO meter as well as retrofitting a new data port. The profiler was away until February 2019, during this time another CTD profiler (18058) was used.

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database.													2018-2019	
Mid-Lake site A														
CTD Profiler														
Temperature				Trace metal program			Trace metal program							
Date	5/07/2018	25/07/2018	28/08/2018	19/09/2018	16/10/2018	31/10/2018	14/11/2018	10/12/2018	8/01/2019	31/01/2019	20/02/2019	4/04/2019	2/05/2019	26/06/2019
Depth (m)														
0	11.82	11.39	11.67	11.81	12.67	13.85	16.25	17.19	20.29	21.28	21.14	19.62	16.20	12.65
10	11.82	11.43	11.21	11.68	12.65	13.79	14.61	16.78	18.70	19.98	21.12	19.63	16.21	12.70
20	11.82	11.43	11.19	11.63	12.60	12.65	12.79	15.11	17.97	19.51	20.43	19.61	16.21	12.70
30	11.82	11.43	11.18	11.40	11.95	12.39	12.22	13.03	13.15	13.71	15.32	15.20	14.71	12.70
40	11.82	11.43	11.17	11.22	11.47	11.98	12.07	12.41	12.16	12.34	12.43	12.66	12.32	12.70
50	11.81	11.43	11.17	11.21	11.39	11.56	11.69	11.75	11.58	11.85	11.88	11.76	11.67	12.37
60	11.81	11.43	11.17	11.17	11.23	11.28	11.46	11.45	11.29	11.50	11.57	11.46	11.48	11.53
70	11.82	11.43	11.17	11.14	11.16	11.21	11.28	11.24	11.18	11.33	11.36	11.32	11.33	11.39
80	11.45	11.44	11.17	11.12	11.12	11.16	11.22	11.17	11.14	11.22	11.24	11.25	11.24	11.33
90	11.38	11.44	11.17	11.11	11.11	11.14	11.17	11.14	11.14	11.17	11.18	11.22	11.22	11.29
100	11.33	11.44	11.16	11.10	11.10	11.13	11.13	11.13	11.12	11.15	11.17	11.18	11.21	11.27
110	11.30	11.43	11.16	11.09	11.09	11.14	11.10	11.12	11.12	11.14	11.17	11.17	11.19	11.25
120	11.30	11.37	11.16	11.09	11.08	11.13	11.09	11.10	11.11	11.13	11.15	11.15	11.18	11.25
130	11.29	11.33	11.16	11.08	11.07	11.13	11.08	11.10	11.11	11.12	11.14	11.14	11.16	11.24
140	11.29	11.32	11.16	11.05	11.06	11.10	11.08	11.10	11.10	11.11	11.13	11.13	11.16	11.22
150	11.28	11.32	11.16	11.03	11.06	11.10	11.08	11.11	11.11	11.11	11.13		11.16	11.21
Dissolved Oxygen (g m^{-3})														
0	9.50	9.31	11.34	11.56	11.31	10.90	10.51	8.39	9.24	9.00	8.80	8.88	9.54	10.36
10	9.51	9.31	11.26	11.54	11.30	10.90	10.79	10.09	9.63	9.29	8.85	8.93	9.42	9.74
20	9.48	9.30	11.08	11.52	11.28	11.18	11.07	10.67	9.86	9.34	9.16	8.89	9.41	9.72
30	9.48	9.31	10.93	11.43	11.32	11.28	10.97	11.20	11.11	11.12	9.97	9.54	9.26	9.73
40	9.47	9.29	10.87	11.25	11.10	11.20	10.87	10.95	10.65	10.79	10.11	9.56	9.15	9.74
50	9.48	9.29	10.79	11.19	10.96	10.95	10.76	10.59	10.31	10.32	9.58	8.85	8.60	9.72
60	9.48	9.28	10.75	11.05	10.74	10.69	10.62	10.43	10.15	9.99	9.17	8.68	8.52	8.07
70	9.46	9.27	10.75	11.01	10.63	10.56	10.48	10.29	10.05	9.87	9.15	8.62	8.46	7.88
80	7.59	9.21	10.77	10.96	10.61	10.53	10.43	10.13	9.96	9.82	9.04	8.38	8.16	7.74
90	7.15	9.16	10.72	10.93	10.57	10.46	10.30	10.06	9.85	9.73	8.60	8.44	7.94	7.63
100	7.09	9.20	10.71	10.88	10.54	10.39	10.38	9.87	9.83	9.54	8.46	8.26	7.95	7.54
110	6.80	9.12	10.72	10.82	10.49	10.12	10.12	9.77	9.32	9.59	8.46	7.92	8.02	7.43
120	6.71	7.38	10.69	10.78	10.44	10.15	10.03	9.67	9.42	9.30	8.54	8.14	7.84	7.36
130	6.72	6.73	10.70	10.79	10.26	9.89	9.84	9.27	9.05	9.09	8.49	8.25	7.79	7.20
140	6.66	6.72	10.70	10.88	9.93	9.64	9.71	9.24	8.76	8.82	8.16	7.89	7.10	7.12
150	6.45	6.41	10.72	10.45	9.75	9.60	9.60	9.19	8.70	8.59	7.90		7.02	7.13
Secchi Depth (m)	12.5	15			12	15		19	19	18	23	16	22	17

Lake taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2017-2018**

Mid-Lake site A

Temperature

Date

												trace metal program			
Depth (m)	18/07/2017	7/08/2017	21/08/2017	27/09/2017	31/10/2017	14/11/2017	9/01/2018	24/01/2018	19/02/2018	26/03/2018	5/04/2018	26/04/2018	1/05/2018	31/05/2018	19/06/2018
0	11.66	11.24	11.32	11.62	13.72	14.49	18.74	21.02	22.03	19.87	18.83	16.27	15.94	13.27	12.55
10	11.67	11.24	11.21	11.62	13.57	14.08	18.33	19.78	21.66	19.87	18.81	15.95	15.88	13.28	12.55
20	11.67	11.23	11.20	11.61	13.17	13.88	16.69	17.81	18.65	19.09	18.80	15.91	15.79	13.28	12.55
30	11.67	11.23	11.20	11.60	12.40	13.48	14.70	14.54	15.06	19.01	16.45	15.90	15.78	13.28	12.55
40	11.66	11.23	11.20	11.34	11.96	11.81	12.69	12.55	12.74	15.66	12.93	13.23	13.60	13.24	12.55
50	11.62	11.23	11.19	11.26	11.63	11.41	11.81	11.77	11.99	12.97	12.09	12.01	12.04	11.79	12.44
60	11.58	11.23	11.20	11.22	11.27	11.27	11.38	11.46	11.48	12.13	11.61	11.56	11.63	11.51	11.77
70	11.42	11.23	11.19	11.18	11.20	11.21	11.23	11.34	11.33	11.61	11.41	11.38	11.43	11.41	11.44
80	11.23	11.23	11.19	11.17	11.15	11.14	11.20	11.24	11.26	11.41	11.31	11.31	11.34	11.36	11.37
90	11.06	11.23	11.19	11.14	11.13	11.12	11.18	11.20	11.22	11.31	11.26	11.26	11.29	11.31	11.35
100	11.04	11.23	11.17	11.13	11.10	11.09	11.16	11.18	11.20	11.24	11.22	11.24	11.26	11.28	11.31
110	11.04	11.09	11.16	11.12	11.08	11.09	11.15	11.17	11.18	11.21	11.19	11.22	11.23	11.25	11.29
120	11.02	11.03	11.14	11.11	11.07	11.08	11.14	11.16	11.17	11.19	11.19	11.21	11.22	11.24	11.27
130	11.01	11.02	11.09	11.10	11.06	11.07	11.13	11.16	11.16	11.18	11.18	11.19	11.20	11.22	11.27
140	10.99	11.02	11.05	11.09	11.05	11.06	11.12	11.14	11.15	11.17	11.17	11.18	11.18	11.21	11.26
150	10.98	11.02	11.04	11.07	11.05	11.06	11.13	11.13	11.14		11.17	11.18	11.18	11.21	11.26

Dissolved Oxygen (g m^{-3})

												trace metal program			
	18/07/2017	7/08/2017	21/08/2017	27/09/2017	31/10/2017	14/11/2017	9/01/2018	24/01/2018	19/02/2018	26/03/2018	5/04/2018	26/04/2018	1/05/2018	31/05/2018	19/06/2018
0	9.64	9.50	9.85	10.10	10.27	10.28	9.11	8.57	8.44	8.81	9.24	9.13	9.12	9.31	9.46
10	9.63	9.49	9.82	10.07	10.25	9.87	8.88	8.90	8.50	8.81	8.86	9.11	9.15	9.34	9.45
20	9.62	9.45	9.75	10.05	10.28	9.85	9.18	9.23	9.13	8.86	8.84	9.10	9.11	9.32	9.44
30	9.59	9.45	9.73	10.04	10.13	9.88	9.65	9.62	9.48	8.85	8.99	9.08	9.08	9.30	9.43
40	9.57	9.44	9.72	9.78	10.11	9.55	9.42	9.43	9.23	9.06	8.82	8.93	8.84	9.28	9.40
50	9.47	9.42	9.69	9.67	9.72	8.92	8.90	8.98	8.83	8.96	8.45	8.43	8.37	8.01	9.07
60	9.39	9.42	9.66	9.56	9.13	8.73	8.71	8.77	8.55	8.64	8.44	7.90	8.17	7.74	7.81
70	8.85	9.43	9.63	9.34	8.65	8.65	8.48	8.59	8.44	8.43	8.22	7.79	7.81	7.53	7.43
80	7.90	9.40	9.61	9.17	8.58	8.73	8.33	8.46	7.97	8.30	8.05	7.99	7.79	7.49	7.28
90	7.56	9.34	9.52	8.84	8.45	8.64	8.31	8.20	7.87	8.21	7.98	7.81	7.87	7.45	7.26
100	7.42	9.32	9.09	8.70	8.37	8.50	8.14	8.07	7.96	8.04	7.87	7.72	7.58	7.31	7.11
110	7.39	7.61	8.95	8.57	8.42	8.40	8.04	7.91	7.83	7.78	7.60	7.31	7.34	7.13	6.97
120	7.33	7.13	8.06	8.31	8.35	8.31	8.07	7.94	7.70	7.62	7.23	7.18	7.27	7.04	6.93
130	7.26	7.07	7.44	8.26	8.28	8.21	7.94	7.90	7.60	7.42	7.07	7.18	7.24	6.80	6.75
140	7.22	6.97	7.10	8.15	8.11	8.05	7.66	7.45	7.45	6.91	6.91	6.88	7.10	6.53	6.74
150	7.07	6.93	6.71	7.87	7.99	7.85	7.60	7.23	7.09		6.61	6.61	6.55	6.51	6.65

Lake taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. 2016-2017

Mid-Lake site A

Temperature

Date

Depth (m)	6/07/2016	27/07/2016	10/08/2016	23/08/2016	12/09/2016	27/09/2016	11/10/2016	1/11/2016	22/11/2016	24/11/2016	8/12/2016	26/01/2017	16/02/2017	1/03/2017	16/03/2017	28/03/2017	18/04/2017	19/04/2017	3/05/2017	16/05/2017	29/05/2017	15/06/2017	19/06/2017	19/06/2017	28/06/2017
0	12.574	11.533	11.016	10.951	11.164	11.591	12.440	13.475	14.372	15.182	16.490	17.262	18.661	20.569	19.340	18.961	17.855	17.700	16.730	15.309	14.566	13.110	13.019	13.014	12.787
10	12.582	11.513	11.026	10.934	10.967	11.508	12.037	13.319	13.708	13.992	16.038	17.250	18.652	20.404	18.702	18.709	17.780	17.719	16.736	15.315	14.310	13.055	13.021	13.017	12.727
20	12.581	11.513	11.027	10.934	10.952	11.184	11.978	13.274	13.606	13.388	14.615	17.251	18.553	18.749	18.668	18.556	17.762	17.720	16.736	15.299	14.295	13.050	13.015	13.015	12.725
30	12.582	11.511	11.027	10.930	10.930	11.056	11.804	12.368	13.215	12.635	14.170	17.130	17.942	16.517	16.937	16.987	17.756	17.720	16.728	15.271	14.294	13.040	13.014	13.011	12.726
40	12.579	11.511	11.025	10.931	10.901	10.945	11.138	11.775	13.062	11.970	12.444	13.336	13.098	13.557	13.745	13.120	13.840	13.742	13.237	12.813	14.289	13.033	13.003	12.995	12.724
50	12.542	11.511	11.026	10.928	10.880	10.901	10.996	11.176	11.595	11.321	11.266	11.934	11.947	11.576	12.252	11.779	11.993	12.106	11.744	11.819	12.220	13.022	12.929	12.926	12.725
60	11.177	11.509	11.029	10.927	10.861	10.860	10.905	10.951	11.118	11.064	10.959	11.241	11.267	11.167	11.383	11.229	11.410	11.340	11.220	11.332	11.316	12.477	11.558	11.896	12.636
70	11.019	11.513	11.029	10.927	10.860	10.841	10.875	10.911	10.947	10.936	10.898	11.021	11.022	11.006	11.079	11.044	11.114	11.070	11.089	11.095	11.119	11.301	11.238	11.229	11.394
80	10.938	11.513	11.031	10.926	10.854	10.823	10.846	10.865	10.894	10.879	10.869	10.940	10.949	10.983	10.972	10.955	11.015	11.000	11.015	11.000	11.049	11.129	11.162	11.105	11.164
90	10.887	11.513	11.032	10.923	10.851	10.816	10.841	10.840	10.869	10.856	10.854	10.906	10.920	10.930	10.933	10.933	10.968	10.960	10.968	10.970	11.023	11.063	11.082	11.044	11.119
100	10.865	11.327	11.033	10.922	10.849	10.790	10.830	10.825	10.858	10.838	10.838	10.881	10.899	10.901	10.912	10.933	10.936	10.941	10.937	10.962	10.992	11.010	11.022	11.017	11.094
110	10.856	11.157	11.030	10.922	10.845	10.783	10.812	10.816	10.849	10.818	10.831	10.864	10.889	10.892	10.899	10.925	10.921	10.924	10.923	10.947	10.973	10.997	11.002	11.001	11.068
120	10.844	11.066	11.029	10.922	10.842	10.771	10.798	10.802	10.842	10.808	10.817	10.855	10.877	10.885	10.888	10.912	10.905	10.912	10.915	10.943	10.964	10.991	10.977	10.978	11.046
130	10.838	11.028	11.027	10.921	10.842	10.770	10.782	10.792	10.833	10.799	10.812	10.846	10.868	10.875	10.880	10.904	10.899	10.905	10.910	10.927	10.954	10.981	10.963	10.967	11.009
140	10.829	10.981	10.970	10.921	10.828	10.770	10.775	10.788	10.831	10.792	10.808	10.842	10.859	10.868	10.877	10.886	10.899	10.904	10.905	10.916	10.937	10.967	10.945	10.953	10.972
150	10.829	10.921	10.944	10.919	10.808	10.760	10.762	10.778	10.814	10.794	10.808	10.844	10.859	10.864	10.874	10.878	10.898	10.902	10.905	10.912	10.927	10.958	10.947	10.949	10.961

Dissolved Oxygen (g m^{-3})

	6/07/2016	27/07/2016	10/08/2016	23/08/2016	12/09/2016	27/09/2016	11/10/2016	1/11/2016	22/11/2016	24/11/2016	8/12/2016	26/01/2017	16/02/2017	1/03/2017	16/03/2017	28/03/2017	18/04/2017	19/04/2017	3/05/2017	16/05/2017	29/05/2017	15/06/2017	19/06/2017	19/06/2017	28/06/2017
0	10.347	10.487	10.230	10.092	10.324	10.454	10.264	10.590	9.700		9.651	9.433	9.053	8.719	8.881	8.907	8.969	8.855	9.093	9.285	9.510	9.520	9.500		9.520
10	10.326	10.344	10.128	9.974	10.158	10.241	10.188	10.231	9.539		9.677	9.261	9.029	8.740	8.844	8.904	8.9363	8.869	9.014	9.243	9.440	9.452	9.494		9.493
20	10.209	10.142	9.985	9.880	10.087	10.014	10.149	10.142	9.539		9.733	9.162	8.974	9.096	8.819	8.894	8.8945	8.880	9.015	9.204	9.374	9.416	9.485		9.498
30	10.089	10.033	9.880	9.768	9.959	9.946	10.152	10.108	9.579		9.678	9.146	8.937	9.141	8.826	8.799	8.8669	8.881	9.007	9.181	9.344	9.389	9.488		9.491
40	9.991	9.992	9.830	9.695	9.883	9.784	9.899	9.731	9.596		9.228	9.096	8.594	9.119	8.947	8.846	8.5863	8.430	8.309	8.319	9.330	9.380	9.471		9.484
50	9.963	9.954	9.755	9.671	9.858	9.690	9.719	9.474	9.102		8.786	8.670	8.341	8.844	8.804	8.631	8.5589	8.540	8.434	8.380	8.392	9.371	9.383		9.490
60	8.533	9.915	9.633	9.610	9.784	9.642	9.605	9.270	9.006		8.867	8.643	8.310	8.798	8.684	8.614	8.4790	8.519	8.357	8.314	8.171	8.955	8.399		9.466
70	8.407	9.906	9.596	9.627	9.760	9.601	9.546	9.272	8.923		8.953	8.601	8.369	8.717	8.691	8.565	8.4577	8.385	8.365	8.237	8.216	8.031	8.048		7.998
80	8.303	9.896	9.564	9.605	9.733	9.607	9.527	9.327	8.941		8.955	8.608	8.307	8.702	8.661	8.485	8.3852	8.336	8.278	8.129	7.990	7.956	8.019		7.899
90	8.282	9.887	9.521	9.640	9.724	9.608	9.540	9.319	8.891		8.937	8.650	8.299	8.597	8.584	8.309	8.3019	8.303	8.278	7.960	7.930	7.842	7.932		7.620
100	8.147	9.021	9.479	9.642	9.719	9.584	9.539	9.267	8.864		8.951	8.540	8.298	8.557	8.512	8.271	8.2271	8.292	8.171	7.932	7.757	7.710	7.813		7.308
110	7.998	8.649	9.418	9.638	9.706	9.578	9.536	9.288	8.839		8.845	8.474	8.269	8.343	8.404	8.250	8.0697	8.238	8.156	7.837	7.611	7.572	7.770		7.355
120	7.820	8.164	9.399	9.639	9.702	9.554	9.378	9.084	8.810		8.677	8.368	8.160	8.346	8.372	8.177	7.9872	8.039	8.058	7.785	7.407	7.385	7.625		7.375
130	7.706	7.988	9.361	9.646	9.702	9.558	9.388	8.892	8.775		8.543	8.292	8.014	8.330	8.239	8.059	7.9611	7.905	7.943	7.824	7.332	7.400	7.608		7.403
140	7.540	7.762	8.705	9.653	9.705	9.553	9.287	8.776	8.736		8.337	7.847	7.688	8.247	7.852	7.811	7.4755	7.575	7.678	7.551	7.606	7.414	7.274		7.259
150	7.467	7.566	7.858	9.613	9.718	9.429	9.201	8.684	8.562		8.325	7.831	7.426	7.616	7.783	7.547	7.4908	7.500	7.332	7.357	7.303	7.250	7.256		7.141

Secchi depth (m)

13	12	13	12.25	14.5	15.5	15	12	12.5	12.75	15	15	16	16	16.25	16.5	12.3	12.65	13	10.25	11	12.5	14.6	14.6	14.5

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. 2015-2016

Mid-Lake site A

Temperature																			
Date													New CTD	New CTD	New CTD	New CTD	New CTD	New CTD	New CTD
	2/07/2015	30/07/2015	13/08/2015	27/08/2015	17/09/2015	1/10/2015	15/10/2015	2/11/2015	19/11/2015	1/12/2015	7/01/2016	21/01/2016	3/02/2016	9/03/2016	22/03/2016	7/04/2016	19/04/2016	5/05/2016	2/06/2016
Depth (m)																			
0	11.59	11.04	10.84	10.78	10.79	11.65	12.33	13.42	13.96	16.27	18.30	19.68	22.21	20.66	19.79	19.03	18.31	17.11	14.62
10	11.61	11.04	10.83	10.77	10.79	11.13	12.28	13.04	13.93	15.53	18.21	19.62	21.42	20.67	19.81	19.00	18.28	17.11	14.62
20	11.61	11.04	10.82	10.76	10.79	10.92	12.06	12.89	13.86	14.47	17.92	18.90	17.84	20.67	19.81	19.00	18.28	17.11	14.63
30	11.60	11.04	10.82	10.76	10.79	10.88	11.99	12.17	13.39	13.74	14.73	14.81	14.62	16.17	15.41	16.23	16.40	17.10	14.62
40	11.58	11.04	10.83	10.77	10.79	10.83	11.03	11.67	12.53	11.76	12.58	12.27	12.17	12.77	12.31	12.92	12.47	13.28	14.60
50	11.57	11.05	10.82	10.77	10.79	10.79	10.85	10.92	11.92	11.14	11.31	11.51	11.43	11.45	11.44	11.53	11.59	11.84	11.32
60	11.57	11.05	10.83	10.77	10.73	10.77	10.80	10.77	11.50	10.86	11.02	11.07	11.06	11.04	11.10	11.13	11.13	11.20	11.05
70	11.55	11.05	10.83	10.77	10.70	10.75	10.75	10.74	10.93	10.78	10.88	10.88	10.92	10.92	10.92	10.95	10.95	10.94	10.93
80	11.50	11.05	10.83	10.77	10.70	10.74	10.72	10.73	10.85	10.78	10.81	10.83	10.83	10.85	10.85	10.86	10.86	10.88	10.87
90	11.43	11.05	10.83	10.77	10.70	10.70	10.71	10.72	10.77	10.75	10.77	10.79	10.79	10.81	10.83	10.82	10.83	10.87	10.85
100	11.38	11.05	10.82	10.77	10.69	10.70	10.70	10.71	10.75	10.74	10.75	10.79	10.76	10.80	10.80	10.80	10.81	10.85	10.83
110	11.36	11.05	10.82	10.77	10.69	10.66	10.69	10.71	10.73	10.74	10.74	10.77	10.75	10.78	10.78	10.78	10.79		10.82
120	11.25	11.06	10.82	10.77	10.69	10.66	10.68	10.70	10.72	10.72	10.74	10.76	10.74	10.78	10.77	10.77	10.78		10.81
130	11.12		10.82	10.77		10.66	10.68	10.70	10.71	10.71	10.74	10.75	10.73	10.77		10.76	10.77		10.80
140	11.05		10.82	10.77		10.64	10.67		10.70	10.71	10.72	10.74	10.73			10.76			10.79
150	11.01		10.81	10.77		10.63													

Dissolved Oxygen (g m^{-3})																			
0	10.78	10.94	11.02	11.07	10.92	10.35	10.76	10.43	10.24	9.74	9.39	9.13	8.30	8.95	9.26	9.86	9.74	9.60	10.11
10	10.57	10.90	10.72	10.77	10.81	9.57	10.77	10.36	10.23	9.61	9.42	9.19	8.28	8.78	9.01	9.85	9.44	9.44	9.93
20	10.72	10.85	10.76	10.77	10.88	9.53	10.81	10.45	10.28	9.87	9.44	9.22	9.02	8.78	9.01	9.81	9.38	9.39	9.76
30	10.77	10.89	10.69	10.77	10.80	9.42	10.84	10.44	10.29	9.78	9.48	9.34	9.15	9.46	9.42	9.89	9.41	9.35	9.70
40	10.79	10.83	10.66	10.70	10.81	9.38	10.66	10.35	10.32	9.74	9.68	9.63	9.06	8.86	8.90	9.24	8.81	8.97	9.65
50	10.84	10.83	10.68	10.67	10.79	9.31	10.62	10.18	10.24	9.52	9.53	9.66	8.85	8.64	8.75	8.90	8.74	8.71	8.78
60	10.75	10.80	10.67	10.66	10.72	9.29	10.45	9.98	10.10	9.41	9.35	9.66	8.77	8.68	8.82	8.86	8.68	8.73	8.87
70	10.71	10.82	10.63	10.64	10.66	9.23	10.43	9.96	9.92	9.35	9.34	9.52	8.73	8.68	8.85	8.75	8.58	8.66	8.75
80	10.61	10.85	10.62	10.67	10.66	9.19	10.28	9.85	9.80	9.19	9.24	9.33	8.75	8.40	8.78	8.79	8.61	8.26	8.46
90	10.60	10.77	10.61	10.65	10.65	9.14	10.29	9.83	9.77	9.17	9.26	9.26	8.76	8.64	8.53	8.54	8.41	8.03	8.45
100	10.30	10.82	10.63	10.66	10.68	9.07	10.19	9.81	9.62	9.13	9.18	9.03	8.79	8.34	8.49	8.57	8.42	7.94	8.41
110	10.17	10.74	10.65	10.65	10.77	9.08	10.20	9.80	9.57	9.09	9.18	8.93	8.66	8.29	8.56	8.34	8.31		8.10
120	9.61	10.74	10.66	10.66	10.69	9.07	10.13	9.73	9.49	8.93	9.11	8.82	8.65	8.25	8.50	8.47	8.10		8.08
130	8.89		10.68	10.63		9.05	10.09	9.75	9.37	8.93	9.11	8.74	8.19	8.35		8.06	7.88		7.97
140	8.52		10.66	10.61		8.99	10.00		9.29	8.96	8.92	8.47	8.13			7.94			7.76
150	8.12		10.61	10.63		8.99													

Secchi depth	2/07/2015	30/07/2015	13/08/2015	27/08/2015	17/09/2015	1/10/2015	15/10/2015	2/11/2015	19/11/2015	1/12/2015	7/01/2016	21/01/2016	3/02/2016	9/03/2016	22/03/2016	7/04/2016	19/04/2016	5/05/2016	2/06/2016
(m)	14.25	13	10	12.5	18.5	17.25	14.5	16	14	14.5	18	14	18	no secchi	17	15	14.75	14.2	14.3

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. 2014-2015

Mid-Lake site A

Temperature

Date	1/07/2014	21/07/2014	26/08/2014	9/09/2014	8/10/2014	20/10/2014	5/11/2014	25/11/2014	17/12/2014	14/01/2015	29/01/2015	12/02/2015	26/02/2015	9/03/2015	25/03/2015	21/04/2015	11/05/2015	27/05/2015	18/06/2015	2/07/2015
Depth (m)																				
0	12.86	11.76	11.48	12.06	11.15	12.91	13.34	14.63	15.43	20.35	20.91	19.47	20.00	20.08	19.11	17.15	15.63	13.79	12.34	11.59
10	12.87	11.51	11.08	11.17	11.18	12.76	12.83	13.58	15.41	20.17	20.87	19.32	20.00	19.64	18.94	17.07	15.66	13.69	12.35	11.61
20	12.87	11.50	11.07	11.12	11.18	11.44	12.55	13.44	15.33	16.18	17.05	18.85	18.09	19.61	18.92	17.03	15.65	13.68	12.35	11.61
30	12.88	11.50	11.06	11.03	11.18	11.27	12.46	13.32	13.91	13.82	14.27	14.16	14.92	14.72	15.30	15.20	15.66	13.67	12.35	11.60
40	12.88	11.50	11.05	10.99	11.17	11.23	12.06	12.49	13.02	12.60	12.67	12.73	13.41	12.84	12.98	12.80	15.63	13.67	12.35	11.58
50	12.88	11.49	11.05	10.99	11.18	11.20	11.82	11.58	11.92	11.86	11.80	11.99	12.32	11.75	11.88	11.78	12.19	13.65	12.35	11.57
60	12.85	11.46	11.05	10.99	11.17	11.20	11.57	11.31	11.37	11.38	11.44	11.59	11.55	11.43	11.52	11.29	11.52	13.57	12.35	11.57
70	11.66	11.42	11.05	10.98	11.16	11.20	11.38	11.25	11.22	11.25	11.30	11.40	11.44	11.26	11.32	11.11	11.15	11.77	12.15	11.55
80	11.53	11.39	11.05	10.98	11.15	11.19	11.25	11.20	11.18	11.19	11.25	11.27	11.29	11.23	11.29	11.01	11.04	11.48	11.20	11.50
90	11.44	11.37	11.04	10.97	11.14	11.18	11.18	11.16	11.14	11.16	11.19	11.23	11.22	11.20	11.24	10.97	10.98	11.36	11.12	11.43
100	11.40	11.36	11.04	10.97	11.13	11.18	11.14	11.14	11.12	11.13	11.16	11.20	11.19	11.19	11.24	10.94	10.95	11.23	11.05	11.38
110	11.37	11.36	11.04	10.97	11.13	11.17	11.13	11.11	11.10	11.12	11.15	11.17	11.17	11.18	11.20	10.91	10.93	11.08	11.02	11.36
120	11.36	11.35	11.04	10.96	11.11	11.17	11.12	11.09	11.10	11.11	11.13	11.13	11.15	11.18	11.19	10.90	10.93	11.03	11.00	11.25
130		11.35	11.04	10.95	11.09	11.14		11.07	11.09	11.11	11.11	11.12		11.16	11.15	10.89	10.91	11.00	10.99	11.12
140		11.35	11.04	10.95	11.05	11.10		11.06	11.09	11.10	11.11	11.11		11.15	11.15	10.88	10.90	10.98		11.05
150		11.35	11.03		11.00			11.05	11.08						11.15			10.95		11.01

Dissolved Oxygen (g m^{-3})

0	10.55	10.82	10.81	10.75	10.93	10.48	10.41	10.13	9.92	9.04	8.86	9.15	8.97	9.02	9.18	9.61	9.96	10.37	10.72	10.78
10	10.28	10.62	11.07	11.40	10.82	10.41	10.19	10.16	9.86	9.11	8.81	9.14	9.02	9.06	9.15	9.35	9.85	10.14	10.46	10.57
20	10.26	10.47	11.25	10.67	10.83	10.50	10.34	10.22	9.91	9.61	9.42	9.28	9.27	9.05	9.08	9.52	9.95	10.28	10.59	10.72
30	10.15	10.25	11.23	10.43	10.74	10.30	10.27	10.17	9.80	9.67	9.60	9.23	9.46	9.30	9.24	9.62	9.97	10.31	10.72	10.77
40	10.04	10.16	11.12	10.21	10.63	10.04	10.11	9.90	9.85	9.44	9.39	9.57	9.37	9.32	9.39	10.03	9.92	10.27	10.66	10.79
50	10.02	9.99	10.90	10.09	10.60	9.98	10.06	9.90	9.63	9.35	9.21	9.44	9.17	9.07	9.25	9.77	9.88	10.28	10.67	10.84
60	9.96	9.54	10.83	10.03	10.60	9.92	10.00	9.79	9.38	9.07	8.93	9.29	8.60	8.61	8.73	9.29	9.25	10.16	10.60	10.75
70	8.67	8.96	10.72	10.05	10.56	9.92	9.88	9.77	9.33	9.02	8.80	9.22	8.49	8.44	8.48	9.14	9.07	9.62	10.54	10.71
80	8.38	8.40	10.61	10.03	10.52	9.89	9.81	9.69	9.19	8.96	8.67	9.01	8.38	8.33	8.02	8.98	8.71	9.32	9.19	10.61
90	8.26	8.29	10.54	10.01	10.51	9.87	9.69	9.58	9.12	8.89	8.66	8.94	8.33	8.25	7.94	8.73	8.63	9.15	9.07	10.60
100	8.19	8.08	10.50	9.96	10.47	9.86	9.57	9.39	9.03	8.70	8.50	8.90	8.28	7.94	7.71	8.55	8.29	8.89	8.76	10.30
110	8.10	8.04	10.46	9.98	10.41	9.85	9.52	9.27	8.98	8.60	8.42	8.93	8.24	7.87	7.71	8.48	8.09	8.61	8.61	10.17
120	8.04	7.94	10.42	9.87	10.39	9.82	9.46	9.15	8.89	8.24	8.37	8.80	7.97	7.69	7.73	8.35	7.77	8.43	8.41	9.61
130		7.89	10.41	9.86	10.31	9.80		9.11	8.78	8.10	8.18	8.67		7.69	7.91	7.45	8.04	8.31	8.23	8.89
140		7.74	10.37	9.86	10.15	9.67		8.87	8.61	7.90	7.68	8.17		7.38	7.37	7.29	7.70	8.19		8.52
150		7.71	10.31		10.04			8.72	8.43						7.10			8.04		8.11
Drift angle																				

Secchi depth

(m)	12.75	15.5	11	11.25	14	13	15	12	15	16	17.25	17	18	na	18	17.25	13	12	16.25	14.25

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. 2013-2014

Mid-Lake site A for the period starting 22 July 2013

Temperature

Date	22/07/2013	6/08/2013	21/08/2013	3/09/2013	18/09/2013	2/10/2013	21/10/2013	7/11/2013	20/11/2013	2/12/2013	8/01/2014	28/01/2014	12/02/2014	25/02/2014	12/03/2014	27/03/2014	9/04/2014	23/04/2014	8/05/2014	20/05/2014	5/06/2014	19/06/2014	1/07/2014	21/07/2014
Depth (m)																								
0	11.50	11.54	11.21	11.20	11.56	11.73	12.81	13.53	16.69	17.41	18.54	18.06	18.55	19.16	19.05	18.23	18.60	17.41	16.32	15.41	14.01	13.38	12.86	11.76
10	11.48	11.36	11.21	11.18	11.20	11.70	12.65	13.42	14.77	17.11	18.43	18.02	18.54	19.17	18.56	18.25	18.53	17.36	16.32	15.40	14.06	13.39	12.87	11.51
20	11.48	11.33	11.21	11.18	11.18	11.54	12.41	13.12	13.64	17.05	17.85	17.69	18.40	18.99	18.26	18.25	18.52	17.35	16.32	15.40	14.06	13.39	12.87	11.50
30	11.47	11.32	11.21	11.18	11.18	11.52	12.14	12.23	12.52	12.61	13.39	14.95	15.41	15.82	15.81	17.25	17.76	17.35	16.32	15.39	14.06	13.40	12.88	11.50
40	11.47	11.31	11.21	11.15	11.18	11.48	12.05	11.81	11.88	12.25	12.11	12.00	12.37	12.55	12.62	13.01	12.99	13.19	15.86	15.35	14.03	13.39	12.88	11.50
50	11.47	11.30	11.19	11.15	11.18	11.47	11.94	11.55	11.67	11.73	11.71	11.65	11.76	11.87	11.80	11.97	11.89	11.98	12.16	12.35	12.45	12.17	12.88	11.49
60	11.42	11.29	11.19	11.15	11.17	11.45	11.85	11.42	11.56	11.54	11.56	11.54	11.56	11.66	11.57	11.72	11.56	11.63	11.68	11.78	11.68	11.56	12.85	11.46
70	11.37	11.28	11.19	11.15	11.17	11.37	11.59	11.30	11.39	11.45	11.44	11.42	11.44	11.51	11.47	11.54	11.46	11.49	11.53	11.54	11.48	11.46	11.66	11.42
80	11.35	11.28	11.19	11.15	11.17	11.20	11.32	11.23	11.35	11.40	11.38	11.35	11.36	11.44	11.41	11.43	11.41	11.43	11.44	11.44	11.42	11.41	11.53	11.39
90	11.28	11.28	11.18	11.15	11.16	11.17	11.24	11.19	11.28	11.31	11.32	11.30	11.33	11.36	11.37	11.38	11.35	11.37	11.38	11.39	11.39	11.38	11.44	11.37
100	11.26	11.25	11.17	11.15	11.16	11.16	11.21	11.17	11.27	11.24	11.28	11.27	11.31	11.32	11.33	11.36	11.33	11.34	11.36	11.36	11.35	11.35	11.40	11.36
110	11.22	11.21	11.17	11.15	11.15	11.15	11.17	11.15	11.26	11.20	11.23	11.25	11.29	11.28	11.31	11.33	11.31	11.31	11.32	11.33	11.34	11.34	11.37	11.36
120	11.20	11.18	11.17	11.16	11.15	11.15	11.16	11.14	11.20	11.18	11.21	11.24	11.27	11.26	11.28	11.30	11.30	11.29	11.31	11.31	11.32	11.33	11.36	11.35
130	11.18	11.16	11.17	11.15	11.14	11.15	11.15	11.13	11.19	11.16	11.19	11.22	11.26	11.24	11.26	11.28	11.27	11.28	11.29	11.30	11.31	11.31		11.35
140	11.11	11.16	11.17	11.16	11.14	11.14	11.14	11.12	11.16	11.15	11.19	11.20	11.23	11.23	11.26	11.27	11.26	11.27	11.28	11.29	11.30			11.35
150	11.11	11.16	11.17	11.15	11.13	11.13	11.14	11.12	11.15	11.15	11.19	11.20	11.22	11.23	11.25	11.26	11.26	11.27	11.28	11.28	11.29			11.35

Dissolved Oxygen (g m^{-3})

Depth (m)																								
0	10.93	10.80	10.67	10.90	10.83	10.91	10.55	10.31	9.79	9.53	9.39	9.31	9.25	9.20	9.25	9.31	9.29	9.56	9.73	9.92	10.23	10.33	10.55	10.82
10	11.43	10.66	11.18	11.15	11.27	11.40	10.71	10.26	9.68	9.16	9.22	8.79	9.17	9.07	9.12	9.03	9.20	9.49	9.74	9.72	9.89	10.19	10.28	10.62
20	11.11	10.19	10.68	10.97	11.07	11.11	10.35	10.13	9.76	9.03	8.93	8.51	9.05	9.02	9.12	9.01	9.20	9.48	9.84	9.64	9.83	10.13	10.26	10.47
30	11.05	9.91	10.78	10.90	10.89	11.01	10.08	9.87	9.60	8.90	9.35	8.14	8.58	8.36	8.68	8.56	9.01	9.34	9.76	9.54	9.78	10.06	10.15	10.25
40	11.32	8.91	11.01	10.99	10.91	10.87	10.15	9.70	9.44	8.91	9.28	9.00	9.01	8.72	8.78	8.59	8.54	8.76	9.47	9.43	9.71	9.94	10.04	10.16
50	11.61	8.50	11.23	10.88	10.87	10.82	10.12	9.68	9.22	8.69	9.29	8.98	8.99	8.59	8.56	8.46	8.38	8.73	8.98	8.77	9.18	9.55	10.02	9.99
60	11.72	7.49	11.44	11.00	10.89	10.91	10.15	9.46	9.18	8.65	9.16	8.93	9.09	8.46	8.35	8.22	8.31	8.63	8.90	8.54	8.38	8.76	9.96	9.54
70	11.61	7.13	11.32	11.00	10.74	10.84	9.89	9.29	8.94	8.55	9.32	9.04	9.02	8.38	8.27	8.13	8.25	8.57	8.85	8.43	8.29	8.58	8.67	8.96
80	11.68	6.07	11.00	10.88	10.48	10.62	9.62	9.23	8.87	8.48	9.08	8.82	8.80	8.28	8.23	8.05	8.18	8.45	8.67	8.30	8.19	8.55	8.38	8.40
90	11.44	5.39	10.64	10.84	10.45	10.44	9.18	9.00	8.65	8.45	8.83	8.35	8.74	8.25	8.14	8.03	8.10	8.40	8.61	8.21	8.08	8.45	8.26	8.29
100	11.21	5.07	10.42	10.61	10.16	10.28	8.84	8.87	8.58	8.44	8.49	8.17	8.55	8.10	8.16	7.76	7.97	8.24	8.45	8.10	7.96	8.30	8.19	8.08
110	10.81	4.64	10.03	10.56	10.05	9.97	8.70	8.67	8.21	8.39	8.19	7.82	8.47	8.10	7.99	7.79	7.88	8.12	8.19	7.86	7.65	8.00	8.10	8.04
120	10.44	4.11	9.78	10.40	9.73	9.65	8.43	8.47	8.28	8.26	8.04	7.55	8.22	7.83	7.83	7.81	7.78	7.96	7.95	7.70	7.49	7.92	8.04	7.94
130	10.36		9.71	10.05	9.56	9.45	8.29	8.22	8.18	8.15	7.59	7.34	8.13	7.70	7.75	7.65	7.58	7.85	7.81	7.54	7.33	7.75		7.89
140	9.99		9.58	9.75	9.20	9.02	7.93	8.09	8.02	7.95	7.49	7.04	7.71	7.41	7.46	7.32	7.32	7.63	7.58	7.17	7.21			7.74
150	9.02		9.57	9.49	8.97	8.48	7.63	8.02	7.60	7.62	7.35	6.53	7.46	6.98	6.73	7.13	6.73	7.10	7.50	7.16	7.07			7.71
	O-ring not released																					Drift angle	Drift angle	

Secchi depth

(m)	14	12	12.8	11.5	12	12	11	10	9	10	12	13	13.5	15	18	14.5	16.5	14.8	17.7	16	12	14	12.75	15.5

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. 2012-2013

Mid-Lake site A for the period starting 1 August 2012

Temperature

Date	1/08/2012	17/08/2012	29/08/2012	20/09/2012	4/10/2012	24/10/2012	8/11/2012	22/11/2012	6/12/2012	19/12/2012	23/01/2013	7/02/2013	21/02/2013	6/03/2013	20/03/2013	4/04/2013	22/04/2013	7/05/2013	23/05/2013	6/06/2013	19/06/2013	22/07/2013
Depth (m)			no profile																			
0	11.15	11.25		11.17	11.45	12.35	13.45	16.40	14.97	17.75	19.02	18.83	20.41	20.01	19.52	19.58	17.49	16.50	15.25	13.99	13.37	11.50
10	11.17	11.07		10.91	11.45	11.59	13.23	14.06	14.83	17.35	18.79	18.82	20.24	20.01	19.55	19.48	17.50	16.47	15.29	14.00	13.37	11.48
20	11.17	11.02		10.71	11.45	11.55	12.95	13.73	14.34	15.74	17.40	18.11	19.42	19.99	19.56	19.45	17.49	16.46	15.32	14.00	13.38	11.48
30	11.18	11.01		10.70	11.44	11.52	12.40	13.10	13.80	14.16	14.32	15.66	16.05	15.73	14.81	15.96	15.87	16.07	15.34	14.00	13.38	11.47
40	11.19	10.99		10.70	11.13	11.51	11.75	11.93	12.22	12.30	12.25	13.20	12.63	12.98	12.48	12.95	12.81	12.47	14.85	13.88	13.38	11.47
50	11.19	10.99		10.68	10.94	11.49	11.47	11.60	11.53	11.65	11.67	12.02	12.02	11.98	11.69	11.88	11.79	11.69	12.03	11.72	12.12	11.47
60	11.19	10.98		10.68	10.92	11.43	11.30	11.38	11.27	11.41	11.45	11.46	11.64	11.48	11.42	11.52	11.45	11.42	11.50	11.47	11.41	11.42
70	11.19	10.97		10.67	10.92	11.37	11.13	11.22	11.19	11.28	11.32	11.29	11.37	11.33	11.22	11.32	11.28	11.29	11.25	11.31	11.24	11.37
80	11.20	10.96		10.66	10.91	11.34	11.04	11.17	11.11	11.14	11.22	11.18	11.28	11.21	11.15	11.21	11.18	11.18	11.17	11.20	11.15	11.35
90	11.20	10.95		10.64	10.90	11.29	10.99	11.05	11.07	11.06	11.15	11.08	11.15	11.13	11.10	11.13	11.12	11.13	11.12	11.13	11.11	11.28
100	11.19	10.95		10.63	10.88	11.25	10.95	11.04	11.04	11.03	11.08	11.08	11.11	11.05	11.07	11.09	11.08	11.09	11.09	11.09	11.07	11.26
110	11.17	10.94		10.61	10.86	11.18	10.91	10.97	11.01	11.00	11.04	11.05	11.06	11.01	11.03	11.06	11.05	11.06	11.06	11.06	11.06	11.22
120	11.16	10.94		10.60	10.82	11.10	10.89	10.95	10.96	10.98	11.01	11.04	11.02	11.00	11.00	11.05	11.03	11.04	11.04	11.03	11.05	11.20
130	11.16	10.94		10.60	10.82	11.00	10.86	10.92	10.92	10.96	10.98	11.02	10.98	10.98	10.99	11.03	11.02	11.03	11.02	11.02	11.04	11.18
140	11.16	10.94		10.60	10.82	10.97	10.85	10.90	10.90	10.94	10.96	10.98	10.97	10.97	10.99	11.02	11.01	11.01	11.01	11.01	11.03	11.11
150	11.16	10.94		10.60	10.82	10.91	10.84	10.90	10.89	10.93	10.94	10.97	10.96	10.96	10.98	11.00	11.00	11.00	11.00	11.00	11.03	11.11

Dissolved Oxygen (g m^{-3})

Depth (m)					4/10/2012	24/10/2012	8/11/2012	22/11/2012	6/12/2012	19/12/2012	23/01/2013	7/02/2013	21/02/2013	6/03/2013	20/03/2013	4/04/2013	22/04/2013	7/05/2013	23/05/2013	6/06/2013	19/06/2013	22/07/2013
0	11.03	10.90		11.00	11.20	10.68	10.40	9.56	9.50	9.14	9.05	8.76	8.73	8.76	10.61	9.11	9.05	9.70	9.70	10.27	10.14	10.93
10	11.19	11.09		11.03	11.24	10.81	10.57	9.88	9.64	9.29	9.17	8.86	8.87	8.73	12.43	13.37	9.08	9.71	9.72	10.26	10.15	11.43
20	11.13	10.77		11.06	11.14	10.66	10.53	9.79	9.68	9.56	9.52	9.14	9.04	8.62	9.69	9.73	9.00	9.68	9.67	10.17	10.16	11.11
30	11.21	10.77		11.07	11.18	10.70	10.68	9.85	9.75	9.79	10.31	9.59	9.92	9.59	9.72	10.07	9.11	9.63	9.64	10.17	10.18	11.05
40	11.10	10.44		11.10	10.93	10.56	10.53	9.60	9.75	9.79	9.74	9.56	9.62	9.63	9.34	9.90	9.05	9.45	9.62	10.15	10.19	11.32
50	11.01	10.24		11.12	10.57	10.60	10.49	9.59	9.46	9.28	9.57	9.22	9.40	9.23	8.97	9.38	8.73	9.02	9.04	9.38	10.17	11.61
60	11.11	10.18		11.17	10.44	10.37	9.99	9.19	8.93	9.01	9.29	8.68	8.96	8.92	8.80	9.08	8.64	8.66	8.92	9.11	9.38	11.72
70	11.11	10.04		11.18	10.43	10.43	9.91	9.02	8.84	8.90	8.87	8.52	8.78	8.67	8.91	8.74	8.49	8.76	8.75	8.99	9.11	11.61
80	11.05	10.22		11.21	10.37	10.34	9.57	8.87	8.78	8.73	8.86	8.25	8.60	8.22	8.91	8.71	8.39	8.80	8.54	8.84	8.99	11.68
90	10.79	10.22		11.22	10.36	10.31	9.55	8.87	8.70	8.62	8.37	8.21	8.38	8.00	8.72	8.28	8.24	8.56	8.34	8.60	8.84	11.44
100	10.02	10.15		11.25	10.27	10.19	9.40	8.50	8.49	8.44	8.40	7.91	8.17	8.14	8.82	8.06	7.93	8.38	8.10	8.32	8.60	11.21
110	9.41	10.16		11.26	10.19	10.12	9.44	8.68	8.38	8.38	8.27	7.89	8.08	7.97	8.73	7.86	7.71	7.92	8.02	7.89	8.32	10.81
120	9.23	10.02		11.30	10.34	9.96	9.34	8.59	8.51	8.25	8.36	7.78	7.77	7.74	8.13	7.73	7.40	7.46	7.79	7.71	7.89	10.44
130	9.10	9.98		11.32	10.30	9.95	9.34	8.61	8.53	8.20	8.22	7.74	7.75	7.74		7.69	7.36	7.19	7.53	7.64	7.71	10.36
140	9.10	9.98		11.34	10.26	9.75	9.10	8.28	8.35	7.87	7.93	7.84	7.40	7.74		7.57	6.94	7.16	7.46	7.56	7.64	9.99
150	9.05	9.98		11.41	10.26	9.51	8.91	8.21	8.07	7.72	7.39	7.41	7.08	7.74		7.23	6.81	7.11	7.35	7.53	7.56	9.02
															Probe error							

Secchi depth

(m)																						
	17	14		13	12.5	13.6	17	18	19	19	15.8	15	19	21	14	18	14.7	14.25	15	14.5	15	14

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. 2011-2012

Mid-Lake site A for the period starting 9 August 2011

Temperature

Date	9/08/2011	24/08/2011	7/09/2011	28/09/2011	26/10/2011	8/11/2011	22/11/2011	8/12/2011	22/12/2011	12/01/2012	26/01/2012	16/02/2012	7/03/2012	10/04/2012	7/05/2012	30/05/2012	14/06/2012	2/07/2012	18/07/2012	1/08/2012	17/08/2012	29/08/2012	20/09/2012
Depth (m)												no profile										no profile	
0	11.07	10.88	11.09	11.02	13.02	14.12	14.59	16.81	18.23	18.91	19.02		18.17	16.64	15.07	13.41	12.64	11.64	11.44	11.15	11.25		11.17
10	10.95	10.80	10.95	11.02	12.80	13.80	14.55	16.26	16.67	18.64	19.01		17.56	16.47	15.07	13.47	12.68	11.62	11.28	11.17	11.07		10.91
20	10.94	10.75	10.88	11.01	12.31	13.37	14.52	14.83	15.55	16.68	18.30		17.26	16.42	15.07	13.48	12.68	11.62	11.27	11.17	11.02		10.71
30	10.93	10.74	10.76	10.96	11.82	13.00	14.20	13.56	13.57	14.81	16.51		16.24	16.21	15.07	13.50	12.67	11.61	11.26	11.18	11.01		10.70
40	10.94	10.73	10.76	10.84	11.05	11.67	12.15	12.25	12.35	12.58	12.21		12.77	14.24	15.03	13.49	12.66	11.61	11.26	11.19	10.99		10.70
50	10.94	10.72	10.75	10.81	10.92	11.15	11.36	11.54	11.56	11.89	12.13		11.82	11.95	12.50	11.95	12.67	11.61	11.26	11.19	10.99		10.68
60	10.94	10.71	10.75	10.80	10.86	10.92	11.00	11.11	11.15	11.31	11.17		11.30	11.24	11.65	11.43	11.61	11.60	11.26	11.19	10.98		10.68
70	10.94	10.71	10.75	10.79	10.81	10.85	10.89	10.96	11.04	11.07	11.14		11.12	11.06	11.23	11.17	11.19	11.59	11.25	11.19	10.97		10.67
80	10.94	10.71	10.75	10.78	10.79	10.83	10.86	10.91	11.01	10.96	10.96		11.02	10.98	11.09	11.02	11.02	11.24	11.18	11.20	10.96		10.66
90	10.94	10.71	10.75	10.77	10.77	10.80	10.83	10.85	10.93	10.92	10.93		10.96	10.91	11.01	10.97	10.97	11.00	11.04	11.20	10.95		10.64
100	10.93	10.71	10.75	10.76	10.75	10.78	10.82	10.85	10.95	10.89	10.89		10.93	10.89	10.97	10.93	10.95	10.99	10.97	11.19	10.95		10.63
110	10.93	10.71	10.75	10.75	10.75	10.76	10.80	10.81	10.88	10.87	10.87		10.89	10.87	10.92	10.89	10.95	10.95	10.94	11.17	10.94		10.61
120	10.93	10.70	10.74	10.74	10.73	10.75	10.79	10.81	10.88	10.85	10.86		10.87	10.84	10.89	10.87	10.92	10.91	10.92	11.16	10.94		10.60
130	10.93	10.70	10.73	10.73	10.72	10.74	10.78	10.78	10.84	10.83	10.83		10.84	10.82	10.87	10.85	10.90	10.89	10.91	11.16	10.94		10.60
140	10.92	10.70	10.72	10.72	10.72	10.73	10.77	10.77	10.85	10.82	10.83		10.84	10.81	10.86	10.84	10.88	10.88	10.90	11.16	10.94		10.60
150	10.92	10.70	10.71	10.72	10.72	10.72	10.76	10.76	10.82	10.81	10.83		10.83	10.81	10.85	10.83	10.86	10.88	10.89	11.16	10.94		10.60

Dissolved Oxygen (g m^{-3})

Depth (m)																							
0	10.49	10.58	10.50	10.57	10.55	10.73	10.33	9.97	9.38	9.29	9.26		9.40	9.70	10.07	10.40	10.60	10.90	10.90	11.03	10.90		11.00
10	10.62	10.59	10.64	10.56	11.22	11.45	11.18	11.11	10.16	9.95	9.21		10.23	9.91	10.00	11.23	11.28	10.98	11.12	11.19	11.09		11.03
20	10.53	10.45	10.62	10.52	11.91	11.69	11.66	11.95	10.92	11.21	9.56		10.24	9.88	9.40	11.49	10.63	10.93	10.83	11.13	10.77		11.06
30	10.40	10.32	10.40	10.50	12.08	11.55	11.57	11.85	11.26	11.50	9.76		10.45	9.83	9.22	11.59	10.78	10.87	10.91	11.21	10.77		11.07
40	10.32	10.23	10.34	10.25	11.68	11.44	11.72	11.74	11.16	11.06	10.18		10.63	9.57	9.01	10.77	10.57	10.86	10.70	11.10	10.44		11.10
50	10.36	10.22	10.31	10.18	11.54	11.11	11.61	11.20	10.96	10.88	9.89		10.52	9.50	9.24	10.10	10.69	10.81	10.84	11.01	10.24		11.12
60	10.34	10.19	10.27	10.13	11.34	10.62	10.84	10.67	10.46	10.47	9.71		10.07	9.36	9.20	9.38	9.33	10.78	10.66	11.11	10.18		11.17
70	10.38	10.11	10.13	10.10	11.24	10.61	10.79	10.64	10.47	10.47	9.46		10.04	9.24	6.84	9.31	9.26	10.69	10.79	11.11	10.04		11.18
80	10.29	10.06	10.21	10.08	11.15	10.39	10.43	10.17	10.01	10.13	9.40		9.62	9.02	10.17	8.94	8.84	9.85	9.71	11.05	10.22		11.21
90	10.28	10.05	10.08	10.06	11.13	10.38	10.30	10.20	10.06	10.06	9.31		9.50	8.99	6.39	8.89	8.87	8.81	9.23	10.79	10.22		11.22
100	10.31	10.01	10.17	10.00	11.05	10.20	9.92	9.90	9.71	9.49	9.14		9.13	8.85	10.68	8.72	8.63	8.64	8.35	10.02	10.15		11.25
110	10.29	9.99	10.05	9.95	10.94	10.17	9.93	10.01	9.74	9.38	9.10		9.12	8.89	6.26	8.66	8.40	8.38	8.35	9.41	10.16		11.26
120	10.29	9.95	10.10	9.91	10.96	10.01	9.47	9.52	9.33	9.12	8.87		8.84	8.62	8.17	8.44	8.26	8.16	8.20	9.23	10.02		11.30
130	10.30	9.89	9.92	9.89	10.77	10.02	9.39	9.45	9.49	9.18	8.80		8.83	8.59	7.63	8.33	8.33	8.08	8.15	9.10	9.98		11.32
140	10.25	9.90	9.99	9.89	10.50	9.63	9.13	9.27	9.38	9.02	8.61		8.23	8.27	8.13	7.84	7.92	7.99	7.84	9.10	9.98		11.34
150	10.20	9.90	9.66	9.66	10.45	9.43	8.94	8.57	8.88	8.42	8.02		8.01	8.03	8.90	7.57	7.83	7.99	7.75	9.05	9.98		11.41
															probe error								

Secchi depth

(m)	16	9	16	13	14	14	18	18.5	13	16.5	15	16	16	17	17	17	14	15.5	17	17	14		13

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. 2010-2011

Mid-Lake site A for the period starting 13 July 2010

Temperature

Date	13/07/2010	10/08/2010	24/08/2010	13/09/2010	5/10/2010	26/10/2010	10/11/2010	25/11/2010	21/12/2010	11/01/2011	27/01/2011	17/02/2011	1/03/2011	15/03/2011	13/04/2011	10/05/2011	31/05/2011	22/06/2011	5/07/2011	9/08/2011
Depth (m)																				
0	11.31	11.01	10.92	11.37	11.90	13.00	13.98	15.96	18.32	19.75	19.62	20.54	20.47	19.94	17.68	15.51	14.13	13.11	12.35	11.07
10	11.29	10.96	10.86	11.02	11.66	11.72	13.25	15.65	18.25	19.62	19.58	20.44	20.48	19.72	17.67	15.52	14.14	13.13	12.33	10.95
20	11.29	10.95	10.85	10.95	11.23	11.53	13.13	13.81	14.51	17.39	18.98	20.35	20.48	19.53	17.64	15.50	14.15	13.12	12.33	10.94
30	11.28	10.95	10.85	10.89	11.01	11.44	11.88	12.10	12.53	12.88	15.19	16.03	15.33	15.41	17.62	15.43	14.15	13.12	12.33	10.93
40	11.28	10.95	10.85	10.85	10.96	11.37	11.54	11.42	11.66	11.62	12.22	12.26	12.17	12.27	12.12	15.32	14.15	13.13	12.33	10.94
50	11.28	10.95	10.85	10.85	10.88	11.31	11.17	11.11	11.24	11.37	11.47	12.09	11.31	11.43	11.39	12.27	11.84	13.11	12.32	10.94
60	11.26	10.94	10.83	10.83	10.85	11.21	11.02	10.98	11.03	11.08	11.13	11.33	11.10	11.11	11.12	11.28	11.31	11.38	11.41	10.94
70	11.01	10.94	10.81	10.82	10.82	11.03	10.93	10.91	10.92	10.96	10.97	11.09	10.98	11.02	10.99	11.09	11.11	11.19	11.18	10.94
80	10.96	10.92	10.80	10.81	10.80	10.89	10.85	10.87	10.88	10.89	10.90	10.96	10.93	10.97	10.95	11.00	11.03	11.07	11.03	10.94
90	10.79	10.84	10.78	10.81	10.78	10.88	10.82	10.84	10.85	10.86	10.86	10.92	10.92	10.92	10.92	10.97	11.00	11.00	11.02	10.94
100	10.75	10.81	10.76	10.80	10.76	10.83	10.81	10.83	10.84	10.86	10.85	10.89	10.90	10.90	10.89	10.93	10.97	10.97	10.98	10.93
110	10.70	10.75	10.76	10.80	10.75	10.82	10.78	10.81	10.81	10.85	10.84	10.88	10.90	10.87	10.88	10.91	10.95	10.95	10.97	10.93
120	10.68	10.73	10.75	10.80	10.75	10.80	10.77	10.81	10.80	10.84	10.84	10.87	10.88	10.87	10.87	10.90	10.95	10.94	10.97	10.93
130	10.67	10.71	10.75	10.78	10.75	10.78	10.77	10.80	10.79	10.83	10.83	10.87	10.87	10.85	10.86	10.89	10.92	10.92	10.95	10.93
140	10.66	10.71	10.74	10.76	10.75	10.79	10.77	10.80	10.79	10.83	10.83	10.85	10.85	10.85	10.84	10.87	10.92	10.91	10.92	10.92
150	10.66	10.70	10.74	10.76	10.75	10.77	10.77	10.80	10.79	10.82	10.83	10.84	10.85	10.85	10.84	10.87	10.91	10.90	10.93	10.92

Dissolved Oxygen (g m^{-3})

Depth (m)																				
0	10.50	9.50	10.64	11.24	9.90	10.12	9.83	9.57	9.00	8.73	8.76	8.60	8.64	8.30	9.17	9.54	9.85	10.07	10.22	10.49
10	11.42	11.29	10.52	10.92	9.80	9.78	9.68	9.32	8.37	8.00	7.98	8.63	8.64	8.73	9.64	10.26	10.71	10.30	10.27	10.62
20	11.57	11.60	10.50	10.62	9.68	9.76	9.52	10.10	9.06	8.74	7.96	8.61	8.69	9.15	9.93	10.81	11.21	10.84	10.09	10.53
30	11.65	11.63	10.44	10.71	9.64	9.75	9.29	10.07	9.52	8.57	7.91	8.72	8.99	9.55	9.86	10.72	10.99	10.92	10.10	10.40
40	11.35	11.59	10.41	10.13	9.51	9.54	9.18	9.70	9.31	8.86	8.23	9.26	9.40	10.06	10.23	10.51	10.91	11.05	10.07	10.32
50	11.30	11.63	10.37	10.17	9.47	9.56	9.05	9.58	9.14	8.55	8.08	9.17	9.33	9.63	9.78	10.15	10.57	10.97	10.07	10.36
60	11.04	11.67	10.31	10.03	9.34	9.32	8.86	9.24	8.86	8.41	7.90	8.84	8.84	9.13	9.67	9.44	9.26	9.54	8.80	10.34
70	10.73	11.81	10.25	10.04	9.31	9.27	8.81	9.29	8.71	8.29	7.66	8.70	8.76	9.11	9.12	9.28	9.01	9.41	8.62	10.38
80	10.04	11.58	10.22	9.85	9.25	8.90	8.75	9.03	8.49	8.10	7.51	8.28	8.43	8.92	9.08	9.13	8.65	8.96	8.10	10.29
90	9.68	11.21	10.18	9.87	9.19	8.90	8.72	9.24	8.47	7.93	7.42	8.19	8.31	9.03	8.46	9.06	8.72	8.91	8.06	10.28
100	9.25	10.56	10.15	9.64	9.17	8.78	8.73	8.80	8.31	7.70	7.33	7.93	8.03	8.53	8.22	8.59	8.37	8.68	7.81	10.31
110	9.06	10.35	10.10	9.67	9.11	8.73	8.64	9.12	8.35	7.56	7.26	7.90	8.00	8.55	8.06	8.60	8.27	8.53	7.72	10.29
120	8.71	9.83	10.06	9.43	9.04	8.61	8.66	8.84	8.07	7.46	7.18	7.86	7.95	8.40	7.92	8.27	7.91	8.45	7.67	10.29
130	8.66	9.44	10.05	9.49	8.95	8.60	8.66	8.67	8.04	7.45	7.16	7.85	7.91	8.35	7.42	8.06	7.84	8.08	7.54	10.30
140	8.59	9.34	10.10	8.83	8.84	8.36	8.66	8.62	7.50	7.42	7.16	7.80	7.79	7.43	7.48	7.72	7.62	7.81	7.15	10.25
150	8.33	9.10	9.96	8.71	8.81	8.17	8.66	8.51	7.46	7.30	7.16	7.47	7.51	7.52	6.98	7.24	7.40	7.30	7.00	10.20

Secchi depth

(m)	14.5	12.8	11	10.5	10.8	12.5	11.5	14.2	17	11	17	12	19	15	17	16.5	17	14	13	16

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2009-2010**

Mid-Lake site A for the period starting 6 July 2009

Temperature

Date	6/07/2009	13/08/2009	7/09/2009	17/09/2009	19/10/2009	12/11/2009	17/12/2009	13/01/2010	2/02/2010	11/02/2010	18/02/2010	10/03/2010	8/04/2010	28/04/2010	20/05/2010	3/06/2010	23/06/2010	13/07/2010	10/08/2010
Depth (m)																			
0	10.93	10.43	10.56	11.63	11.72	13.00	16.99	17.89	19.23	20.60	20.45	20.08	17.36	16.38	15.09	14.11	12.23	11.31	11.01
10	10.93	10.41	10.52	11.08	11.25	12.54	16.25	17.89	19.15	20.53	20.40	20.04	17.35	16.31	15.09	14.00	12.25	11.29	10.96
20	10.92	10.41	10.51	10.71	11.24	12.43	15.85	17.56	17.60	18.34	18.73	19.69	17.35	16.30	15.09	13.99	12.23	11.29	10.95
30	10.92	10.41	10.47	10.57	11.20	12.19	13.45	13.21	13.95	14.51	13.91	15.56	17.34	16.12	15.08	13.99	12.25	11.28	10.95
40	10.91	10.38	10.47	10.50	10.98	11.77	12.54	11.65	11.92	12.03	12.02	12.23	12.28	12.72	12.41	11.71	12.21	11.28	10.95
50	10.92	10.36	10.47	10.49	10.67	11.40	11.34	11.20	11.13	11.07	11.10	11.20	11.19	11.21	11.25	11.12	11.02	11.28	10.95
60	10.92	10.36	10.46	10.48	10.58	10.97	10.86	11.02	10.86	10.88	10.86	10.84	10.82	10.85	10.88	10.90	10.84	11.26	10.94
70	10.92	10.36	10.46	10.48	10.53	10.67	10.68	10.71	10.68	10.68	10.67	10.68	10.67	10.73	10.73	10.77	10.72	11.01	10.94
80	10.91	10.35	10.46	10.47	10.50	10.56	10.57	10.59	10.59	10.62	10.63	10.62	10.62	10.65	10.66	10.69	10.69	10.96	10.92
90	10.92	10.34	10.46	10.47	10.49	10.54	10.53	10.51	10.55	10.58	10.57	10.58	10.60	10.60	10.63	10.65	10.67	10.79	10.84
100	10.92	10.34	10.46	10.46	10.47	10.50	10.49	10.51	10.52	10.55	10.53	10.56	10.57	10.59	10.60	10.63	10.65	10.75	10.81
110	10.91	10.33	10.46	10.46	10.46	10.46	10.48	10.51	10.52	10.52	10.51	10.53	10.57	10.56	10.58	10.61	10.64	10.70	10.75
120	10.91	10.33	10.44	10.45	10.44	10.44	10.46	10.49	10.50	10.51	10.51	10.52	10.55	10.55	10.57	10.59	10.64	10.68	10.73
130	10.91	10.33	10.36	10.42	10.43	10.42	10.44	10.48	10.49	10.50	10.50	10.51	10.53	10.54	10.55	10.56	10.62	10.67	10.71
140	10.90	10.33	10.35	10.38	10.41	10.40	10.44	10.47	10.49	10.50	10.50	10.51	10.53	10.54	10.55	10.56	10.61	10.66	10.71
150	10.90	10.30	10.35	10.38	10.41	10.40	10.44	10.46	10.49	10.49	10.50	10.51	10.53	10.54	10.55	10.56	10.61	10.66	10.70

Dissolved Oxygen (g m^{-3})

Depth (m)																			
0	8.91	9.83	9.37	10.58	11.67	9.88	9.66	9.48	9.29	9.47	9.34	8.84	9.48	10.48	10.57	10.44	10.54	10.50	9.50
10	9.88	10.72	10.29	11.08	12.13	10.80	9.63	9.18	9.26	9.40	9.32	8.28	10.17	10.17	11.29	10.25	10.86	11.42	11.29
20	11.06	11.48	10.48	11.00	11.79	10.78	9.58	9.62	9.38	9.71	9.59	8.75	9.66	9.39	10.84	10.34	10.40	11.57	11.60
30	11.31	11.57	10.49	10.68	11.78	10.84	9.71	9.34	9.17	9.65	9.45	8.92	9.43	9.09	10.63	10.39	10.38	11.65	11.63
40	11.28	11.39	10.46	10.40	11.24	10.56	9.31	9.15	8.86	8.72	8.75	8.60	9.04	8.53	9.06	9.39	10.28	11.35	11.59
50	11.29	11.39	10.36	10.31	11.10	10.47	9.29	8.78	8.36	8.21	8.44	8.14	8.57	8.13	8.68	9.26	9.46	11.30	11.63
60	11.03	11.20	10.18	10.15	10.10	9.86	8.78	8.68	8.06	7.94	7.99	7.73	8.31	7.92	8.11	8.93	9.04	11.04	11.67
70	11.05	11.16	10.21	10.12	10.02	9.86	8.60	8.31	7.88	7.76	7.97	7.59	8.11	7.84	8.08	8.84	8.82	10.73	11.81
80	10.83	10.86	10.09	10.11	9.70	9.24	8.34	8.27	7.69	7.74	7.70	7.51	7.97	7.70	8.03	8.54	8.55	10.04	11.58
90	10.87	10.97	10.16	10.02	9.72	9.26	8.25	7.97	7.47	7.55	7.68	7.38	7.74	7.56	7.70	8.44	8.37	9.68	11.21
100	10.68	10.87	10.23	10.03	9.51	8.60	8.17	7.71	7.37	7.54	7.41	7.25	7.43	7.42	7.51	8.18	8.26	9.25	10.56
110	10.72	10.90	10.30	9.95	9.50	8.60	8.05	7.50	7.23	7.37	7.43	7.22	7.27	7.27	7.39	8.10	8.09	9.06	10.35
120	10.55	10.86	9.91	10.26	9.20	8.20	7.98	7.55	7.23	7.19	7.17	7.15	7.11	7.08	7.17	7.95	8.03	8.71	9.83
130	10.55	10.71	9.80	10.00	9.18	8.15	7.87	7.37	7.18	7.20	7.12	6.98	7.09	7.05	7.11	7.90	8.00	8.66	9.44
140	10.48	10.80	9.52	9.69	8.82	7.70	7.62	7.42	6.90	6.95	6.71	6.57	6.82	6.77	6.79	7.18	7.85	8.59	9.34
150	10.30	10.77	9.46	9.47	8.79	7.72	7.41	7.25	6.88	6.93	6.65	6.46	6.75	6.75	6.73	7.17	7.84	8.33	9.10

Secchi depth

(m)	15	12	15	*	13	12.5	15	14.5	16	*	17	19	21.5	19	19.5	14.5	14	14.5	12.8

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2008-2009**

Mid-Lake site A for the period starting 11 September 2007

Temperature

Date	4/09/2008	16/09/2008	14/10/2008	4/11/2008	26/11/2008	22/12/2008	13/01/2009	22/01/2009	28/01/2009	11/02/2009	25/02/2009	16/03/2009	26/03/2009	15/04/2009	7/05/2009	27/05/2009	18/06/2009	6/07/2009	13/08/2009
Depth (m)																			
0	10.97	11.34	12.59	13.37	15.45	18.84	19.67	19.84	20.88	21.42	20.46	18.71	17.96	16.60	15.05	12.97	11.60	10.93	10.43
10	10.92	11.14	12.09	12.94	15.26	17.50	19.55	19.23	20.17	21.21	20.39	18.29	17.95	16.59	15.04	12.96	11.61	10.93	10.41
20	10.85	10.99	11.93	12.62	15.17	15.77	16.97	19.12	18.45	20.04	20.37	18.25	17.94	16.59	15.04	12.96	11.61	10.92	10.41
30	10.82	10.93	11.85	12.55	12.87	13.32	13.60	13.90	13.21	13.92	14.47	16.68	13.86	16.58	15.04	12.90	11.61	10.92	10.41
40	10.79	10.91	11.75	12.35	12.07	12.27	12.19	12.11	11.90	12.09	12.84	12.43	12.13	12.53	12.55	12.62	11.60	10.91	10.38
50	10.75	10.88	11.59	11.51	11.44	11.39	11.33	11.52	11.31	11.50	11.62	11.56	11.45	11.56	11.64	11.50	11.60	10.92	10.36
60	10.72	10.79	10.90	10.83	10.93	11.06	11.08	11.04	11.05	11.19	11.18	11.22	11.19	11.12	11.17	11.06	11.60	10.92	10.36
70	10.69	10.69	10.76	10.79	10.78	10.88	10.89	10.90	10.89	10.97	10.92	10.98	10.98	10.98	11.01	10.94	11.60	10.92	10.36
80	10.66	10.68	10.71	10.72	10.76	10.81	10.82	10.87	10.84	10.86	10.87	10.88	10.89	10.92	10.93	10.90	11.59	10.91	10.35
90	10.66	10.66	10.69	10.70	10.77	10.78	10.78	10.81	10.80	10.81	10.82	10.83	10.84	10.88	10.89	10.88	11.41	10.92	10.34
100	10.65	10.65	10.68	10.68	10.82	10.75	10.76	10.80	10.78	10.77	10.79	10.81	10.81	10.86	10.86	10.86	11.09	10.92	10.34
110	10.64	10.64	10.66	10.67	10.78	10.73	10.75	10.78	10.74	10.76	10.77	10.80	10.79	10.84	10.86	10.85	11.00	10.91	10.33
120	10.63	10.64	10.64	10.65	10.78	10.71	10.73	10.77	10.74	10.75	10.76	10.79	10.78	10.82	10.84	10.84	10.98	10.91	10.33
130	10.63	10.63	10.60	10.63	10.79	10.70	10.72	10.74	10.73	10.73	10.75	10.77	10.77	10.79	10.82	10.82	10.95	10.91	10.33
140	10.63	10.62	10.59	10.63	10.81	10.70	10.72	10.73	10.72	10.73	10.74	10.77	10.76	10.78	10.80	10.81	10.94	10.90	10.33
150	10.62	10.62	10.59	10.63	10.80	10.70	10.71	10.74	10.72	10.73	10.74	10.76	10.76	10.78	10.80	10.81	10.89	10.90	10.30

Dissolved Oxygen (g m^{-3})

Depth (m)																			
0	10.03	9.84	10.29	*	10.09	9.29	8.67	9.24	8.52	8.48	*	9.26	9.44	9.33	10.05	10.13	10.47	8.91	9.83
10	10.85	10.65	10.29	*	10.08	9.72	9.21	8.89	8.45	8.34	*	9.16	10.06	10.11	10.15	10.25	10.73	9.88	10.72
20	10.90	11.05	10.50	*	10.00	9.39	8.88	8.68	8.47	8.19	*	9.40	10.55	10.76	10.15	10.13	10.59	11.06	11.48
30	11.12	10.91	10.46	*	9.79	9.81	9.02	8.53	8.54	8.20	*	9.12	10.34	10.83	10.15	10.17	10.57	11.31	11.57
40	10.76	10.82	10.34	*	9.23	9.69	8.96	8.46	8.06	8.36	*	8.24	9.86	10.39	9.15	9.78	10.56	11.28	11.39
50	10.88	10.63	10.05	*	9.10	9.05	8.49	8.06	7.98	7.92	*	7.97	9.25	9.58	8.91	9.47	10.49	11.29	11.39
60	10.74	10.55	9.89	*	8.54	8.77	8.25	7.91	7.81	7.80	*	7.62	8.97	9.06	8.67	8.73	10.40	11.03	11.20
70	10.52	10.25	9.86	*	8.60	8.53	8.10	7.64	7.74	7.71	*	7.55	8.94	8.84	8.51	8.60	10.43	11.05	11.16
80	10.48	10.20	9.81	*	8.43	8.47	7.98	7.46	7.66	7.64	*	7.44	8.54	8.21	7.79	8.25	10.43	10.83	10.86
90	10.34	10.13	9.85	*	8.44	8.21	7.92	7.38	7.56	7.60	*	7.37	8.45	8.24	7.79	8.24	10.25	10.87	10.97
100	10.28	10.10	10.03	*	8.20	8.22	7.78	7.25	7.53	7.44	*	7.26	8.24	8.07	7.65	8.10	8.65	10.68	10.87
110	9.79	10.00	10.13	*	8.31	7.99	7.67	7.22	7.47	7.31	*	7.20	8.26	8.12	7.62	8.06	8.53	10.72	10.90
120	9.62	9.97	10.09	*	8.04	7.91	7.63	7.17	7.32	7.26	*	7.01	7.94	8.02	7.63	7.79	8.17	10.55	10.86
130	9.42	9.75	9.83	*	8.09	7.70	7.48	7.21	7.24	7.04	*	7.03	7.93	8.15	7.59	7.83	8.11	10.55	10.71
140	9.37	9.52	9.76	*	7.88	7.59	7.40	7.24	7.08	6.92	*	6.68	7.08	8.01	7.74	7.49	7.99	10.48	10.80
150	9.17	9.24	9.85	*	7.85	7.48	7.25	7.03	6.90	6.72	*	6.59	6.91	7.55	7.35	7.30	7.97	10.30	10.77

Secchi depth

(m)	13.0	14.5	12.2	12.0	10.0	12.0	13.0	14.8	18.0	22.0	20.0	15.6	18.5	18.0	16.0	15.0	16.0	15.0	12.0

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2007-2008**

Mid-Lake site A for the period starting 11 September 2007

Temperature

Date	11/9/2007	9/10/2007	30/10/2007	15/11/2007	4/12/2007	20/12/2007	17/01/2008	31/01/2008	14/02/2008	27/02/2008	13/03/2008	26/03/2008	17/04/2008	7/05/2008	22/05/2008	5/06/2008	19/06/2008	1/07/2008	15/07/2008	7/08/2008	20/08/2008
Depth (m)																					
0	11.00	12.33	12.84	13.47	16.64	17.38	21.23	19.79	19.87	19.28	18.83	19.26	17.88	15.67	14.65	13.60	12.89	11.97	11.42	11.06	10.70
10	10.99	11.69	11.83	13.19	16.20	17.15	19.96	19.62	19.81	19.26	18.75	19.24	17.87	15.67	14.65	13.60	12.90	12.03	11.41	10.98	10.70
20	10.98	11.67	11.76	12.92	14.48	14.76	17.21	17.59	19.65	19.24	18.75	18.92	17.85	15.67	14.65	13.59	12.90	12.03	11.40	10.98	10.69
30	10.99	11.44	11.70	12.86	12.58	13.19	13.64	13.82	16.07	14.08	16.20	16.92	15.58	15.67	14.65	13.60	12.90	12.01	11.40	10.98	10.69
40	10.99	11.42	11.64	12.78	12.02	12.18	12.26	12.31	12.63	12.24	12.54	12.44	12.38	15.27	12.27	13.60	12.90	12.03	11.40	10.98	10.69
50	10.99	11.39	11.51	11.80	11.69	11.75	11.64	11.61	11.80	11.71	11.76	11.77	11.72	12.11	11.66	11.93	12.86	12.03	11.39	10.99	10.70
60	10.99	11.34	11.43	11.49	11.42	11.53	11.41	11.39	11.47	11.44	11.47	11.48	11.48	11.56	11.44	11.54	11.60	12.03	11.39	10.98	10.70
70	10.99	11.16	11.32	11.37	11.29	11.33	11.23	11.26	11.33	11.30	11.34	11.29	11.34	11.37	11.32	11.37	11.36	11.61	11.38	10.98	10.70
80	10.96	11.00	11.23	11.31	11.25	11.23	11.22	11.17	11.25	11.25	11.24	11.23	11.27	11.29	11.27	11.29	11.27	11.39	11.38	10.98	10.70
90	10.96	10.98	11.16	11.17	11.14	11.12	11.12	11.11	11.19	11.18	11.18	11.17	11.20	11.21	11.22	11.24	11.23	11.29	11.35	10.98	10.70
100	10.96	10.98	11.07	11.10	11.10	11.09	11.12	11.09	11.15	11.14	11.14	11.14	11.17	11.16	11.18	11.21	11.21	11.28	11.30	10.98	10.70
110	10.96	10.97	11.04	11.04	11.07	11.04	11.06	11.08	11.11	11.11	11.11	11.12	11.14	11.16	11.16	11.19	11.19	11.28	11.25	10.98	10.70
120	10.96	10.96	11.02	11.02	11.05	11.03	11.04	11.06	11.07	11.09	11.09	11.11	11.15	11.15	11.15	11.16	11.17	11.25	11.22	10.98	10.70
130	10.96	10.96	11.00	11.00	11.02	11.00	11.02	11.05	11.06	11.07	11.07	11.09	11.12	11.12	11.13	11.15	11.15	11.22	11.20	10.98	10.70
140	10.96	10.96	10.98	10.97	10.99	11.01	11.00	11.05	11.05	11.06	11.06	11.08	11.11	11.11	11.12	11.13	11.15	11.17	11.19	10.98	10.70
150	10.96	10.95	10.96	10.95	10.98	10.99	11.00	11.04	11.04	11.05	11.06	11.08	11.11	11.10	11.12	11.13	11.15	11.16	11.19	10.98	10.70

Dissolved Oxygen (g m^{-3})

Depth (m)																					
0	11.00	10.23	10.18	10.03	9.35	9.21	8.61	*	10.77	9.20	9.38	9.87	9.49	9.91	10.13	10.36	10.53	10.75	10.89	10.21	9.55
10	11.12	10.37	10.27	10.11	9.45	9.24	8.63	*	8.76	9.09	9.05	8.61	8.97	9.04	9.37	9.84	10.26	10.63	10.66	11.03	10.80
20	10.87	10.12	10.25	10.07	9.23	9.21	8.70	*	9.00	9.32	9.24	8.85	8.46	8.97	9.18	9.72	10.14	10.32	10.51	11.04	11.16
30	10.99	10.17	10.07	10.17	9.36	9.37	8.93	*	9.35	9.45	9.01	8.73	8.52	8.86	9.16	9.63	10.10	10.37	10.48	10.94	11.11
40	10.84	9.92	10.02	9.97	9.09	9.09	8.69	*	9.01	8.92	8.96	8.57	8.72	8.87	8.68	9.81	10.12	10.40	10.42	10.72	11.08
50	10.92	10.09	9.85	9.66	9.08	9.21	8.67	*	8.64	8.82	8.60	8.51	8.48	8.45	8.56	9.22	10.10	10.31	10.52	10.83	11.07
60	11.07	9.96	9.52	9.75	9.14	8.69	8.60	8.70	8.44	8.49	8.34	8.15	8.20	8.25	8.58	8.96	9.51	10.36	10.45	10.60	11.05
70	10.89	9.90	9.77	9.30	8.74	8.69	8.26	8.22	8.19	8.15	8.02	7.79	7.84	7.89	8.37	8.65	9.07	10.28	10.39	10.76	10.98
80	10.90	9.59	9.58	9.12	8.76	8.38	8.03	8.05	8.16	7.88	7.92	7.52	7.71	7.90	8.30	8.53	8.91	9.60	10.34	10.74	10.96
90	10.66	9.63	9.42	9.07	8.62	8.46	8.10	8.06	7.99	7.87	7.76	7.47	7.57	7.68	8.22	8.45	8.72	9.18	10.23	10.73	10.91
100	10.64	9.58	9.49	9.14	8.46	8.41	7.90	7.90	7.97	7.86	7.69	7.45	7.45	7.46	8.14	8.44	8.66	9.06	9.93	10.72	10.90
110	10.62	9.57	9.16	8.83	8.37	8.46	7.83	7.87	7.81	7.64	7.50	7.20	7.29	7.38	8.03	8.19	8.43	8.72	9.34	10.68	10.84
120	10.66	9.52	9.27	8.95	8.42	8.08	7.95	7.52	7.82	7.39	7.45	7.20	7.29	7.38	7.94	8.16	8.32	8.55	8.94	10.67	10.83
130	10.42	9.35	9.01	8.81	8.31	8.13	7.72	7.40	7.59	7.41	7.27	7.16	7.18	7.19	7.86	7.86	8.14	8.31	8.79	10.63	10.57
140	10.40	9.30	9.11	8.81	8.28	7.88	7.74	7.27	7.62	7.05	7.10	7.10	7.13	7.17	7.81	7.61	8.01	8.25	8.48	10.62	10.38
150	10.37	9.13	8.91	8.45	7.95	7.95	7.33	7.35	7.27	7.00	6.76	6.59	6.72	6.85	7.40	7.50	7.73	8.08	8.48	10.57	9.67

Secchi depth

(m)	11	15	16	14	15	17.5	22.5	21.5	25	22	22	19	20.5	16	17	15	16.5	14	13	12.5	12.5

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2006-2007**
Mid-Lake site A for the period starting 4 September 2006

Temperature

Date	4/09/2006	26/09/2006	18/10/2006	1/11/2006	5/12/2006	19/12/2006	9/01/2007	25/01/2007	8/02/2007	21/02/2007	21/03/2007	3/04/2007	19/04/2007	8/05/2007	22/05/2007	14/06/2007	27/06/2007	18/07/2007	8/08/2007	23/08/2007	11/09/2007
Depth (m)																					
0	11.10	11.88	11.72	12.43	15.21	15.62	16.51	18.60	19.31	19.58	18.70	18.04	16.49	19.29	15.17	13.56	12.38	11.43	11.15	11.00	11.00
10	10.93	11.48	11.73	12.27	14.06	15.46	16.41	18.42	18.98	19.12	18.03	18.03	16.48	18.98	15.16	13.56	12.39	11.43	11.15	11.00	10.99
20	10.93	11.29	11.72	12.25	13.87	14.45	15.44	17.96	18.16	17.62	17.99	17.94	16.47	18.16	15.16	13.56	12.39	11.43	11.16	11.00	10.98
30	10.89	11.19	11.69	12.20	13.69	14.15	14.42	15.82	14.86	15.17	15.18	16.72	16.47	14.86	15.16	13.56	12.39	11.36	11.15	11.00	10.99
40	10.87	11.15	11.45	12.10	13.16	12.43	12.25	13.05	12.89	13.09	12.65	13.50	13.78	12.89	15.15	13.56	12.39	11.29	11.16	11.00	10.99
50	10.83	11.08	11.34	11.96	11.77	11.64	11.74	11.84	11.89	11.91	11.94	12.33	12.47	11.89	11.99	13.55	12.39	11.27	11.16	11.00	10.99
60	10.82	11.06	11.25	11.34	11.20	11.36	11.29	11.47	11.39	11.46	11.51	11.65	11.69	11.39	11.54	11.77	12.38	11.25	11.15	11.00	10.99
70	10.82	11.00	11.21	11.17	11.11	11.21	11.15	11.26	11.21	11.21	11.22	11.28	11.33	11.21	11.33	11.35	11.39	11.22	11.16	11.01	10.99
80	10.82	10.94	11.16	11.06	11.06	11.10	11.09	11.14	11.15	11.15	11.16	11.22	11.20	11.15	11.21	11.22	11.28	11.17	11.16	11.01	10.96
90	10.81	10.90	11.08	10.99	10.97	11.03	11.03	11.04	11.06	11.05	11.09	11.11	11.13	11.06	11.12	11.11	11.22	11.14	11.16	11.01	10.96
100	10.81	10.87	10.97	10.94	10.94	11.00	11.00	11.00	11.03	11.05	11.05	11.10	11.09	11.03	11.10	11.10	11.16	11.13	11.16	11.01	10.96
110	10.81	10.84	10.89	10.91	10.91	10.96	10.98	10.98	11.01	11.02	11.03	11.04	11.05	11.01	11.07	11.09	11.12	11.12	11.16	11.01	10.96
120	10.80	10.81	10.86	10.88	10.90	10.94	10.97	10.99	11.06	11.02	11.02	11.04	11.04	11.06	11.07	11.08	11.11	11.12	11.16	11.01	10.96
130	10.79	10.79	10.85	10.85	10.88	10.92	10.95	10.97	10.99	10.99	11.01	11.01	11.03	10.99	11.03	11.07	11.08	11.11	11.16	11.01	10.96
140	10.76	10.78	10.83	10.84	10.88	10.89	10.94	10.97	10.97	10.98	10.99	11.00	11.02	10.97	11.03	11.05	11.07	11.10	11.16	11.01	10.96
150	10.75	10.76	10.82	10.85	10.88	10.91	10.93	10.99	10.96	11.02	11.04	11.03	11.02	11.00	11.04	11.05	11.07	11.10	11.16	11.01	10.96

Dissolved Oxygen (g m^{-3})

Depth (m)																					
0	10.52	10.31	10.36	10.23	9.62	9.52	9.35	8.99	8.95	9.16	9.31	9.44	9.74	9.20	10.01	10.01	10.26	10.36	10.96	11.02	11.00
10	10.47	10.28	10.31	10.16	9.69	9.52	9.52	8.95	8.96	9.26	9.27	9.51	9.73	9.29	10.06	9.95	10.37	10.43	11.08	11.05	11.12
20	10.33	10.25	10.23	10.14	9.56	9.43	9.64	8.95	8.77	9.22	9.27	9.45	9.84	9.08	10.12	9.83	10.48	10.56	11.05	11.15	10.87
30	10.23	10.22	10.27	10.07	9.48	9.50	9.49	8.61	8.78	9.21	8.52	9.30	9.75	9.09	10.06	9.74	10.25	10.27	10.89	11.01	10.99
40	10.13	10.10	10.14	10.08	9.38	9.39	9.47	8.84	8.95	9.08	8.94	8.86	9.26	9.28	9.87	9.71	10.17	10.11	10.89	10.92	10.84
50	10.00	9.96	9.99	10.03	9.05	9.28	9.33	8.66	8.68	8.71	8.77	8.87	9.11	9.00	9.39	9.70	10.12	9.88	10.67	10.90	10.92
60	9.91	10.06	9.93	9.73	9.15	8.97	9.15	8.61	8.62	8.63	8.72	8.76	9.00	8.93	8.83	9.28	10.23	9.84	10.67	10.84	11.07
70	9.82	9.95	9.83	9.54	8.79	8.89	9.02	8.53	8.48	8.57	8.76	8.82	8.96	8.78	8.90	8.45	9.67	9.60	10.67	10.68	10.89
80	9.88	9.83	9.82	9.51	8.66	8.85	8.85	8.34	8.47	8.41	8.62	8.49	8.89	8.78	8.62	8.42	9.34	9.39	10.78	10.88	10.90
90	9.78	9.71	9.71	9.33	8.69	8.67	8.75	8.29	8.29	8.40	8.54	8.53	8.70	8.59	8.66	7.89	8.47	8.36	10.67	10.73	10.66
100	9.82	9.69	9.65	9.30	8.49	8.46	8.65	7.99	8.21	8.01	8.36	8.23	8.58	8.51	8.13	7.66	8.56	8.20	10.79	10.67	10.64
110	9.73	9.62	9.47	9.21	8.40	8.38	8.38	8.02	8.04	7.95	8.22	8.24	8.41	8.33	8.20	7.74	8.40	7.87	10.66	10.70	10.62
120	9.79	9.38	9.37	9.08	8.34	8.33	8.38	7.88	7.84	7.72	8.02	8.01	8.24	8.12	7.74	7.69	8.30	7.92	10.61	10.76	10.66
130	9.65	9.35	9.29	9.00	8.24	8.26	8.27	7.81	7.91	7.71	7.58	8.09	8.01	8.19	7.74	7.54	7.95	7.75	10.52	10.55	10.42
140	9.61	9.38	9.10	8.94	8.22	8.21	8.14	7.75	7.86	7.61	7.58	7.72	7.66	8.15	7.34	7.35	7.94	7.74	10.50	10.75	10.40
150	9.65	9.13	9.02	8.69	7.96	7.82	7.89	7.45	7.25	7.35	7.25	7.25	7.32	7.50	7.18	7.39	7.58	7.55	10.46	10.54	10.37

Secchi depth

(m)	11	17.5	13	14.5	16	15.5	13.5	14.5	16	18.2	16.5	19	16	16	18.5	18	18.5	14.5	14	13	11

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2005-2006**
Mid-Lake site A for the period starting 17 August 2005

Temperature

Date	17/08/2005	31/08/2005	14/09/2005	29/09/2005	12/10/2005	25/10/2005	10/11/2005	1/12/2005	10/01/2006	2/02/2006	1/03/2006	12/04/2006	27/04/2006	9/05/2006	30/05/2006	27/06/2006	11/07/2006	25/07/2006	4/09/2006
Depth (m)																			
0	11.17	11.74	12.42	11.91	11.92	13.40	16.10	15.09	17.40	20.20	19.50	16.71	16.31	15.70	14.21	11.94	11.51	11.15	11.10
10	10.98	11.24	11.76	11.68	11.79	12.84	14.59	14.93	17.10	20.11	19.50	16.72	16.29	15.70	14.21	11.99	11.51	11.15	10.93
20	10.97	11.10	11.22	11.67	11.76	12.17	14.27	14.22	16.85	18.15	19.25	16.72	16.29	15.70	14.21	11.99	11.50	11.15	10.93
30	10.97	11.05	11.05	11.66	11.66	11.63	12.36	13.34	14.84	15.46	16.14	16.71	16.29	15.70	14.21	11.99	11.48	11.15	10.89
40	10.97	11.00	11.01	11.60	11.47	11.47	11.66	12.32	12.21	13.40	12.93	16.48	13.96	13.40	14.20	11.99	11.48	11.15	10.87
50	10.97	10.98	10.98	11.18	11.39	11.29	11.27	11.66	11.60	11.75	11.57	12.00	12.20	11.94	14.16	11.99	11.48	11.15	10.83
60	10.97	10.97	10.99	11.02	11.37	11.17	11.15	11.26	11.21	11.35	11.35	11.53	11.56	11.36	11.54	11.39	11.47	11.15	10.82
70	10.96	10.97	10.97	10.97	11.26	11.06	11.04	11.11	11.13	11.19	11.16	11.29	11.30	11.23	11.27	11.21	11.46	11.15	10.82
80	10.97	10.96	10.97	10.97	11.13	10.99	11.00	11.06	11.06	11.11	11.14	11.19	11.19	11.14	11.19	11.16	11.45	11.15	10.82
90	10.96	10.96	10.96	10.96	11.07	10.97	10.98	11.01	11.05	11.06	11.06	11.12	11.12	11.10	11.16	11.15	11.42	11.15	10.81
100	10.96	10.95	10.96	10.95	11.01	10.97	10.97	10.98	11.04	11.04	11.05	11.08	11.08	11.09	11.12	11.14	11.23	11.15	10.81
110	10.96	10.94	10.94	10.94	10.98	10.94	10.95	10.97	11.02	11.02	11.05	11.05	11.07	11.06	11.11	11.14	11.20	11.15	10.81
120	10.96	10.94	10.93	10.93	10.98	10.94	10.94	10.97	11.00	11.02	11.05	11.03	11.06	11.06	11.09	11.13	11.19	11.15	10.80
130	10.96	10.93	10.93	10.92	10.96	10.93	10.93	10.96	10.99	11.00	11.03	11.02	11.05	11.04	11.07	11.13	11.18	11.15	10.79
140	10.95	10.93	10.91	10.91	10.96	10.93	10.94	10.96	10.99	11.00	11.00	11.02	11.04	11.03	11.07	11.12	11.18	11.15	10.76
150	10.93	10.93	10.89	10.91	10.96	10.92	10.96	10.97	10.98	10.99	11.00	11.02	11.04	11.04	11.07	11.10	11.14	11.15	10.75

Dissolved Oxygen (g m^{-3})

Depth (m)																			
0	10.52	10.47	10.26	10.35	10.38	10.04	9.95	9.70	9.23	9.00	9.20	9.33	9.39	9.46	9.97	10.29	10.84	10.54	10.52
10	10.55	10.47	10.26	10.47	10.49	9.98	9.99	9.94	9.38	9.39	9.24	9.15	9.96	9.59	10.49	10.27	10.88	10.94	10.47
20	10.41	10.26	10.37	10.39	10.40	10.04	9.88	9.69	9.37	9.20	9.43	9.51	9.39	9.47	9.97	10.30	10.77	10.59	10.33
30	10.39	10.28	10.19	10.39	10.44	9.89	9.74	9.26	8.96	8.94	8.99	9.23	9.31	9.50	10.21	10.22	10.76	10.54	10.23
40	10.31	9.80	9.40	10.32	10.25	9.61	9.48	9.74	8.95	8.69	9.02	8.92	8.82	8.90	9.98	10.22	10.74	10.34	10.13
50	10.29	9.66	9.39	10.20	10.23	9.51	9.36	9.63	8.61	8.59	8.91	8.61	8.70	8.51	10.10	10.16	10.71	10.54	10.00
60	10.17	9.57	9.18	9.83	9.92	9.14	8.65	9.08	8.69	8.22	8.78	8.49	8.31	8.29	9.25	9.64	10.70	10.38	9.91
70	10.13	9.41	9.26	9.63	9.86	9.03	8.83	8.80	8.50	8.20	8.52	8.20	8.51	8.26	8.87	8.85	10.64	10.45	9.82
80	10.06	9.38	9.01	9.46	9.63	8.76	8.50	8.78	8.21	8.04	8.19	7.94	8.17	8.19	8.47	8.42	10.47	10.36	9.88
90	10.05	9.42	9.07	9.38	9.68	8.76	8.59	8.40	8.12	8.07	7.82	7.98	8.10	8.08	8.33	8.15	10.46	10.44	9.78
100	10.04	9.41	8.86	9.20	9.33	8.54	8.35	8.39	7.96	7.88	7.89	8.05	8.12	8.06	8.16	8.05	9.65	10.34	9.82
110	10.04	9.37	8.88	9.12	9.24	8.49	8.41	8.35	7.92	7.94	7.85	7.91	7.84	7.96	8.11	7.96	8.87	10.35	9.73
120	9.96	9.23	8.56	9.03	9.13	8.44	8.22	8.28	7.89	7.62	7.86	7.44	7.57	7.77	8.04	7.89	8.41	10.17	9.79
130	9.93	9.14	8.56	8.96	9.07	8.40	8.27	8.20	7.82	7.78	7.72	7.58	7.49	7.66	8.04	7.84	8.31	10.33	9.65
140	9.32	8.94	8.38	8.79	9.01	8.38	7.92	8.08	7.62	7.36	7.67	7.34	7.32	7.58	7.99	7.82	8.29	10.39	9.61
150	8.63	8.57	8.20	8.56	8.94	8.24	7.86	8.00	7.39	7.28	7.34	7.19	7.15	7.23	7.57	7.61	8.14	10.28	9.65

Secchi depth

(m)	13	13	13	14	14	15	17.5	19.3	19	15.5	15.3	15.8	17	17.5	18.2	15.2	13.5	12	11

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2004-2005**
Mid-Lake site A for the period starting 24 August 2004

Temperature

Date	24/08/2004	7/09/2004	21/10/2004	2/11/2004	22/11/2004	15/12/2004	11/01/2005	25/01/2005	9/02/2005	22/02/2005	10/03/2005	21/03/2005	14/04/2005	18/05/2005	9/06/2005	20/06/2005	20/07/2005	3/08/2005	17/08/2005	31/08/2005	14/09/2005
Depth (m)																					
0	10.92	10.70	11.75	12.94	15.31	14.17	16.97	19.27	20.73	20.05	19.25	19.34	17.92	14.33	12.98	12.67	11.46	11.12	11.17	11.74	12.42
10	10.83	10.66	11.61	12.89	15.15	14.10	16.01	18.05	20.19	19.73	19.24	19.17	17.96	14.31	12.99	12.47	11.31	11.11	10.98	11.24	11.76
20	10.83	10.66	11.60	12.49	13.69	13.89	15.83	16.72	18.05	18.80	19.23	18.81	17.95	14.24	12.98	12.43	11.31	11.10	10.97	11.10	11.22
30	10.83	10.66	11.59	11.65	13.17	13.79	13.37	14.55	14.65	14.02	14.92	14.59	15.13	14.13	12.98	12.42	11.30	11.11	10.97	11.05	11.05
40	10.83	10.66	11.59	11.28	11.61	13.59	12.39	13.12	12.83	12.36	13.06	12.62	12.92	13.88	12.98	12.44	11.30	11.10	10.97	11.00	11.01
50	10.83	10.65	11.58	10.93	11.09	11.35	11.33	11.89	11.75	11.49	11.75	11.64	12.00	11.47	12.97	12.42	11.28	11.11	10.97	10.98	10.98
60	10.83	10.66	11.15	10.75	10.97	11.03	11.04	11.23	11.12	11.00	11.16	11.20	11.33	11.18	12.57	11.54	11.28	11.10	10.97	10.97	10.99
70	10.83	10.66	10.78	10.72	10.77	10.88	10.86	10.98	10.90	10.87	10.92	10.96	10.99	10.97	11.13	11.07	11.26	11.11	10.96	10.97	10.97
80	10.83	10.65	10.74	10.64	10.73	10.80	10.81	10.91	10.83	10.82	10.88	10.94	10.88	10.93	10.98	11.00	11.21	11.10	10.97	10.96	10.97
90	10.82	10.61	10.72	10.62	10.69	10.73	10.75	10.80	10.75	10.80	10.80	10.81	10.82	10.89	10.95	10.93	10.98	11.10	10.96	10.96	10.96
100	10.83	10.58	10.71	10.61	10.68	10.70	10.74	10.81	10.80	10.78	10.80	10.82	10.78	10.90	10.90	10.91	10.94	11.10	10.96	10.95	10.96
110	10.83	10.56	10.67	10.60	10.64	10.67	10.69	10.72	10.73	10.75	10.74	10.76	10.76	10.87	10.89	10.87	10.93	11.08	10.96	10.94	10.94
120	10.83	10.56	10.66	10.58	10.64	10.66	10.68	10.73	10.76	10.76	10.76	10.79	10.76	10.88	10.87	10.86	10.89	10.99	10.96	10.94	10.93
130	10.82	10.55	10.64	10.57	10.61	10.63	10.66	10.69	10.71	10.71	10.72	10.73	10.74	10.81	10.84	10.86	10.88	10.97	10.96	10.93	10.93
140	10.82	10.53	10.61	10.57	10.61	10.61	10.65	10.68	10.74	10.73	10.75	10.77	10.74	10.82	10.80	10.86	10.88	10.93	10.95	10.93	10.91
150	10.79	10.47	10.56	10.58	10.60	10.62	10.67	10.67	10.70	10.70	10.71	10.72	10.72	10.77	10.78	10.85	10.87	10.90	10.93	10.93	10.89

Dissolved Oxygen (g m^{-3})

Depth (m)																					
0	10.7	10.7	10.4	10.1	9.5	9.9	9.4	8.95	8.64	8.74	8.77	8.89	9.12	9.75	10.12	10.15	10.7	10.7	10.52	10.47	10.26
10	10.5	10.5	10.1	10.2	9.6	9.8	9.5	8.87	8.75	8.78	8.77	8.87	9.01	9.75	10.03	10.12	10.5	10.5	10.55	10.47	10.26
20	10.5	10.5	10.3	10.0	9.5	9.8	9.5	8.79	8.73	8.59	8.72	8.85	9.04	9.66	9.97	10.17	10.5	10.5	10.41	10.26	10.37
30	10.4	10.4	10.1	9.9	9.5	9.7	9.2	8.72	8.68	8.62	8.01	8.34	8.37	9.55	9.97	10.03	10.4	10.4	10.39	10.28	10.19
40	10.4	10.3	10.2	9.9	9.5	9.7	9.2	8.80	8.76	8.68	8.48	8.39	8.66	9.49	9.88	9.99	10.4	10.3	10.31	9.80	9.40
50	10.3	10.3	10.0	9.6	9.4	9.3	9.0	8.54	8.45	8.36	8.16	8.17	8.34	9.01	9.87	9.93	10.3	10.3	10.29	9.66	9.39
60	10.3	10.2	9.9	9.5	9.1	9.4	8.9	8.50	8.41	8.37	8.14	8.22	8.21	8.66	9.69	9.05	10.3	10.2	10.17	9.57	9.18
70	10.2	10.2	9.7	9.3	9.1	9.3	8.8	8.40	8.36	8.32	8.04	8.18	8.21	8.56	8.90	8.72	10.2	10.2	10.13	9.41	9.26
80	10.2	10.1	9.6	9.2	9.0	9.2	8.7	8.29	8.24	8.27	8.04	8.13	8.19	8.22	8.70	8.33	10.2	10.1	10.06	9.38	9.01
90	10.1	10.0	9.4	9.1	8.8	9.1	8.6	8.18	8.12	8.13	8.03	8.11	8.27	8.07	8.39	8.23	10.1	10.0	10.05	9.42	9.07
100	10.1	10.0	9.4	9.0	8.8	9.0	8.5	8.13	7.86	7.93	7.89	7.90	7.99	7.90	8.27	8.06	10.1	10.0	10.04	9.41	8.86
110	9.9	9.9	9.3	9.0	8.8	8.9	8.4	8.07	7.84	7.81	7.82	7.83	7.82	7.75	8.16	7.99	9.9	9.9	10.04	9.37	8.88
120	10.0	9.9	9.3	8.9	8.6	8.8	8.4	8.02	7.78	7.71	7.73	7.81	7.66	7.78	8.08	7.70	10.0	9.9	9.96	9.23	8.56
130	10.0	9.9	9.3	8.7	8.6	8.7	8.3	8.00	7.76	7.71	7.68	7.78	7.69	7.77	8.03	7.57	10.0	9.9	9.93	9.14	8.56
140	9.9	9.9	9.2	8.7	8.4	8.5	8.1	7.83	7.59	7.50	7.36	7.48	7.56	7.69	7.94	7.42	9.9	9.9	9.32	8.94	8.38
150	9.8	9.7	9.0	8.6	8.2	8.3	7.9	7.51	7.54	7.46	7.35	7.43	7.47	7.67	7.75	7.36	9.8	9.7	8.63	8.57	8.20

Secchi depth

(m)	12.5	12	15	16	16	19.5	20	19.5	18	21.5	18.5	20	17.2	16	14.1	13.8	13	14	13	13	13

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2003-2004**
Mid-Lake site A for the period starting 14 July 2003

Temperature

Date	14/07/2003	31/07/2003	14/08/2003	26/08/2003	8/09/2003	7/10/2003	21/10/2003	19/11/2003	4/12/2003	18/12/2003	13/01/2004	26/02/2004	8/03/2004	31/03/2004	14/04/2004	10/05/2004	10/06/2004	13/07/2004	26/07/2004	24/08/2004	7/09/2004
Depth (m)																					
0	11.85	11.38	11.25	11.23	11.13	11.48	13.11	13.96	16.15	17.72	20.29	17.20	17.50	16.49	15.27	14.74	13.04	11.59	11.29	10.92	10.70
10	11.86	11.38	11.24	11.17	11.13	11.39	11.92	13.79	15.11	17.76	19.60	17.19	17.00	16.29	15.24	14.74	13.05	11.64	11.26	10.83	10.66
20	11.86	11.38	11.24	11.12	11.11	11.37	11.53	13.78	14.53	15.57	16.72	17.18	16.70	16.23	15.21	14.74	13.04	11.62	11.25	10.83	10.66
30	11.86	11.38	11.24	11.11	11.06	11.37	11.40	13.70	12.96	13.23	13.87	17.16	16.55	16.19	15.19	14.74	13.05	11.65	11.25	10.83	10.66
40	11.86	11.38	11.24	11.11	11.06	11.32	11.34	12.30	12.26	12.33	12.58	12.90	13.30	16.15	15.13	14.73	13.05	11.62	11.26	10.83	10.66
50	11.86	11.38	11.24	11.11	11.06	11.31	11.23	11.35	11.48	11.84	11.58	11.83	11.60	12.51	12.40	12.56	13.05	11.65	11.26	10.83	10.65
60	11.86	11.38	11.24	11.11	11.06	11.31	11.19	11.28	11.41	11.39	11.33	11.53	11.60	11.59	11.67	11.66	13.05	11.64	11.26	10.83	10.66
70	11.86	11.38	11.24	11.10	11.06	11.31	11.16	11.23	11.26	11.26	11.26	11.35	11.40	11.40	11.48	11.43	12.42	11.65	11.25	10.83	10.66
80	11.35	11.38	11.24	11.00	11.06	11.30	11.15	11.19	11.25	11.22	11.23	11.30	11.35	11.34	11.39	11.38	11.56	11.64	11.25	10.83	10.65
90	11.31	11.38	11.24	11.09	11.06	11.29	11.13	11.16	11.20	11.17	11.22	11.25	11.27	11.30	11.32	11.35	11.51	11.66	11.25	10.82	10.61
100	11.27	11.35	11.24	11.09	11.06	11.25	11.11	11.15	11.18	11.17	11.21	11.23	11.27	11.27	11.30	11.32	11.39	11.65	11.25	10.83	10.58
110	11.24	11.34	11.23	11.09	11.06	11.21	11.10	11.12	11.17	11.15	11.19	11.20	11.24	11.26	11.28	11.30	11.35	11.65	11.26	10.83	10.56
120	11.22	11.32	11.22	11.09	11.06	11.14	11.10	11.11	11.18	11.14	11.18	11.18	11.22	11.24	11.25	11.30	11.34	11.65	11.26	10.83	10.56
130	11.21	11.27	11.22	11.08	11.06	11.11	11.08	11.09	11.14	11.13	11.17	11.18	11.20	11.22	11.23	11.28	11.33	11.49	11.26	10.82	10.55
140	11.21	11.26	11.21	11.08	11.06	11.09	11.08	11.09	11.15	11.13	11.16	11.17	11.20	11.21	11.21	11.27	11.32	11.39	11.26	10.82	10.53
150	11.20	11.22	11.20	11.08	11.07	11.09	11.08	11.09	11.14	11.13	11.16	11.17	11.20	11.21	11.21	11.26	11.31	11.34	11.26	10.79	10.47

Dissolved Oxygen (g m^{-3})

Depth (m)																					
0	10.3	10.6	10.5	10.5	10.5	10.5	10.1	9.9	9.5	9.1	9.2	9.3	9.4	9.2	9.5	9.7	10.2	10.5	10.6	10.7	10.7
10	10.2	10.4	10.5	10.5	10.6	10.5	10.0	9.9	9.5	9.2	9.3	9.4	9.0	9.1	9.2	9.6	9.9	10.5	10.6	10.5	10.5
20	10.2	10.2	10.3	10.4	10.4	10.4	10.2	9.8	9.4	9.0	9.1	9.0	8.8	9.0	9.1	9.4	9.8	10.5	10.6	10.5	10.5
30	10.2	9.9	10.1	10.3	10.1	10.1	10.0	9.5	9.2	9.2	9.1	8.9	8.5	9.0	8.8	9.3	9.5	10.3	10.3	10.4	10.4
40	10.1	9.9	10.0	10.0	9.8	10.0	9.7	9.3	9.0	9.1	8.7	8.4	8.0	8.9	8.8	9.2	9.5	10.1	10.1	10.4	10.3
50	10.0	9.0	9.9	9.9	9.8	9.8	9.4	9.0	8.7	8.8	8.5	8.1	7.9	8.2	8.2	8.6	9.4	9.8	9.9	10.3	10.3
60	9.9	8.8	9.8	9.7	9.6	9.7	9.2	8.9	8.6	8.4	8.2	8.0	7.7	8.0	8.0	8.2	9.4	9.9	9.8	10.3	10.2
70	9.9	8.7	9.8	9.6	9.6	9.6	9.1	8.7	8.5	8.3	8.1	7.9	7.6	8.0	7.8	7.9	9.1	9.6	9.7	10.2	10.2
80	8.7	8.6	9.7	9.5	9.5	9.6	8.9	8.6	8.4	8.1	8.0	7.9	7.5	8.0	7.7	7.9	8.5	9.7	9.6	10.2	10.1
90	8.5	8.5	9.7	9.5	9.5	9.5	8.9	8.6	8.3	8.1	8.0	7.9	7.5	7.9	7.6	7.8	8.0	9.5	9.5	10.1	10.0
100	8.2	8.4	9.6	9.5	9.5	9.4	8.8	8.6	8.2	7.9	7.8	7.8	7.4	7.8	7.5	7.7	7.7	9.5	9.4	10.1	10.0
110	8.2	8.1	9.6	9.4	9.5	9.3	8.8	8.4	8.2	7.9	7.8	7.7	7.3	7.7	7.4	7.6	7.6	9.4	9.4	9.9	9.9
120	8.0	8.0	9.5	9.4	9.5	9.3	8.7	8.4	8.1	7.8	7.7	7.5	7.1	7.6	7.3	7.4	7.5	9.4	9.3	10.0	9.9
130	8.0	7.9	9.5	9.4	9.4	9.1	8.7	8.3	8.0	7.8	7.5	7.3	7.0	7.5	7.2	7.3	7.4	9.1	9.2	10.0	9.9
140	7.8	7.8	9.5	9.3	9.4	9.0	8.5	8.2	7.9	7.5	7.4	7.3	6.9	7.4	7.0	7.3	7.3	8.3	9.2	9.9	9.9
150	7.7	7.6	9.3	9.3	9.4	8.9	8.5	8.0	7.7	7.3	7.2	7.1	6.8	7.1	6.8	7.1	7.3	8.0	9.2	9.8	9.7

Secchi depth

(m)	14.5	14	13.5	13	12.5	13	17	16	18.5	17.5	19	17	15	16	15	18	13.5	12	11	12.5	12

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2003-2004**
Additional site B (Kuratau Basin) for the period starting 14 July 2003

Temperature

Date	14/07/2003	31/07/2003	14/08/2003	26/08/2003	8/09/2003	7/10/2003	21/10/2003	19/11/2003	4/12/2003	18/12/2003	13/01/2004	26/02/2004	8/03/2004	31/03/2004	14/04/2004	10/05/2004	10/06/2004	13/07/2004	26/07/2004	24/08/2004	7/09/2004
Depth (m)																					
0	11.82	11.32	11.38	11.36	11.13	11.70	13.31	13.79	15.65	17.08	20.25	16.83	17.63	15.92	15.10	14.72	13.02	11.43	11.26	10.92	10.85
10	11.80	11.29	11.22	11.17	11.11	11.44	12.28	13.49	15.00	16.43	19.73	16.72	16.56	15.90	15.02	14.68	12.95	11.40	11.20	10.77	10.59
20	11.79	11.29	11.22	11.14	11.07	11.40	11.71	13.33	13.81	15.28	16.73	16.58	16.51	15.89	15.00	14.64	12.84	11.41	11.20	10.73	10.58
30	11.79	11.29	11.21	11.13	11.03	11.35	11.46	12.22	12.37	13.38	13.74	16.16	16.40	15.88	14.99	14.47	12.71	11.41	11.20	10.72	10.57
40	11.79	11.29	11.21	11.13	11.02	11.34	11.38	11.67	11.90	12.91	12.48	15.75	15.53	15.53	14.18	14.07	12.67	11.41	11.19	10.72	10.57
50	11.79	11.29	11.21	11.13	11.02	11.33	11.28	11.40	11.57	11.65	11.62	12.97	12.55	12.89	12.48	12.48	12.66	11.41	11.19	10.72	10.56
60	11.78	11.29	11.21	11.13	11.01	11.25	11.23	11.31	11.37	11.33	11.40	11.88	11.64	11.69	11.72	11.78	12.57	11.40	11.19	10.72	10.56
70	11.78	11.29	11.21	11.12	11.01	11.12	11.15	11.24	11.25	11.27	11.28	11.55	11.47	11.49	11.51	11.47	12.51	11.41	11.18	10.72	10.56
80	11.77	11.29	11.16	11.12	11.01	11.06	11.09	11.18	11.21	11.25	11.20	11.38	11.41	11.37	11.43	11.38	12.27	11.37	11.18	10.72	10.51
90	11.35	11.29	11.04	11.11	11.01	11.02	11.08	11.13	11.13	11.19	11.16	11.32	11.35	11.32	11.37	11.31	11.77	11.26	11.17	10.71	10.45
100	11.27	11.29	10.91	11.08	11.01	11.02	11.05	11.10	11.11	11.16	11.14	11.28	11.33	11.26	11.30	11.24	11.65	11.24	11.17	10.66	10.38

Dissolved Oxygen (g m^{-3})

Depth (m)																					
0	10.7	10.9	10.8	10.6	10.6	10.4	10.5	10.1	9.8	9.1	9.2	9.3	9.5	8.8	10.5	11.4	12.3	10.6	10.5	10.5	10.8
10	10.5	11.0	10.6	10.6	10.5	10.4	10.4	10.3	9.9	9.3	9.2	9.1	9.0	9.0	9.5	10.2	10.7	10.6	10.5	10.4	10.7
20	10.3	11.3	10.4	10.2	10.2	10.2	10.1	9.9	9.6	9.4	9.2	9.0	8.9	8.9	9.2	9.9	10.1	10.1	10.5	10.5	10.7
30	10.2	11.2	10.1	9.9	10.1	9.9	10.0	9.6	9.3	9.1	9.0	9.0	8.7	8.8	8.9	9.4	9.7	9.8	10.3	10.4	10.6
40	10.1	11.2	9.9	9.8	9.9	9.6	9.7	9.2	8.9	9.1	8.8	8.7	8.2	8.7	8.5	9.1	9.6	9.6	10.0	10.3	10.5
50	10.0	10.9	9.8	9.6	9.8	9.6	9.4	9.0	8.8	8.7	8.5	8.2	7.9	8.2	7.9	8.5	9.3	9.5	9.8	10.2	10.3
60	9.9	10.7	9.7	9.5	9.7	9.4	9.0	8.8	8.6	8.3	8.2	8.1	7.7	8.0	7.6	8.0	9.2	9.3	9.6	10.1	10.3
70	9.9	10.4	9.7	9.5	9.7	9.3	8.9	8.7	8.6	8.3	8.1	7.9	7.6	7.8	7.3	7.7	8.9	9.2	9.6	10.1	10.2
80	9.8	10.3	9.4	9.4	9.6	9.1	8.7	8.6	8.4	7.9	7.8	7.8	7.4	7.6	7.1	7.4	8.7	9.1	9.4	10.0	10.1
90	9.2	10.1	9.2	9.3	9.6	9.0	8.7	8.5	8.3	7.9	7.8	7.7	7.3	7.6	7.0	7.5	8.3	8.7	9.5	9.9	10.1
100	8.3	10.0	9.2	9.3	9.6	8.9	8.6	8.2	7.9	7.9	7.6	7.4	7.3	7.3	6.8	7.0	8.1	8.1	9.4	9.8	10.0

Secchi depth

(m)	12	13	13	11.5	11	9.5	15	17	17	15	16	13.5	5	11	14	15.5	12	11	10	10	11

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2003-2004**
Additional site C (Western Bays) for the period starting 14 July 2003

Temperature

Date	14/07/2003	31/07/2003	14/08/2003	26/08/2003	8/09/2003	7/10/2003	21/10/2003	19/11/2003	4/12/2003	18/12/2003	13/01/2004	26/02/2004	8/03/2004	31/03/2004	14/04/2004	10/05/2004	10/06/2004	13/07/2004	26/07/2004	24/08/2004	7/09/2004
Depth (m)																					
0	11.86	11.43	11.56	11.31	11.32	11.85	13.29	15.10	15.79	17.00	20.17	16.90	18.43	16.37	15.41	14.98	13.16	11.58	11.51	10.97	11.14
10	11.80	11.36	11.26	11.21	11.13	11.24	11.93	13.84	15.29	16.33	18.89	16.69	17.02	16.35	15.18	14.80	13.08	11.61	11.32	10.94	10.73
20	11.80	11.34	11.25	11.14	11.09	11.17	11.62	13.76	14.31	15.26	17.11	16.34	16.45	16.35	15.15	14.76	13.07	11.61	11.30	10.90	10.71
30	11.80	11.32	11.25	11.14	11.08	11.14	11.52	13.63	12.99	13.46	13.74	14.66	15.33	15.95	15.15	14.75	13.07	11.61	11.31	10.90	10.71
40	11.80	11.31	11.25	11.14	11.08	11.14	11.50	11.91	12.03	12.88	12.25	12.56	13.64	13.21	15.14	14.73	13.07	11.60	11.31	10.89	10.70
50	11.80	11.31	11.25	11.14	11.07	11.13	11.46	11.42	11.43	11.64	11.57	11.63	11.64	11.68	12.68	12.57	12.80	11.61	11.30	10.90	10.70
60	11.80	11.31	11.25	11.14	11.07	11.13	11.38	11.31	11.30	11.31	11.36	11.53	11.48	11.45	11.76	11.73	11.68	11.60	11.30	10.89	10.70
70	11.80	11.31	11.25	11.14	11.07	11.12	11.21	11.27	11.28	11.26	11.28	11.39	11.37	11.34	11.54	11.48	11.44	11.61	11.30	10.89	10.70
80	11.79	11.31	11.25	11.14	11.07	1.10	11.13	11.20	11.25	11.22	11.25	11.31	11.35	11.32	11.37	11.39	11.37	11.58	11.30	10.89	10.70
90	11.60	11.29	11.25	11.14	11.07	11.04	11.07	11.14	11.21	11.19	11.21	11.26	11.33	11.29	11.30	11.32	11.33	11.61	11.30	10.89	10.70
100	11.28	11.27	11.24	11.14	11.07	11.03	11.07	11.11	11.19	11.12	11.19	11.23	11.32	11.25	11.29	11.31	11.32	11.61	11.30	10.89	10.70

Dissolved Oxygen (g m^{-3})

Depth (m)																					
0	10.3	10.7	10.3	10.4	10.4	11.4	10.1	9.8	9.5	9.2	9.2	9.3	9.3	9.4	10.4	10.3	10.6	10.6	11.0	10.4	10.7
10	10.3	10.8	10.3	10.3	10.4	11.0	10.1	9.9	9.9	9.1	9.2	9.1	9.0	9.2	9.5	9.8	10.1	10.6	10.5	10.4	10.4
20	10.1	10.3	10.1	10.1	10.2	10.8	9.9	9.9	9.5	9.2	9.1	9.2	9.1	9.0	9.1	9.7	9.9	10.6	10.2	10.3	10.4
30	10.1	10.0	9.9	9.9	10.0	10.1	9.6	9.6	9.3	9.1	8.8	8.6	8.6	8.9	8.9	9.4	9.7	10.3	9.9	10.2	10.4
40	10.0	10.0	9.8	9.7	9.9	9.7	9.4	9.4	9.0	9.1	8.8	8.4	8.4	8.3	8.7	9.2	9.6	9.9	9.8	10.1	10.3
50	9.9	9.9	9.6	9.6	9.7	9.7	9.3	9.2	8.8	8.8	8.5	8.2	8.0	8.0	8.2	8.7	9.3	9.6	9.6	10.1	10.2
60	9.8	9.6	9.6	9.5	9.6	9.5	9.2	9.0	8.5	8.5	8.2	8.0	7.9	8.0	7.8	8.2	8.6	9.5	9.5	10.1	10.2
70	9.8	9.5	9.5	9.4	9.5	9.4	9.1	8.8	8.5	8.3	8.1	7.9	7.8	7.9	7.5	8.0	8.2	9.4	9.5	10.0	10.1
80	9.7	9.5	9.5	9.4	9.5	9.3	8.8	8.8	8.3	8.2	7.9	7.8	7.8	7.8	7.4	7.8	8.0	9.3	9.4	10.0	10.0
90	9.6	9.1	9.4	9.3	9.4	9.2	8.7	8.6	8.4	7.9	7.8	7.8	7.7	7.7	7.3	7.6	7.9	9.2	9.2	9.9	10.0
100	8.8	8.8	9.0	9.3	9.4	9.1	8.7	8.5	8.3	7.9	7.7	7.6	7.7	7.5	7.3	7.5	7.8	9.1	9.3	9.9	10.0

Secchi depth

(m)	14	12	14.5	13	12	12.5	12	17.2	17	19	17.5	14	13	12.5	16.5	16	14	12.5	11	10	12

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2002-2003**

Mid-Lake site A for the period starting 1 July 2002

Temperature

Date	1/07/2002	17/07/2002	31/07/2002	29/08/2002	18/09/2002	9/10/2002	13/11/2002	28/11/2002	18/12/2002	30/01/2003	13/02/2003	17/03/2003	3/04/2003	28/04/2003	15/05/2003	12/06/2003	14/07/2003	31/07/2003	14/08/2003	26/08/2003	8/09/2003
Depth (m)																					
0	12.13	11.44	11.20	11.10	11.38	11.60	12.58	14.12	15.00	17.84	19.31	18.55	19.05	16.76	15.67	13.59	11.85	11.38	11.25	11.23	11.13
10	12.12	11.44	11.20	10.90	11.33	11.60	12.55	14.02	14.78	17.59	19.19	18.43	18.70	16.73	15.57	13.56	11.86	11.38	11.24	11.17	11.13
20	12.11	11.44	11.20	10.90	11.28	11.40	12.50	12.91	14.48	17.08	18.10	18.37	18.59	16.73	15.56	13.55	11.86	11.38	11.24	11.12	11.11
30	12.11	11.44	11.20	10.80	11.02	11.30	12.38	12.41	14.26	16.13	15.50	16.77	17.02	16.72	15.57	13.55	11.86	11.38	11.24	11.11	11.06
40	12.11	11.44	11.20	10.90	10.97	11.30	12.16	11.98	12.67	12.69	12.85	13.44	13.31	12.80	15.53	12.22	11.86	11.38	11.24	11.11	11.06
50	12.11	11.44	11.20	10.90	10.96	11.20	12.00	11.54	11.87	12.03	12.14	12.03	12.30	11.96	12.20	11.82	11.86	11.38	11.24	11.11	11.06
60	12.10	11.44	11.20	10.80	10.94	11.20	11.72	11.22	11.64	11.70	11.68	11.60	11.81	11.62	11.61	11.52	11.86	11.38	11.24	11.11	11.06
70	12.10	11.44	11.20	10.80	10.93	11.20	11.51	11.09	11.31	11.41	11.33	11.39	11.52	11.34	11.36	11.38	11.86	11.38	11.24	11.10	11.06
80	11.97	11.44	11.20	10.90	10.92	11.10	11.32	10.98	11.17	11.25	11.25	11.27	11.31	11.27	11.27	11.27	11.35	11.38	11.24	11.00	11.06
90	11.49	11.43	11.20	10.90	10.91	11.10	11.13	10.95	11.06	11.15	11.16	11.16	11.20	11.17	11.22	11.21	11.31	11.38	11.24	11.09	11.06
100	11.39	11.41	11.20	10.90	10.90	11.10	11.05	10.92	11.04	11.11	11.10	11.13	11.18	11.15	11.20	11.20	11.27	11.35	11.24	11.09	11.06
110	11.32	11.37	11.20	10.90	10.89	11.00	11.05	10.90	11.04	11.09	11.08	11.10	11.13	11.13	11.16	11.17	11.24	11.34	11.23	11.09	11.06
120	11.29	11.32	11.20	10.90	10.87	11.00	11.01	10.87	11.00	11.06	11.06	11.09	11.13	11.13	11.15	11.15	11.22	11.32	11.22	11.09	11.06
130	11.25	11.27	11.20	10.90	10.85	10.90	10.99	10.85	10.98	11.04	11.04	11.08	11.09	11.10	11.12	11.12	11.21	11.27	11.22	11.08	11.06
140	11.23	11.26	11.20	10.80	10.83	10.90	10.97	10.83	10.97	11.03	11.03	11.09	11.09	11.09	11.12	11.11	11.21	11.26	11.21	11.08	11.06
150	11.23	11.26	11.20	10.80	10.81	10.90	10.96	10.82	10.97	11.03	11.03	11.07	11.08	11.09	11.11	11.11	11.20	11.22	11.20	11.08	11.07

Dissolved Oxygen (g m^{-3})

Depth (m)																					
0	10.3	10.4	9.7	10.5	10.5	10.3	10.2	9.8	9.6	9.1	8.9	9.0	8.8	9.2	9.5	10.0	10.3	10.6	10.5	10.5	10.5
10	10.3	10.7	9.5	10.4	10.7	10.3	10.2	10.0	9.7	9.1	8.9	8.9	8.8	9.2	9.2	9.7	10.2	10.4	10.5	10.5	10.6
20	10.3	10.7	9.4	10.3	10.6	10.2	10.2	10.1	9.6	9.2	8.9	8.8	8.6	9.1	9.3	9.4	10.2	10.2	10.3	10.4	10.4
30	10.2	10.7	9.4	10.3	10.5	10.2	10.2	10.1	9.6	9.1	8.8	8.5	8.3	8.9	9.2	9.3	10.2	9.9	10.1	10.3	10.1
40	10.2	10.6	9.4	10.2	10.4	10.2	10.1	9.7	9.5	9.2	8.8	8.4	8.0	8.4	9.1	9.0	10.1	9.9	10.0	10.0	9.8
50	10.2	10.6	9.4	10.2	10.3	10.1	10.1	9.7	9.3	9.1	8.6	8.2	7.8	8.2	8.2	8.2	10.0	9.0	9.9	9.9	9.8
60	10.1	10.5	9.4	10.2	10.2	10.1	10.0	9.5	9.1	8.9	8.4	8.0	7.7	8.1	8.1	8.1	9.9	8.8	9.8	9.7	9.6
70	10.1	10.5	9.3	10.1	10.2	10.0	9.9	9.5	8.8	8.8	8.4	7.8	7.6	8.0	8.0	8.0	9.9	8.7	9.8	9.6	9.6
80	10.0	10.3	9.4	10.1	10.2	10.1	9.7	9.4	8.7	8.7	8.3	7.8	7.5	7.9	7.8	7.9	8.7	8.6	9.7	9.5	9.5
90	9.7	10.3	9.4	10.1	10.1	10.1	9.5	9.3	8.7	8.7	8.2	7.8	7.4	7.8	7.5	7.6	8.5	8.5	9.7	9.5	9.5
100	8.6	10.1	9.4	10.1	10.0	9.8	9.4	9.1	8.6	8.6	8.1	7.7	7.3	7.7	7.2	7.5	8.2	8.4	9.6	9.5	9.5
110	8.3	9.8	9.3	9.9	9.9	9.8	9.4	9.1	8.4	8.4	8.0	7.6	7.2	7.6	7.1	7.4	8.2	8.1	9.6	9.4	9.5
120	8.1	8.8	9.3	9.9	9.9	9.8	9.3	9.0	8.3	8.3	7.8	7.4	7.0	7.5	7.1	7.2	8.0	8.0	9.5	9.4	9.5
130	8.0	8.5	9.3	9.9	9.9	9.7	9.2	9.0	8.3	8.2	7.7	7.2	6.9	7.4	7.0	7.0	8.0	7.9	9.5	9.4	9.4
140	7.8	8.1	9.3	9.9	9.9	9.4	9.0	8.8	8.2	8.0	7.4	7.1	6.8	7.2	6.8	6.7	7.8	7.8	9.5	9.3	9.4
150	7.8	8.1	9.3	9.8	9.8	9.4	8.9	8.7	8.1	7.9	7.3	6.9	6.5	6.9	6.7	6.5	7.7	7.6	9.3	9.3	9.4

Secchi depth

(m)	16	15.5	12	9.5	12	15.5	18	12.7	13.5	18	19	15	13.5	14	16.5	11	14.5	14	13.5	13	12.5

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2002-2003**
Additional site B (Kuratau Basin) for the period starting 1 July 2002

Temperature

Date	1/07/2002	17/07/2002	31/07/2002	29/08/2002	18/09/2002	9/10/2002	13/11/2002	28/11/2002	18/12/2002	30/01/2003	13/02/2003	17/03/2003	3/04/2003	28/04/2003	15/05/2003	12/06/2003	14/07/2003	31/07/2003	14/08/2003	26/08/2003	8/09/2003
Depth (m)																					
0	12.13	11.48	11.3	11	11.08	11.70	11.98	13.82	15.16	16.76	18.87	18.74	19.09	16.73	15.79	13.24	11.82	11.32	11.38	11.36	11.13
10	12.09	11.49	11.1	10.8	11.05	11.30	11.94	13.67	15.08	16.75	18.46	18.54	18.82	16.66	15.49	13.02	11.8	11.29	11.22	11.17	11.11
20	12.09	11.48	11.1	10.8	11.03	11.20	11.9	12.79	13.86	16.53	17.71	18.45	18.49	16.62	15.47	12.79	11.79	11.29	11.22	11.14	11.07
30	12.09	11.48	11.1	10.8	11.03	11.20	11.8	12.31	13.4	14.33	16.2	14.87	15.32	16.2	15.41	11.83	11.79	11.29	11.21	11.13	11.03
40	12.08	11.48	11.1	10.8	11.02	11.20	11.68	11.75	13.18	12.98	13.89	12.03	13.25	13.46	13.2	11.62	11.79	11.29	11.21	11.13	11.02
50	11.97	11.49	11.1	10.8	10.91	11.20	11.44	11.44	12.91	12.1	12.59	12.06	12	12.28	12.09	11.51	11.79	11.29	11.21	11.13	11.02
60	11.93	11.49	11.1	10.8	10.9	11.10	11.26	11.27	12.27	11.69	11.75	11.58	11.58	11.7	11.71	11.38	11.78	11.29	11.21	11.13	11.01
70	11.87	11.48	11.1	10.8	10.89	11.10	11.11	11.17	11.58	11.37	11.4	11.36	11.35	11.4	11.4	11.29	11.78	11.29	11.21	11.12	11.01
80	11.78	11.48	11.1	10.8	10.89	11.00	11	11.03	11.51	11.23	11.3	11.24	11.25	11.25	11.28	11.27	11.77	11.29	11.16	11.12	11.01
90	11.37	11.46	11.1	10.7	10.87	11.00	10.93	10.96	11.39	11.14	11.17	11.13	11.15	11.18	11.21	11.26	11.35	11.29	11.04	11.11	11.01
100	11.28	11.3	11	10.7	10.85	11.00	10.91	10.92	11.2	11.09	11.12	11.13	11.12	11.12	11.18	11.25	11.27	11.29	10.91	11.08	11.01
110			10.7	10.7		10.90															

Dissolved Oxygen (g m^{-3})

Depth (m)																					
0	10.3	10.4	9.9	10.4	10.4	10.4	10.3	9.9	9.6	9.3	9.4	8.9	8.9	9.7	9.4	10	10.7	10.9	10.8	10.6	10.6
10	10.3	10.8	9.7	10.3	10.5	10.5	10.3	10	9.7	9.3	9.3	8.9	8.8	9.6	9.4	10	10.5	11	10.6	10.6	10.5
20	10.2	10.6	9.6	10.3	10.5	10.3	10.3	9.9	9.5	9.2	9.3	8.8	8.5	9.5	9.3	9.6	10.3	11.3	10.4	10.2	10.2
30	10.2	10.6	9.6	10.2	10.5	10.3	103	9.9	9.6	9.2	9.2	8.2	8.1	9.4	8.8	9.2	10.2	11.2	10.1	9.9	10.1
40	10.1	10.5	9.6	10.2	10.4	10.2	10.2	9.5	9.4	9.1	9	8.2	8	8.8	8.5	8.8	10.1	11.2	9.9	9.8	9.9
50	10.1	10.5	9.6	10.1	10.3	10.1	10.1	9.5	9.4	8.9	8.8	8	7.7	8.3	7.9	8.5	10	10.9	9.8	9.6	9.8
60	9.8	10.4	9.6	10.1	10.2	10.1	9.9	9.4	9.2	8.6	8.6	7.8	7.6	8.3	7.8	8.3	9.9	10.7	9.7	9.5	9.7
70	9.7	10.4	9.5	10	10.1	9.8	9.8	9.4	9	8.4	8.4	7.7	7.4	8.2	7.7	8.2	9.9	10.4	9.7	9.5	9.7
80	9.5	10.3	9.5	10	10.1	9.7	9.7	9	8.6	8.3	8.3	7.3	7.3	8	7.7	8.1	9.8	10.3	9.4	9.4	9.6
90	9.1	10.3	9.5	10	10	9.7	9.5	9	8.6	8.2	8	7.2	7.1	7.7	7.5	7.7	9.2	10.1	9.2	9.3	9.6
100	8.7	9.8	9.6	9.9	9.9	9.7	9.2	9	8.4	7.7	7.6	7	7	7.6	7.1	7.5	8.3	10	9.2	9.3	9.6
110			9.2	9.8		9.4															

Secchi depth

(m)	16	12.5	10.5	8	11	16	14	12.7	14	18	11	14	12.8	13.5	15.5	12	12	13	13	11.5	11

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2002-2003**
Additional site C (Western Bays) for the period starting 1 July 2002

Temperature

Date	1/07/2002	17/07/2002	31/07/2002	29/08/2002	18/09/2002	9/10/2002	13/11/2002	28/11/2002	18/12/2002	30/01/2003	13/02/2003	17/03/2003	3/04/2003	28/04/2003	15/05/2003	12/06/2003	14/07/2003	31/07/2003	14/08/2003	26/08/2003	8/09/2003
Depth (m)																					
0	12.22	11.52	11.6	11.4	11.24	12.10	12.56	13.98	15.12	17.61	19.58	19.04	18.15	17.1	15.8	13.65	11.86	11.43	11.56	11.31	11.32
10	12.15	11.5	11.2	10.9	11.23	11.30	12.5	13.45	14.21	17.49	18.95	18.45	18.58	16.82	15.54	13.62	11.8	11.36	11.26	11.21	11.13
20	12.14	11.49	11.2	10.9	11.16	11.30	12.38	12.63	13.31	17.48	17.41	18.29	18.3	16.77	15.52	13.59	11.8	11.34	11.25	11.14	11.09
30	12.14	11.49	11.2	10.8	11.06	11.20	12.33	12.42	12.73	14.31	14.19	14.81	14.61	16.76	15.51	13.59	11.8	11.32	11.25	11.14	11.08
40	12.13	11.49	11.2	10.8	11.02	11.20	11.75	12.2	11.98	12.36	12.79	12.88	12.73	13.62	13.07	13.59	11.8	11.31	11.25	11.14	11.08
50	12.13	11.49	11.2	10.8	11.02	11.20	11.28	11.98	11.53	12	11.98	11.86	12.1	12.08	12.14	13.54	11.8	11.31	11.25	11.14	11.07
60	11.92	11.49	11.2	10.8	11	11.10	11.12	11.37	11.33	11.61	11.68	11.49	11.71	11.56	11.71	13.28	11.8	11.31	11.25	11.14	11.07
70	11.55	11.49	11.2	10.8	10.99	11.10	11.08	11.21	11.15	11.29	11.3	11.35	11.37	11.35	11.4	11.8	11.8	11.31	11.25	11.14	11.07
80	11.5	11.49	11.2	10.8	10.95	11.10	11.03	11.04	11.12	11.19	11.19	11.25	11.22	11.24	11.27	11.45	11.79	11.31	11.25	11.14	11.07
90	11.47	11.49	11.2	10.8	10.94	11.00	11	10.98	11.1	11.11	11.15	11.2	11.18	11.18	11.22	11.35	11.6	11.29	11.25	11.14	11.07
100	11.45	11.49	11.2	10.8	10.92	11.00	10.97	10.96	11.08	11.08	11.13	11.2	11.15	11.15	11.17	11.23	11.28	11.27	11.24	11.14	11.07

Dissolved Oxygen (g m^{-3})

Depth (m)																					
0	10.4	10.5	9.7	10.3	10.5	10.4	10.2	9.9	9.6	9.1	9.5	9.9	8.9	9.4	9.3	10	10.3	10.7	10.3	10.4	10.4
10	10.4	10.8	9.5	10.2	10.7	10.4	10.3	9.7	9.6	9	9.3	9.7	8.8	9.2	9.1	9.6	10.3	10.8	10.3	10.3	10.4
20	10.4	10.8	9.5	10.2	10.7	10.4	10.3	9.9	9.7	9	9.3	9	8.8	9.2	9	9.3	10.1	10.3	10.1	10.1	10.2
30	10.3	10.7	9.4	10.1	10.6	10.4	10.2	9.9	9.6	8.7	9	8.4	8.3	9	8.8	9.1	10.1	10	9.9	9.9	10
40	10.3	10.5	9.4	10	10.5	10.3	10.1	9.7	9.5	8.7	9	8.4	8.1	8.5	8.3	9.3	10	10	9.8	9.7	9.9
50	10.2	10.5	9.4	10	10.4	10	9.9	9.7	9.2	8.6	8.7	8.1	7.9	8.2	7.8	9.2	9.9	9.9	9.6	9.6	9.7
60	10	10.5	9.4	10	10.4	10	9.7	9.6	9.1	8.5	8.5	8.1	7.9	8.2	7.8	9.9	9.8	9.6	9.6	9.5	9.6
70	9.6	10.5	9.4	9.9	10.3	9.9	9.7	9.5	9	8.4	8.4	7.9	7.8	8	7.7	9.7	9.8	9.5	9.5	9.4	9.5
80	8.8	10.5	9.3	9.9	10.2	9.9	9.5	9	8.8	8.3	8.3	7.6	7.7	8	7.5	9.4	9.7	9.5	9.5	9.4	9.5
90	8.7	10.4	9.3	9.9	10.1	9.8	9.5	9.1	8.7	8.1	8.3	7.5	7.6	7.9	7.3	9.2	9.6	9.1	9.4	9.3	9.4
100	8.6	10.2	9.3	10	10	9.6	9.3	9.1	8.7	8	8.1	7.3	7.4	7.8	7.2	9.1	8.8	8.8	9	9.3	9.4

Secchi depth

(m)	14	12.5	12	8	12	19	16	15.5	13.5	18.5	19	15	14.5	14.5	17	11	14	12	14.5	13	12

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2001-2002**

Mid-Lake site A for the period starting 2 July 2001

Temperature

Date	2/07/01	25/07/01	13/08/01	3/09/01	25/09/01	25/10/01	12/11/01	10/12/01	20/12/01	8/01/02	22/01/02	6/03/02	4/04/02	22/04/02	5/05/02	19/06/02	1/07/02	17/07/02	31/07/02	29/08/02	18/09/02	9/10/02
Depth (m)																						
0	12.11	11.26	11.15	10.96	11.58	12.97	14.23	15.47	17.92	18.37	19.4	18.69	17.45	17.05	15.51	12.57	12.13	11.44	11.2	11.1	11.38	11.60
10	12.04	11.26	11.12	10.98	11.57	12.91	14.16	15.51	16.60	18.07	18.8	18.69	17.38	16.64	15.54	12.57	12.12	11.44	11.2	10.9	11.33	11.60
20	12.00	11.26	11.12	10.95	11.56	12.90	13.37	15.52	15.46	17.62	18.05	18.68	17.18	16.61	15.52	12.57	12.11	11.44	11.2	10.9	11.28	11.40
30	11.99	11.26	11.11	10.94	11.52	12.89	12.85	14.52	13.79	13.5	14.8	15.3	16.83	16.56	15.5	12.56	12.11	11.44	11.2	10.8	11.02	11.30
40	11.98	11.26	11.11	10.94	11.04	12.00	11.87	13.01	12.41	12.43	13.1	12.42	12.9	13.35	15.39	12.56	12.11	11.44	11.2	10.9	10.97	11.30
50	11.98	11.26	11.11	10.94	10.96	11.50	11.57	11.80	11.70	11.61	12.06	11.73	12.09	11.93	11.92	12.56	12.11	11.44	11.2	10.9	10.96	11.20
60	11.95	11.26	11.10	10.94	10.92	11.13	11.24	11.27	11.32	11.38	11.52	11.43	11.51	11.53	11.49	12.53	12.1	11.44	11.2	10.8	10.94	11.20
70	11.76	11.26	11.09	10.94	10.91	11.01	11.13	11.13	11.22	11.24	11.25	11.27	11.3	11.3	11.33	11.98	12.1	11.44	11.2	10.8	10.93	11.20
80	11.51	11.26	11.08	10.92	10.90	10.96	11.03	11.05	11.16	11.16	11.17	11.2	11.24	11.25	11.27	11.35	11.97	11.44	11.2	10.9	10.92	11.10
90	11.45	11.26	11.08	10.91	10.90	10.95	11.01	11.02	11.12	11.13	11.15	11.17	11.19	11.22	11.28	11.27	11.49	11.43	11.2	10.9	10.91	11.10
100	11.41	11.26	11.08	10.91	10.90	10.94	10.99	11.00	11.08	11.12	11.14	11.16	11.17	11.2	11.38	11.25	11.39	11.41	11.2	10.9	10.9	11.10
110	11.39	11.26	11.08	10.91	10.90	10.92	10.97	10.99	11.07	11.1	11.13	11.13	11.14	11.18	11.27	11.24	11.32	11.37	11.2	10.9	10.89	11.00
120	11.36	11.26	11.08	10.91	10.89	10.92	10.95	10.97	11.04	11.1	11.12	11.13	11.14	11.17	11.26	11.21	11.29	11.32	11.2	10.9	10.87	11.00
130	11.35	11.26	11.07	10.90	10.89	10.91	10.94	10.96	11.04	11.09	11.1	11.13	11.13	11.15	11.24	11.2	11.25	11.27	11.2	10.9	10.85	10.90
140	11.34	11.26	11.07	10.90	10.89	10.90	10.94	10.96	11.04	11.08	11.1	11.13	11.13	11.14	11.23	11.19	11.23	11.26	11.2	10.8	10.83	10.90
150	11.33	11.26	11.07	10.90	10.89	10.90	10.94	10.96	11.03	11.08	11.1	11.12	11.13	11.14	11.19	11.9	11.23	11.26	11.2	10.8	10.81	10.90

Dissolved Oxygen (g m^{-3})

Depth (m)																						
0	9.2	10.2	9.6	10.6	10.4	9.9	9.5	9.4	9.1	9.1	9.0	8.7	8.8	9.4	10.5	10.2	10.3	10.4	9.7	10.5	10.5	10.3
10	9.1	10.5	9.6	10.7	10.4	9.9	9.8	9.5	8.9	9.0	8.9	8.7	8.9	9.3	9.5	10.2	10.3	10.7	9.5	10.4	10.7	10.3
20	9.4	9.4	9.6	10.6	10.4	10.0	9.4	9.5	9.0	9.0	9.1	8.7	8.8	9.3	9.5	10.2	10.3	10.7	9.4	10.3	10.6	10.2
30	9.8	9.2	9.6	10.6	10.4	10.1	9.4	9.1	8.8	9.0	9.1	8.4	8.7	9.2	9.4	10.2	10.2	10.7	9.4	10.3	10.5	10.2
40	9.8	9.1	9.6	10.6	10.0	9.7	8.9	9.1	8.6	8.8	9.0	8.4	8.3	8.7	9.3	10.1	10.2	10.6	9.4	10.2	10.4	10.2
50	9.6	8.9	9.6	10.6	9.9	9.5	9.0	8.7	8.6	8.7	8.7	8.2	8.2	8.3	8.6	10.1	10.2	10.6	9.4	10.2	10.3	10.1
60	9.4	8.9	9.5	10.5	9.8	9.3	8.7	8.6	8.5	8.6	8.6	8.2	8.1	8.1	8.3	10.0	10.1	10.5	9.4	10.2	10.2	10.1
70	9.5	9.0	9.4	10.4	9.7	9.3	8.8	8.7	8.5	8.6	8.5	8.2	8.0	8.0	8.2	9.6	10.1	10.5	9.3	10.1	10.2	10.0
80	7.7	8.9	9.4	10.4	9.7	9.2	8.6	8.4	8.5	8.6	8.4	8.1	7.9	7.9	8.2	8.5	10.0	10.3	9.4	10.1	10.2	10.1
90	7.8	8.9	9.4	10.4	9.6	9.5	8.8	8.5	8.5	8.6	8.2	8.1	7.8	7.8	8.0	8.3	9.7	10.3	9.4	10.1	10.1	10.1
100	7.5	8.6	9.3	10.4	9.6	9.2	8.6	8.4	8.3	8.5	8.1	8.0	7.8	7.8	7.5	8.2	8.6	10.1	9.4	10.1	10.0	9.8
110	7.4	8.7	9.3	10.4	9.6	9.2	8.6	8.4	8.3	8.4	8.1	8.0	7.7	7.7	7.3	8.1	8.3	9.8	9.3	9.9	9.9	9.8
120	6.9	8.5	9.3	10.3	9.5	9.0	8.4	8.4	8.3	8.2	8.1	7.9	7.7	7.6	7.2	8.0	8.1	8.8	9.3	9.9	9.9	9.8
130	6.9	8.5	9.3	10.2	9.5	9.0	8.4	8.4	8.3	8.2	8.2	7.9	7.6	7.5	7.3	7.9	8.0	8.5	9.3	9.9	9.9	9.7
140	6.8	8.3	9.2	10.2	9.5	8.6	8.2	8.2	8.1	8.0	8.1	7.8	7.1	7.8	7.3	7.8	7.8	8.1	9.3	9.9	9.9	9.4
150	6.4	8.2	9.2	10.2	9.3	8.5	8.1	8.1	7.9	7.8	7.9	7.6	7.0	7.2	7.3	7.7	7.8	8.1	9.3	9.8	9.8	9.4

Secchi depth

(m)	12	14.5	13.5	17.5	11	14.5	15.5	16	13	13	15	14.5	19	22	16.4	17	16	15.5	12	9.5	12	15.5

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2001-2002**
Additional site B (Kuratau Basin) for the period starting 8 January 2002 on

Temperature

Date	8/01/2002	22/01/2002	6/03/2002	4/04/2002	22/04/2002	5/05/2002	19/06/2002	1/07/2002	17/07/2002	31/07/2002	29/08/2002	18/09/2002
Depth (m)												
0	18.1	18.8	18.64	17.38	16.84	15.12	12.45	12.13	11.48	11.3	11	11.08
10	17.55	18.45	18.58	17.35	16.61	15.14	12.44	12.09	11.49	11.1	10.8	11.05
20	15.72	17.4	18.56	17.1	16.6	15.05	12.44	12.09	11.48	11.1	10.8	11.03
30	13.74	13.9	15.07	16.74	16.4	14.75	12.43	12.09	11.48	11.1	10.8	11.03
40	12.62	12.73	13.08	14.3	13.4	14.4	12.24	12.08	11.48	11.1	10.8	11.02
50	11.92	11.98	11.91	12.77	12.12	14.07	12.11	11.97	11.49	11.1	10.8	10.91
60	11.31	11.41	11.5	12.03	11.53	12.96	11.73	11.93	11.49	11.1	10.8	10.9
70	11.21	11.25	11.24	11.5	11.32	12.2	11.49	11.87	11.48	11.1	10.8	10.89
80	11.15	11.19	11.21	11.29	11.24	11.97	11.38	11.78	11.48	11.1	10.8	10.89
90	11.1	11.13	11.15	11.2	11.18	11.69	11.3	11.37	11.46	11.1	10.7	10.87
100	11.1	11.12	11.12	11.19	11.15	11.39	11.22	11.28	11.3	11	10.7	10.85
110										10.7	10.7	

Dissolved Oxygen (g m^{-3})

Depth (m)												
0	8.7	8.8	9.3	9.3	9.3	10.9	10.4	10.3	10.4	9.9	10.4	10.4
10	8.6	9	9.1	9.2	9.3	9.5	10.3	10.3	10.8	9.7	10.3	10.5
20	8.8	9	9.1	9.2	9.2	9.4	10.2	10.2	10.6	9.6	10.3	10.5
30	8.8	8.9	8.6	9.1	9.2	9.3	10.2	10.2	10.6	9.6	10.2	10.5
40	8.7	8.7	8.7	8.9	8.5	9.1	10.1	10.1	10.5	9.6	10.2	10.4
50	8.7	8.4	8.5	8.6	8.2	9	10	10.1	10.5	9.6	10.1	10.3
60	8.7	8.3	8.4	8.4	8	8.6	9	9.8	10.4	9.6	10.1	10.2
70	8.7	8.3	8.3	8.3	7.9	8.1	8.7	9.7	10.4	9.5	10	10.1
80	8.7	8.2	8.1	8.1	7.8	7.9	8.4	9.5	10.3	9.5	10	10.1
90	8.2	8.1	7.9	7.7	7.7	7.8	8.2	9.1	10.3	9.5	10	10
100	8	7.6	7.5	7.7	7.5	7.7	7.8	8.7	9.8	9.6	9.9	9.9
110	8				6.2					9.2	9.8	

Secchi depth

Depth (m)	13.5	12	14.5	19.5	19	13.2	15	16	12.5	10.5	8	11

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2001-2002**
Additional site C (Western Bays) for the period starting 8 January 2002 on

Temperature

Date	8/01/2002	22/01/2002	6/03/2002	4/04/2002	22/04/2002	5/05/2002	19/06/2002	1/07/2002	17/07/2002	31/07/2002	29/08/2002	18/09/2002	9/10/2002
Depth (m)													
0	18.72	18.82	18.68	17.47	16.88	15.6	12.58	12.22	11.52	11.6	11.4	11.24	12.10
10	17.41	18.46	18.47	17.24	11.63	15.64	12.56	12.15	11.5	11.2	10.9	11.23	11.30
20	16.95	18.21	18.32	17.16	16.58	15.64	12.56	12.14	11.49	11.2	10.9	11.16	11.30
30	14	13.77	15.9	17.12	16.5	15.61	12.56	12.14	11.49	11.2	10.8	11.06	11.20
40	13.14	12.01	12.98	13.17	13.02	12.26	12.56	12.13	11.49	11.2	10.8	11.02	11.20
50	11.97	11.5	12.13	12.11	11.87	11.57	12.56	12.13	11.49	11.2	10.8	11.02	11.20
60	11.44	11.26	11.59	11.57	11.47	11.37	11.9	11.92	11.49	11.2	10.8	11	11.10
70	11.26	11.17	11.36	11.38	11.32	11.29	11.36	11.55	11.49	11.2	10.8	10.99	11.10
80	11.18	11.16	11.25	11.32	11.26	11.24	11.28	11.5	11.49	11.2	10.8	10.95	11.10
90	11.15	11.14	11.18	11.21	11.23	11.21	11.23	11.47	11.49	11.2	10.8	10.94	11.00
100	11.12	11.11	11.18	11.19	11.19	11.19	11.22	11.45	11.49	11.2	10.8	10.92	11.00
110	11.11	11.1			11.16	11.15				11.2	10.8		10.90
120										11.2	10.8		10.90

Dissolved Oxygen (g m^{-3})

Depth (m)													
0	8.6	8.9	9.3	9.4	9.3	10.6	10.3	10.4	10.5	9.7	10.3	10.5	10.4
10	8.4	8.9	9	9.1	9.2	9.5	10.2	10.4	10.8	9.5	10.2	10.7	10.4
20	8.9	8.9	9	9.1	9.2	9.5	10.2	10.4	10.8	9.5	10.2	10.7	10.4
30	8.6	8.9	8.8	9.1	9.1	9.4	10.1	10.3	10.7	9.4	10.1	10.6	10.4
40	8.6	8.5	8.6	8.6	8.5	8.9	10.1	10.3	10.5	9.4	10	10.5	10.3
50	8.5	8.2	8.5	8.5	8.1	8.6	10	10.2	10.5	9.4	10	10.4	10
60	8.6	8.1	8.5	8.2	7.9	8.3	9.7	10	10.5	9.4	10	10.4	10
70	8.6	8.1	8.2	8.2	7.8	8.2	9.1	9.6	10.5	9.4	9.9	10.3	9.9
80	8.7	8.1	8.1	8	7.7	8	8.4	8.8	10.5	9.3	9.9	10.2	9.9
90	8.6	8.1	8.1	7.9	7.7	7.9	8	8.7	10.4	9.3	9.9	10.1	9.8
100	8.7	8.1	8.1	7.9	7.6	7.8	7.7	8.6	10.2	9.3	10	10	9.6
110	8.5	7.9			7.6	7.7				9.3	10		9.7
120	8.5	7.7								9.1	9.9		9.6

Secchi depth

Depth (m)	14.5	15.5	16	19	18.5	15.6	16	14	12.5	12	8	12	19

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **2000-2001**

For the period starting 11 July 2000

Temperature

Date	11-7-00	04-8-00	21-8-00	11-9-00	28-9-00	25-10-00	13-11-00	06-12-00	03-1-01	15-1-01	20-2-01	01-3-01	19-3-01	09-4-01	11-4-01	10-5-01	29-5-01	02-7-01	25-7-01	13-8-01
Depth (m)																				
0	11.87	11.32	11.19	11.80	12.47	14.04	13.27	15.73	18.16	18.98	20.47	20.87	19.01	16.99	16.99	15.78	13.62	12.11	11.26	11.15
10	11.87	11.32	11.15	11.46	11.52	13.03	13.09	15.06	17.37	18.51	19.37	20.71	19.05	16.87	16.99	15.78	13.74	12.04	11.26	11.12
20	11.86	11.32	11.14	11.33	11.36	11.99	12.98	14.15	15.46	14.79	18.08	18.98	19.06	16.78	16.97	15.78	13.78	12.00	11.26	11.12
30	11.86	11.33	11.14	11.30	11.33	11.83	12.80	13.31	13.61	13.63	16.06	15.95	16.46	15.82	16.84	15.73	13.79	11.99	11.26	11.11
40	11.86	11.33	11.14	11.27	11.31	11.60	12.36	12.49	12.73	12.81	13.39	13.36	13.05	13.13	13.87	13.19	13.80	11.98	11.26	11.11
50	11.86	11.33	11.14	11.22	11.30	11.49	12.10	12.16	12.21	12.27	12.67	12.58	12.42	12.35	12.68	12.42	13.80	11.98	11.26	11.11
60	11.64	11.33	11.15	11.18	11.27	11.42	11.69	11.78	11.76	11.87	12.01	12.01	11.84	11.81	11.89	11.90	11.92	11.95	11.26	11.10
70	11.42	11.33	11.15	11.15	11.24	11.39	11.41	11.53	11.64	11.67	11.77	11.79	11.67	11.67	11.69	11.69	11.61	11.76	11.26	11.09
80	11.31	11.33	11.15	11.14	11.20	11.38	11.29	11.40	11.47	11.55	11.56	11.63	11.55	11.54	11.54	11.52	11.54	11.51	11.26	11.08
90	11.22	11.33	11.15	11.13	11.17	11.33	11.26	11.36	11.43	11.46	11.50	11.55	11.49	11.46	11.48	11.47	11.46	11.45	11.26	11.08
100	11.21	11.32	11.15	11.13	11.14	11.33	11.21	11.32	11.38	11.39	11.43	11.50	11.43	11.41	11.43	11.42	11.42	11.41	11.26	11.08
110	11.19	11.32	11.15	11.13	11.06	11.29	11.19	11.28	11.36	11.36	11.40	11.46	11.41	11.37	11.39	11.40	11.38	11.39	11.26	11.08
120	11.19	11.31	11.15	11.13	11.04	11.27	11.19	11.27	11.33	11.34	11.39	11.44	11.39	11.33	11.35	11.38	11.35	11.36	11.26	11.08
130	11.18	11.26	11.15	11.12	11.02	11.23	11.17	11.26	11.30	11.32	11.37	11.43	11.37	11.32	11.34	11.36	11.33	11.35	11.26	11.07
140	11.16	11.18	11.14	11.12	11.01	11.18	11.15	11.25	11.30	11.31	11.35	11.40	11.35	11.31	11.32	11.34	11.31	11.34	11.26	11.07
150	11.15	11.18	11.14	11.12	11.01	11.15	11.15	11.25	11.32	11.31	11.33	11.41	11.34	11.31	11.32	11.34	11.31	11.33	11.26	11.07

Dissolved Oxygen (g m^{-3})

Depth (m)																				
0	9.0	9.0	9.2	9.3	9.1	8.9	8.2	8.7	8.2	8.0	8.0	8.2	8.4	8.3	8.4	8.2	8.7	9.2	10.2	9.6
10	9.0	9.0	9.4	9.5	8.7	8.8	8.4	8.3	8.3	8.6	8.0	8.5	8.3	8.3	8.2	8.0	8.5	9.1	10.5	9.6
20	9.0	9.1	9.4	9.5	8.7	9.1	8.4	8.5	8.4	8.1	8.2	8.6	8.6	8.4	7.9	7.9	8.4	9.4	9.4	9.6
30	9.0	9.1	9.6	9.5	8.7	8.9	8.4	8.5	8.5	8.2	8.0	8.3	8.0	8.0	8.0	7.8	8.4	9.8	9.2	9.6
40	9.0	9.1	9.6	9.5	9.1	8.7	8.2	8.2	8.4	7.9	8.1	8.1	7.6	7.8	7.6	7.7	8.3	9.8	9.1	9.6
50	9.0	9.1	9.6	9.5	9.1	8.5	8.2	8.2	8.2	8.1	7.9	7.8	7.6	7.5	7.4	7.5	8.3	9.6	8.9	9.6
60	9.0	9.1	9.7	9.5	8.7	8.4	8.0	7.9	8.0	7.5	7.7	7.4	6.8	7.2	7.2	7.5	7.2	9.4	8.9	9.5
70	8.9	9.1	9.7	9.5	8.7	8.3	7.9	7.8	7.9	7.4	7.6	7.2	6.8	7.1	7.4	7.3	7.0	9.5	9.0	9.4
80	7.8	9.0	9.7	9.5	8.7	8.2	7.6	7.6	7.8	7.5	7.4	7.0	6.5	6.9	7.3	7.3	7.0	7.7	8.9	9.4
90	7.4	8.9	9.7	9.5	8.7	8.2	7.6	7.6	7.7	7.5	7.4	6.9	6.5	6.9	7.1	7.1	7.0	7.8	8.9	9.4
100	7.2	8.7	9.7	9.5	8.7	8.0	7.5	7.6	7.6	7.3	7.2	6.8	6.6	6.8	7.0	7.0	6.9	7.5	8.6	9.3
110	7.1	8.3	9.7	9.5	8.7	8.0	7.5	7.5	7.6	7.2	7.1	6.7	6.5	6.8	7.0	7.0	6.7	7.4	8.7	9.3
120	6.9	7.9	9.7	9.5	8.2	8.1	7.4	7.4	7.5	7.1	7.0	6.5	6.5	6.7	6.8	6.9	6.6	6.9	8.5	9.3
130	6.9	7.3	9.7	9.5	8.5	8.1	7.4	7.3	7.4	7.0	7.0	6.5	6.5	6.6	6.7	6.6	6.5	6.9	8.5	9.3
140	6.9	7.1	9.7	9.5	8.6	8.0	7.3	7.2	7.2	6.9	6.8	6.4	6.5	6.4	6.4	6.7	6.3	6.8	8.3	9.2
150	6.8	7.4	9.7	9.3	8.5	7.9	7.3	7.1	7.1	6.6	6.5	6.3	6.4	6.3	6.3	6.6	6.1	6.4	8.2	9.2

Secchi depth

	Depth (m)																			
	11	12	15	12	13	11	12	17	17	18	17	14.5	17	13.5	13.5	17	14.5	12	14.5	13.5

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **1999-2000**

For the period starting 13 July 1999

Temperature

Date	13-7-99	6-8-99	3-9-99	29-9-99	18-10-99	19-12-99	18-1-00	12-4-00	4-5-00	25-5-00	20-6-00	11-7-00	4-8-00	21-8-00	11-9-00	28-9-00	25-10-00	13-11-00	6-12-00
Depth (m)																			
0	12.0	11.8	11.8	11.5	12.8	16.56	18.63	17.41	15.82	14.22	12.28	11.87	11.32	11.19	11.80	12.47	14.04	13.27	15.73
10	12.0	11.4	11.3	11.5	12.7	16.40	18.35	17.25	15.77	14.28	12.28	11.87	11.32	11.15	11.46	11.52	13.03	13.09	15.06
20	12.0	11.4	11.2	11.5	12.4	15.96	17.22	17.21	15.76	14.31	12.28	11.86	11.32	11.14	11.33	11.36	11.99	12.98	14.15
30	12.0	11.4	11.1	11.4	11.6	15.23	14.94	16.65	15.75	14.28	12.27	11.86	11.33	11.14	11.30	11.33	11.83	12.86	13.31
40	12.0	11.3	11.1	11.2	11.4	12.16	13.29	12.55	13.64	14.22	12.26	11.86	11.33	11.14	11.27	11.31	11.60	12.36	12.49
50	12.0	11.3	11.1	11.1	11.3	11.64	11.91	11.67	12.14	12.53	12.26	11.86	11.33	11.14	11.22	11.30	11.49	12.10	12.16
60	12.0	11.3	11.0	11.1	11.1	11.35	11.45	11.39	11.56	11.56	12.21	11.85	11.33	11.15	11.18	11.27	11.42	11.69	11.78
70	12.0	11.3	11.0	11.0	11.1	11.25	11.31	11.29	11.36	11.34	11.58	11.64	11.33	11.15	11.15	11.24	11.39	11.41	11.53
80	11.4	11.3	11.0	11.0	11.0	11.18	11.21	11.23	11.24	11.23	11.32	11.42	11.33	11.15	11.14	11.20	11.38	11.29	11.40
90	11.3	11.3	11.0	11.0	11.0	11.16	11.17	11.20	11.21	11.20	11.24	11.31	11.33	11.15	11.13	11.17	11.33	11.26	11.36
100	11.2	11.2	11.0	11.0	11.0	11.14	11.14	11.17	11.17	11.15	11.17	11.22	11.32	11.15	11.13	11.14	11.33	11.21	11.32
110	11.2	11.2	11.0	11.0	11.0	11.12	11.12	11.15	11.14	11.12	11.16	11.21	11.32	11.15	11.13	11.06	11.29	11.19	11.28
120	11.2	11.1	11.0	11.0	11.0	11.10	11.09	11.13	11.12	11.10	11.14	11.19	11.31	11.15	11.13	11.04	11.27	11.19	11.27
130	11.1	11.1	11.0	11.0	11.0	11.08	11.08	11.11	11.10	11.09	11.12	11.18	11.26	11.15	11.12	11.02	11.23	11.17	11.26
140	11.1	11.1	11.0	11.0	11.0	11.07	11.07	11.09	11.09	11.09	11.10	11.16	11.18	11.14	11.12	11.01	11.18	11.15	11.25
150	11.1	11.0	11.0	10.9	11.0	11.10	11.06	11.09	11.09	11.07	11.10	11.15	11.18	11.14	11.12	11.01	11.15	11.15	11.25

Dissolved Oxygen (g m^{-3})

Depth (m)																			
0	10.5	10.1	9.2	9.5	8.9	8.3	7.9	9.2	8.7	8.5	8.1	9.0	9.0	9.2	9.3	9.1	8.9	8.2	8.7
10	10.7	10.2	9.8	9.8	8.9	8.6	7.9	9.2	8.6	8.3	8.3	9.0	9.0	9.4	9.5	8.7	8.8	8.4	8.3
20	10.7	9.9	9.8	9.9	8.9	8.7	8.1	9.2	8.8	8.5	8.7	9.0	9.1	9.4	9.5	8.7	9.1	8.4	8.5
30	10.6	10.0	9.8	9.7	8.9	8.7	8.3	9.0	8.8	8.5	8.6	9.0	9.1	9.6	9.5	8.7	8.9	8.4	8.5
40	10.6	9.7	9.5	9.6	8.8	8.7	8.1	8.3	8.2	8.6	8.6	9.0	9.1	9.6	9.5	9.1	8.7	8.2	8.2
50	10.4	9.9	9.5	9.3	8.6	8.7	8.0	8.0	7.9	8.2	8.6	9.0	9.1	9.6	9.5	9.1	8.5	8.2	8.2
60	10.4	9.8	9.4	9.2	8.6	8.6	8.0	8.0	7.9	7.7	8.7	9.0	9.1	9.7	9.5	8.7	8.4	8.0	7.9
70	10.3	9.7	9.3	9.0	8.6	8.7	8.0	8.0	7.8	7.7	8.4	8.9	9.1	9.7	9.5	8.7	8.3	7.9	7.8
80	10.3	9.0	9.2	9.0	8.5	8.5	7.9	7.9	7.7	7.6	7.6	7.8	9.0	9.7	9.5	8.7	8.2	7.6	7.6
90	8.1	8.6	9.2	9.0	8.6	8.5	7.7	7.9	7.8	7.4	7.4	7.4	8.9	9.7	9.5	8.7	8.2	7.6	7.6
100	7.9	7.3	9.2	8.9	8.6	8.5	8.3	7.7	7.6	7.4	7.3	7.2	8.7	9.7	9.5	8.7	8.0	7.5	7.6
110	7.5	7.1	9.1	8.9	8.6	8.3	8.1	7.7	7.6	7.6	7.4	7.1	8.3	9.7	9.5	8.7	8.0	7.5	7.5
120	7.4	6.8	9.1	8.9	8.3	8.4	8.1	7.7	7.4	7.5	7.3	6.9	7.9	9.7	9.5	8.2	8.1	7.4	7.4
130	7.3	6.7	9.0	8.8	7.9	8.2	8.0	7.5	7.4	7.5	7.3	6.9	7.3	9.7	9.5	8.5	8.1	7.4	7.3
140	7.1	6.7	8.9	8.7	7.5	8.1	8.0	7.5	7.2	7.4	7.2	6.9	7.1	9.7	9.5	8.6	8.0	7.3	7.2
150	6.9	6.4	8.9	8.6	7.5	8.0	7.5	7.2	6.8	7.0	6.9	6.8	7.4	9.7	9.3	8.5	7.9	7.3	7.1

Secchi depth

Depth (m)	16	14.5	10	10	14.9	18	19.1	15	14	14	14	11	12	15	12	13	11	12	17

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **1998-1999**

For the period starting 28 July 1998

Temperature

Date	28-7-98	22-8-98	29-9-98	1-11-98	26-11-98	22-12-98	12-2-99	3-3-99	14-4-99	30-4-99	19-5-99	1-6-99	17-6-99	13-7-99	6-8-99	3-9-99	29-9-99	18-10-99
Depth (m)																		
0	11.4	11.5	12.9	13.6	18.4	18.5	20.1	20.9	18.3	16.4	14.4	14.2	13.0	12.0	11.8	11.8	11.5	12.8
10	11.6	11.3	11.9	13.2	15.6	16.7	20.1	19.8	18.3	16.4	14.4	14.1	13.4	12.0	11.4	11.3	11.5	12.7
20	11.6	11.3	11.5	12.7	15.4	15.7	20.1	19.8	18.3	16.4	14.5	14.1	13.4	12.0	11.4	11.2	11.5	12.4
30	11.6	11.3	11.3	12.4	12.7	14.5	14.9	15.1	18.1	16.0	14.5	14.1	13.4	12.0	11.4	11.1	11.4	11.6
40	11.6	11.3	11.2	12.4	12.1	12.7	13.2	13.1	12.9	13.1	14.5	13.9	13.4	12.0	11.3	11.1	11.2	11.4
50	11.6	11.3	11.1	12.2	11.8	11.8	12.1	12.1	11.9	12.2	13.1	13.0	13.4	12.0	11.3	11.1	11.1	11.3
60	11.6	11.3	11.1	11.7	11.5	11.5	11.6	11.8	11.6	12.0	11.8	12.0	12.1	12.0	11.3	11.0	11.1	11.1
70	11.6	11.1	11.0	11.2	11.3	11.3	11.4	11.5	11.4	11.8	11.3	11.4	11.5	12.0	11.3	11.0	11.0	11.1
80	10.6	10.9	11.0	11.1	11.2	11.2	11.2	11.4	11.3	11.2	11.2	11.3	11.3	11.4	11.3	11.0	11.0	11.0
90	10.6	10.9	10.9	11.1	11.1	11.1	11.1	11.3	11.2	11.1	11.1	11.2	11.2	11.3	11.3	11.0	11.0	11.0
100	10.5	10.8	10.9	11.0	11.1	11.1	11.1	11.3	11.2	11.1	11.1	11.1	11.2	11.2	11.2	11.0	11.0	11.0
110	10.5	10.5	10.9	11.0	11.0	11.1	11.1	11.2	11.2	11.1	11.1	11.1	11.1	11.2	11.2	11.0	11.0	11.0
120	10.5	10.5	10.9	11.0	11.0	11.0	11.0	11.2	11.2	11.1	11.1	11.1	11.1	11.2	11.1	11.0	11.0	11.0
130	10.5	10.5	10.7	11.0	11.0	11.1	11.1	11.1	11.1	11.1	11.0	11.1	11.1	11.1	11.1	11.0	11.0	11.0
140	10.5	10.5	10.7	10.9	11.0	11.1	11.1	11.1	11.1	11.1	11.0	11.1	11.0	11.1	11.1	11.0	11.0	11.0
150	10.5	10.5	10.7	10.9	11.0	11.1	11.1	11.1	11.1	11.1	11.0	11.1	11.0	11.1	11.0	11.0	10.9	11.0
Dissolved Oxygen (g m^{-3})																		
Depth (m)																		
0	10.6	10.6	10.6	10.4	9.6	9.7	9.0	8.6	9.1	9.5	9.9	10.0	10.4	10.5	10.1	9.2	9.5	8.9
10	10.5	10.5	10.7	10.7	9.9	10.1	9.0	8.7	9.2	9.5	10.5	10.4	10.3	10.7	10.2	9.8	9.8	8.9
20	10.4	10.4	10.6	10.7	9.8	10.2	8.9	8.7	9.1	9.6	10.4	10.4	10.4	10.7	9.9	9.8	9.9	8.9
30	10.4	10.3	10.5	10.6	10.1	10.2	9.9	9.5	9.1	9.6	10.1	10.7	10.5	10.6	10.0	9.8	9.7	8.9
40	10.3	10.3	10.3	10.4	10.0	10.1	9.9	9.2	9.1	9.1	10.0	10.4	10.4	10.6	9.7	9.5	9.6	8.8
50	10.3	10.2	10.2	10.2	9.8	9.9	9.6	8.9	9.0	8.7	9.2	9.6	10.4	10.4	9.9	9.5	9.3	8.6
60	10.3	10.1	10.1	10.0	9.7	9.7	9.5	8.8	8.9	8.7	8.7	9.4	9.0	10.4	9.8	9.4	9.2	8.6
70	10.3	9.5	9.9	9.6	9.5	9.5	9.4	8.7	8.7	8.6	8.3	9.1	8.9	10.3	9.7	9.3	9.0	8.6
80	8.6	8.2	9.5	9.1	9.2	9.3	9.2	8.6	8.6	8.4	8.2	9.1	8.6	10.3	9.0	9.2	9.0	8.5
90	8.5	7.9	9.3	8.8	9.1	9.1	9.1	8.4	8.6	8.0	7.8	8.8	8.5	8.1	8.6	9.2	9.0	8.6
100	8.3	7.4	8.9	8.5	9.1	8.9	8.9	8.3	8.6	8.0	7.7	8.5	8.2	7.9	7.3	9.2	8.9	8.6
110	8.3	7.4	8.5	8.3	8.8	8.9	8.7	8.2	8.5	8.0	7.5	8.2	8.1	7.5	7.1	9.1	8.9	8.6
120	8.2	7.4	7.7	8.0	8.6	8.8	8.3	7.9	8.3	7.9	7.4	8.2	8.0	7.4	6.8	9.1	8.9	8.3
130	8.2	7.4	7.6	7.8	8.4	8.6	8.1	7.7	8.1	7.7	7.3	8.1	7.7	7.3	6.7	9.0	8.8	7.9
140	8.1	7.4	7.4	7.6	8.2	8.4	7.9	7.5	7.9	7.5	7.2	7.8	7.4	7.1	6.7	8.9	8.7	7.5
150	8.1	7.4	7.4	7.6	8.0	8.2	7.7	7.3	7.7	7.3	7.0	7.5	7.3	6.9	6.4	8.9	8.6	7.5
Secchi depth																		
Depth (m)	10.0	10.5	10.4	13.5	15.0	14.5	12.5	14.3	13.0	12.2	15.0	15.0	15.0	16.0	14.5	10.0	10.0	14.9

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **1997-1998**
For the period starting 16 September 1997

Temperature

Date	16-9-97	11-10-97	28-10-97	02-12 -97	21-1 -98	04-3-98	24-3-98	26-3-98	07-4-98	29-5-98	28-7-98	22-8-98
Depth (m)												
1	10.8	11.8	12.2	14.5	17.7	20.0	19.3	18.6	17.7	14.2	11.4	11.49
10	10.5	11.4	12.0	13.7	17.6	19.9	18.6	18.6	17.7	14.3	11.6	11.32
20	10.5	11.1	11.5	13.6	16.5	19.7	18.5	18.5	17.7	14.0	11.6	11.27
30	10.5	10.8	11.5	13.1	14.3	16.4	18.0	18.1	17.5	13.1	11.6	11.27
40	10.5	10.6	11.4	12.5	12.0	13.3	13.0	12.6	13.7	12.0	11.6	11.27
50	10.5	10.5	11.1	11.5	11.2	12.0	11.9	11.7	11.5	11.2	11.6	11.26
60	10.5	10.5	11.1	11.0	11.0	11.5	11.1	11.1	11.0	10.9	11.6	11.26
70	10.5	10.5	10.8	10.8	10.8	11.0	10.7	10.8	10.8	10.8	11.6	11.12
80	10.5	10.5	10.7	10.7	10.7	10.8	10.6	10.7	10.6	10.6	10.6	10.90
90	10.5	10.5	10.6	10.6	10.6	10.7	10.5	10.6	10.6	10.6	10.6	10.86
100	10.5	10.5	10.5	10.5	10.6	10.7	10.5	10.6	10.6	10.6	10.5	10.82
110	10.5	10.5	10.4	10.5	10.6	10.6	10.5	10.5	10.5	10.6	10.5	10.5
120	10.5	10.5	10.5	10.5	10.5	10.6	10.5	10.5	10.5	10.5	10.5	10.5
130	10.5	10.5	10.5	10.5	10.5	10.6	10.5	10.5	10.5	10.5	10.5	10.5
140	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
150	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5

Dissolved Oxygen (g m^{-3})

Depth (m)												
1	10.55	10.37	10.68	9.89	9.27	9.17	9.43	9.10	9.14	9.92	10.60	10.64
10	10.52	10.51	10.22	9.86	9.38	9.19	9.53	9.07	9.10	9.88	10.46	10.50
20	10.50	10.46	10.24	9.86	9.46	9.22	9.61	8.95	9.07	9.87	10.40	10.36
30	10.29	10.46	10.00	9.74	9.81	9.30	9.78	8.97	9.09	9.68	10.35	10.27
40	10.31	10.39	9.96	9.66	9.85	9.32	9.73	9.47	9.32	9.40	10.32	10.26
50	10.27	10.36	9.89	9.47	9.53	9.16	9.55	9.45	9.34	9.26	10.30	10.20
60	10.16	10.31	9.77	9.44	9.37	9.17	9.30	9.47	9.30	9.18	10.28	10.10
70	10.08	10.24	9.76	9.19	9.30	9.11	9.21	9.38	9.24	9.20	10.25	9.54
80	10.06	10.15	9.85	9.04	9.13	9.04	9.14	9.30	9.13	9.12	8.58	8.15
90	10.03	10.09	9.33	9.00	9.10	8.93	9.03	9.24	9.05	9.08	8.52	7.90
100	9.99	10.06	9.23	8.96	9.01	8.89	8.39	9.16	8.97	8.94	8.34	7.36
110	9.96	10.02	9.03	8.87	8.89	8.83	8.38	8.98	8.94	8.78	8.26	7.36
120	9.91	10.00	8.96	8.87	8.84	8.75	8.38	8.87	8.88	8.69	8.21	7.36
130	9.86	9.92	8.76	8.84	8.68	8.63	8.38	8.38	8.79	8.41	8.21	7.36
140	9.82	9.87	8.76	8.71	8.45	8.30	8.38	8.38	8.58	8.41	8.14	7.36
150	9.56	9.69	8.76	8.65	8.38	8.22	8.38	8.38	8.40	8.41	8.14	7.36

Secchi depth data (m)

Depth (m)	12.0	13.7	12.5	14.5	14.7	11.5	13.5	13.5	13.5	15.5	10.0	10.5

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. 1996-1997

For the period starting 3 September 1996

Temperature

Date	3-9-96	17-9-96	27-9-96	17-10-96	24-10-96	6-11-96	28-11-96	11-12-96	23-12-96	8-1-97	29-1-97	26-3-97	2-4-97	15-4-97	20-5-97	29-5-97	7-7-97	29-7-97
Depth (m)																		
1	10.5	10.7	12.5	13.3	12.6	13.5	13.6	14.8	16.3	17.9	17.8	17.7	17.3	16.7	14.1	14.2	11.7	10.9
10	10.4	10.6	11.6	12.0	12.3	13.6	13.6	14.8	15.3	16.8	17.6	17.6	17.3	16.7	14.0	14.1	11.7	11.0
20	10.3	10.4	11.1	11.9	12.3	13.4	13.3	14.4	15.1	16.5	17.4	17.2	17.2	16.7	14.0	14.1	11.7	11.0
30	10.3	10.3	11.0	11.8	12.3	13.3	13.3	14.2	15.0	15.6	14.8	16.6	17.2	16.7	12.6	14.1	11.7	11.0
40	10.3	10.3	10.5	11.7	11.9	11.7	11.6	12.7	13.5	13.0	13.4	13.8	14.5	14.0	11.5	14.0	11.7	11.0
50	10.4	10.3	10.4	11.5	11.6	10.8	10.9	12.5	12.4	11.9	11.8	12.4	11.5	11.9	11.0	12.1	11.7	11.0
60	10.3	10.3	10.4	10.9	11.1	10.6	10.9	11.7	11.3	11.2	10.9	11.2	10.9	11.1	10.5	11.8	11.7	11.0
70	10.3	10.3	10.3	10.6	10.6	10.5	10.5	11.7	10.7	10.8	10.7	10.7	10.6	10.9	10.5	11.1	11.7	11.0
80	10.3	10.3	10.3	10.5	10.5	10.4	10.4	11.1	10.6	10.6	10.6	10.5	10.5	10.7	10.5	10.8	10.9	11.0
90	10.3	10.3	10.3	10.4	10.4	10.4	10.4	10.4	10.5	10.5	10.4	10.5	10.5	10.6	10.5	10.6	10.8	10.9
100	10.3	10.3	10.3	10.3	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.5	10.5	10.5	10.5	10.6	10.7
110	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.4	10.4	10.4	10.4	10.4	10.4	10.5	10.5	10.5	10.5	10.6
120	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.4	10.4	10.4	10.4	10.4	10.4	10.5	10.5	10.5	10.5	10.5
130	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.4	10.4	10.4	10.4	10.4	10.4	10.5	10.5	10.5	10.5	10.5
140	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.4	10.3	10.3	10.3	10.4	10.4	10.5	10.5	10.5	10.5	10.5
150	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.4	10.4	10.5	10.4	10.4	10.5	10.5
Dissolved Oxygen (g m^{-3})																		
Depth (m)																		
1	8.81	9.08	10.03	9.78	10.32	9.96	9.99	10.03	9.10	8.71	8.80	9.70	9.40	9.06	9.09	9.3	9.9	10.53
10	9.17	9.17	10.43	9.85	10.27	9.84	9.87	9.97	9.30	8.70	8.80	9.30	9.25	8.95	9.10	9.2	9.8	10.42
20	9.14	8.98	10.32	9.84	10.15	9.80	9.80	9.90	9.30	8.70	8.70	8.93	8.94	8.91	9.06	9.2	9.8	10.45
30	8.98	8.95	10.16	9.84	9.89	9.79	9.81	9.76	9.30	8.80	9.10	8.80	8.82	8.87	9.01	9.2	9.8	10.43
40	8.90	8.93	9.98	9.80	9.89	9.73	9.77	9.70	9.30	9.00	8.90	8.78	8.79	8.82	8.94	9.1	9.8	10.46
50	8.78	8.87	9.69	9.76	9.80	9.29	9.35	9.10	9.30	8.80	8.90	8.51	8.58	8.65	8.86	9.1	9.7	10.40
60	8.73	8.80	9.54	9.67	9.67	9.19	9.14	9.04	9.15	8.60	8.70	8.49	8.56	8.71	8.70	9.0	9.7	10.36
70	8.74	8.80	9.45	9.56	9.44	9.14	9.09	9.03	9.07	8.60	8.60	8.47	8.52	8.71	8.64	8.9	9.7	10.34
80	8.70	8.77	9.37	9.42	9.33	9.03	9.01	9.01	9.00	8.60	8.50	8.36	8.46	8.69	8.48	8.5	8.6	10.34
90	8.63	8.70	9.24	9.29	9.30	8.99	8.96	8.92	8.98	8.60	8.50	8.30	8.45	8.63	8.32	8.3	8.2	10.24
100	8.59	8.61	9.11	9.22	9.21	8.94	8.93	8.88	8.95	8.60	8.40	8.27	8.40	8.54	8.29	8.2	8.1	8.70
110	8.48	8.49	9.13	9.15	9.20	8.90	8.87	8.80	8.89	8.50	8.30	8.18	8.29	8.48	8.27	8.1	8.0	8.02
120	8.44	8.33	9.07	8.91	8.98	8.77	8.74	8.73	8.85	8.40	8.20	8.08	8.20	8.41	8.22	8.1	8.0	8.05
130	8.19	8.27	9.07	8.83	8.98	8.71	8.69	8.69	8.66	8.30	8.30	7.96	8.02	8.20	8.19	8.1	7.9	8.09
140	8.39	8.35	9.05	8.89	8.89	8.62	8.65	8.60	8.33	8.20	8.20	7.40	7.60	7.87	7.97	7.8	7.4	7.79
150	8.81	8.84	8.98	8.49	8.94	8.48	8.43	8.47	8.25	8.10	8.10	7.40	7.50	7.71	7.88	7.7	7.2	7.13
Secchi depth data (m)																		
Secchi d	13.1	14..2	11.2	12.6	13.4	14.9	14.1	14.7	17.7	15.1	15.2	15.3	16.0	17.7	14.6	14.5	12.5	13.5

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. 1995-1996

For the period starting 12 September 1995

Temperature

Date	12-9-95	25-9-95	30-10-95	24-11-95	06-12-95	12-1-96	31-1-96	13-2-96	29-2-96	20-3-96	28-3-96	18-4-96	19-5-96	14-6-96	9-7-96
Depth (m)															
1	10.7		13.7		17.7	21.1	21.7	22.7	20.5	18.2	16.8	17.7	14.8	12.2	11.2
10	10.7		11.9		16.2	20.7	20.7	21.0	20.1	18.2	16.7	17.4	14.8	12.2	11.2
20	10.7		11.4		15.3	18.1	18.5	20.6	20.0	18.2	16.6	17.3	14.8	12.1	11.2
30	10.7		11.2		12.4	14.8	13.5	15.1	15.5	18.1	13.7	17.0	14.8	12.1	11.2
40	10.7		10.9		11.4	12.4	12.3	12.2	11.9	12.3	12.4	12.6	14.7	12.0	11.2
50	10.7		10.8		11.0	11.5	11.6	11.6	11.3	11.4	11.6	11.4	11.6	11.2	11.2
60	10.7		10.7		10.7	11.0	11.2	11.0	11.0	11.1	11.4	11.1	11.1	10.9	11.2
70	10.7		10.5		10.6	10.9	10.8	10.8	10.8	10.9	11.6	11.1	10.9	10.8	11.2
80	10.5		10.5		10.6	10.9	10.7	10.7	10.7	10.8	11.2	10.9	10.8	10.8	11.2
90	10.4		10.5		10.6	10.7	10.7	10.7	10.7	10.7	11.3	10.8	10.7	10.8	10.8
100	10.4		10.5		10.5	10.6	10.6	10.7	10.7	10.7	10.9	10.8	10.7	10.7	10.8
110	10.4		10.5		10.5	10.5	10.6	10.7	10.7	10.6	10.8	10.8	10.7	10.7	10.8
120	10.4		10.5		10.5	10.5	10.5	10.6	10.6	10.6	10.7	10.7	10.7	10.7	10.8
130	10.4		10.5		10.5	10.5	10.5	10.7	10.6	10.6	10.7	10.7	10.7	10.7	10.8
140	10.4		10.5		10.5	10.5	10.5	10.6	10.6	10.6	10.7	10.7	10.7	10.7	10.8
150	10.4		10.5		10.5	10.5	10.5	10.6	10.6	10.6	10.6	10.7	10.7	10.7	10.8
160	10.4		*		10.5	10.5	10.5	*	*	*	*	*	*	*	*

Dissolved oxygen (g m^{-3})

Depth (m)															
1	9.6		10.3		9.5	8.5	8.5	8.1	8.2	8.4	8.7	8.6	9.0	9.2	9.3
10	9.6		10.5		9.9	8.7	8.5	8.1	8.2	8.3	8.7	8.6	9.0	9.2	9.1
20	9.6		10.6		10.0	9.1	9.1	8.2	8.1	8.3	8.8	8.6	8.9	9.2	9.1
30	9.6		10.7		10.5	9.7	10.1	9.2	9.0	8.1	9.0	8.4	8.9	9.1	9.0
40	9.7		10.7		10.5	10.1	10.2	9.5	9.1	8.7	8.8	8.7	8.9	9.0	8.9
50	9.6		10.3		10.3	9.9	9.9	9.0	9.0	8.6	8.6	8.4	8.7	8.4	8.8
60	9.5		10.3		10.0	9.6	8.9	8.7	8.8	8.5	8.5	8.4	8.5	8.1	8.7
70	9.4		10.2		10.0	9.6	8.9	8.6	8.6	8.5	8.5	8.4	8.3	7.9	8.7
80	9.4		10.2		9.9	9.6	8.8	8.5	8.5	8.4	8.3	8.4	8.3	7.8	8.6
90	9.0		10.1		9.8	9.5	8.8	8.4	8.4	8.3	8.2	8.3	8.2	7.7	8.1
100	9.0		10.0		9.7	9.4	8.8	8.3	8.3	8.3	8.2	8.3	8.1	7.7	7.5
110	9.0		9.9		9.6	9.4	8.8	8.1	8.3	8.2	8.1	7.9	7.8	7.6	7.3
120	8.8		9.9		9.4	9.3	8.3	8.1	8.3	8.1	8.3	7.9	7.8	7.5	7.1
130	8.8		9.8		9.3	9.2	8.3	7.9	8.2	7.8	8.3	7.8	7.8	7.5	7.1
140	8.7		9.6		9.1	8.9	7.9	7.6	8.2	7.5	8.0	7.6	7.7	7.4	7.0
150	8.7		9.2		8.9	8.7	7.9	7.6	8.0	7.4	7.8	7.4	7.5	7.4	7.0

Secchi depth

Depth (m)	11.9	11.9	13.0	13.6	15.1	16.3	15.7	17.8	18.4	14.1	14.6	14.4	14.7	14.4	12.9

Lake Taupo Temperature, Dissolved Oxygen, and Secchi Depth Database. **1994-1995**

Started 27 October 1994

Temperature

Date	27-10-94	21-11-94	01-12-94	13-12 -94	27-12 -94	13-1 -95	25-1 -95	09-2 -95	26-2 -95	08-3 -95	24-3-95	12-4-95	19-4-95	04-5-95	21-5-95	08-6-95	14-7-95	30-7-95
	Depth (m)																	
1	11.7	12.8	15.7	17.5	17.8	18.6	19.9	20.6	20.9	20.9	18.5	19.4	18.4	17.0	15.0	13.4	11.3	10.8
10	11.5	12.6	14.2	16.4	17.3	18.4	19.9	20.0	19.9	19.8	18.4	18.6	18.2	16.9	15.0	13.5	11.3	10.8
20	11.5	12.6	13.2	15.5	16.9	18.0	17.8	19.6	19.9	19.7	18.4	18.4	18.2	16.8	15.0	13.4	11.3	10.8
30	11.3	12.6	13.0	13.2	13.3	15.9	15.6	15.0	15.0	15.1	18.4	15.7	16.5	14.6	15.0	13.4	11.3	10.8
40	10.9	12.6	12.1	12.5	12.2	13.1	13.3	12.9	13.0	12.8	12.7	13.0	12.5	12.2	12.7	13.3	11.3	10.8
50	10.9	12.4	11.4	11.7	11.6	12.0	11.8	11.9	11.9	11.8	12.0	11.8	11.6	11.3	11.7	12.8	11.2	10.8
60	10.8	11.8	10.7	11.1	*	11.4	11.5	11.4	11.1	11.2	11.3	11.3	11.1	11.2	11.3	11.7	11.2	10.8
70	10.7	10.9	10.6	10.8	*	*	11.2	11.0	10.9	10.9	11.0	10.9	10.9	10.9	11.0	11.2	11.2	10.8
80	10.6	10.7	10.5	10.7	*	*	11.0	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	11.0	10.9	10.8
90	10.5	10.6	10.5	10.6	*	*	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.8	10.8	10.8	10.8
100	10.5	10.5	10.5	10.5	*	*	10.7	10.6	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.8	10.7	10.8
110	10.5	10.5	10.4	10.4	*	*	10.6	10.6	10.6	10.6	10.7	10.7	10.7	10.7	10.7	10.8	10.7	10.8
120	10.4	10.4	10.4	10.4	*	*	10.6	10.5	10.6	10.6	10.6	10.7	10.7	10.7	10.7	10.8	10.7	10.8
130	10.4	10.4	10.4	10.3	*	*	10.5	10.5	10.6	10.6	10.6	10.6	10.7	10.7	10.7	10.8	10.7	10.8
140	10.4	10.3	10.4	10.3	*	*	10.5	10.5	10.6	10.6	10.6	10.6	10.7	10.6	10.7	10.8	10.7	10.8
150	10.3	10.3	10.3	10.3	*	*	10.5	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.7	10.8	10.7	10.8
160	10.3	10.3	10.3	10.3	*	*	10.5	10.5	10.6	10.6	10.6	10.6	10.6	10.7	*	10.7	*	*

Dissolved oxygen (g m^{-3})

	Depth (m)																	
1	10.5	9.6	9.8	9.2	9.0	8.0	8.9	8.4	8.5	8.5	8.7	*	9.2	9.3	9.0	9.0	9.6	9.6
10	10.6	9.4	10.3	9.4	10.6	10.4	10.2	8.5	8.4	8.0	*	*	9.3	9.1	8.8	9.1	9.6	9.5
20	10.8	9.4	10.3	9.4	11.0	10.5	11.5	8.5	8.4	8.0	*	*	9.2	9.0	8.8	9.1	9.4	9.4
30	10.7	9.4	10.2	9.7	12.5	11.2	11.4	9.8	9.6	9.7	*	*	9.3	9.2	8.7	9.0	9.4	9.3
40	10.5	9.3	10.1	9.6	12.5	11.9	12.0	9.7	9.4	9.7	*	*	9.7	9.3	8.6	9.0	9.3	9.3
50	10.4	9.3	9.9	9.5	12.6	11.9	12.0	9.4	9.4	9.5	*	*	9.5	9.2	8.5	8.8	9.2	9.3
60	10.4	9.4	9.9	9.5	*	10.3	11.9	9.4	9.3	9.4	*	*	9.5	9.2	8.5	8.3	9.2	9.2
70	10.4	*	9.8	9.5	*	*	11.7	9.3	9.3	9.3	*	*	9.5	9.2	8.4	8.3	9.2	9.2
80	10.4	*	9.8	9.5	*	*	11.6	9.3	8.9	9.1	*	*	9.0	9.2	8.3	8.3	8.5	9.1
90	10.4	*	9.7	9.5	*	*	11.4	9.2	8.8	9.0	*	*	8.7	9.0	8.1	7.9	8.3	9.0
100	10.2	*	9.6	9.4	*	*	11.3	9.0	8.6	8.8	*	*	8.6	8.6	8.0	7.6	7.8	8.9
110	10.3	*	9.7	9.3	*	*	11.1	9.0	8.3	8.7	*	*	8.3	8.2	8.0	7.5	7.4	8.8
120	10.2	*	9.4	9.2	*	*	10.9	8.7	8.2	8.4	*	*	8.2	7.9	7.8	7.1	7.2	8.6
130	9.8	*	9.2	9.0	*	*	10.6	8.5	7.9	8.3	*	*	8.0	7.7	7.6	7.0	7.2	8.4
140	9.8	*	8.9	9.0	*	*	10.5	8.3	7.6	8.1	*	*	8.0	7.5	7.4	7.0	7.1	8.4
150	9.9	*	8.6	8.7	*	*	10.4	8.3	7.3	7.9	*	*	7.5	7.3	7.0	7.0	7.1	8.3
160	*	*	8.5	8.5	*	*	10.0	8.2	7.5	7.7	*	*	6.6	7.2	*	6.8	*	*

Secchi depth

Depth (m)																		
	11.7	11.4	12.5	12.9	15.6	17.8	15.7	17.0	16.5	17.1	14.7	15.7	16.1	15.1	14.3	15.0	12.5	15.7

* = missing or invalid data

Appendix 3 - Nutrient data

Includes accumulated 10-m tube data since 1994. Blank cells indicate missing data.

For completeness, 10-m tube data collected from the Kuratau Basin (site B) and Western Bays (site C) from January 2002 to December 2004 are included as separate sheets following the mid-lake data from site A for those years.

For the spring/autumn profile data, two different analytical methods are used to measure particulate nitrogen:

1. a wet digestion method involving high temperature refluxing in digestion mixture [persulphate / sulphuric acid / Selenium catalyst] for 3 hours followed by colorimetric determination of the nitrogen as the ammoniacal form, and

2. a CHN combustion method which converts all nitrogen compounds to N_2 gas in a furnace at ~1000°C to be measured in a thermal conductivity detector.

From February 2002, DRP, NO_3-N, and NH_4-N were measured on a Lachat Flow Injection Analysis (FIA) system but using essentially the same chemistry as previously used on the Technical Auto-Analyzer system. The reported detection limits for these nutrients remains the same at 0.5 mg m^{-3} for DRP and NO_3-N, and 1 mg m^{-3} for NH_4-N. TN and TP values are the sum of all N and P components, excluding Urea-N which is part of the DON component.

From October 2009, chlorophyll *a* concentrations collected by van Dorn sampler from a depth of 50 m have been included in the data set as an indication of the biomass in the DCM. However, because the DCM moves up and down during the year, the fixed depth samples from 50 m may not always be in the centre of DCM.

Lake Taupo cumulative database of 10m tube sample data from October1994 to September 2002.
Samples collected from central lake site.

Date Collected	Temp.	Secchi	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	PN	TN	Chlorophyll *a*	PC
	ºC	m	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
27/10/1994	11.7	11.7	1.2	0.7	2.5	4.4	1.1	0.2	56	16.6	73.4	1.16	
24/11/1994	12.8	11.4	0.5	2.7	1.7	4.8	1.7	1.0	51	12.6	66.5	0.41	
1/12/1994	15.7	12.5	0.6	2.4	2.4	5.4	2.2	1.2	56	18.5	78.0	0.41	
13/12/1994	17.5	12.9	0.8	4.2	1.4	6.4	<0.2	0.9	51	9.3	60.8	0.24	
28/12/1994	17.8	15.6	0.5	1.7	1.9	4.1	1.1	1.3	51	16.7	69.6	0.41	
13/01/1995	18.6	17.8	0.1	2.2	1.6	3.8	<0.2	0.8	53	11.6	64.9	0.22	
24/01/1995	19.9	15.7	0.2	2.1	1.2	3.6	<0.2	0.8	57	13.3	71.0	0.25	
10/02/1995	20.6	17.0	0.3	2.2	1.2	3.6	<0.2	1.5	62	10.2	73.3	0.32	
27/02/1995	20.9	16.5	0.4	<0.5	2.5	2.8	1.9	1.5	71	16.5	90.8	0.35	
9/03/1995	20.9	17.1	0.4	1.7	1.7	3.7	0.2	0.7	55	11.6	67.5	0.28	
24/03/1995	18.5	14.7			1.9	1.9				13.0		0.37	
12/04/1995	19.4	15.7	0.2	1.4	1.7	3.2	0.3	0.7	51	17.3	69.6	0.57	
19/04/1995	18.4	16.1	2.8	1.5	1.4	5.7	4.0	0.9	71	14.1	90.0	0.92	
4/05/1995	17.0	15.1	1.4	1.1	3.0	5.5	1.4	2.3	76	24.7	104.4	0.96	
21/05/1995	15.0	14.3	1.2	0.9	2.2	4.3	0.4	2.1	50	29.2	81.8	0.98	
8/06/1995	13.4	15.0	0.7	0.4	1.8	2.9	0.2	0.6	54	15.4	70.2	1.05	
14/07/1995	11.3	12.5	0.3	2.5	1.7	4.5	0.3	2.1	53	15.0	70.8	1.32	
30/07/1995	10.8	15.7	0.7	0.7	1.9	3.3	<0.2	4.6	35	17.3	57.3		
13/08/1995			0.5	0.4	1.9	2.8	<0.2	4.6	39	14.2	57.4	0.99	
12/09/1995	10.7	11.9	0.5	2.2	2.2	4.9	1.0	40.9	177	19.1	237.6	1.37	
25/09/1995	11.5	11.9	<0.2	0.7	2.1	2.8	<0.2	0.1	84	17.6	101.6	0.64	
30/10/1995	13.0	13.0	<0.2	2.4	1.9	4.3	<0.2	<0.1	56	14.7	70.4	0.93	
24/11/1995	13.7	13.6	0.8	1.8	1.6	4.3	1.9	<0.1	59	12.6	73.3	0.29	
6/12/1995	17.7	15.1	2.2	0.4	1.2	3.9	1.7	<0.1	58	11.3	70.8	0.20	
12/01/1996	21.1	16.3	2.6	0.6	1.2	4.4	3.6	<0.1	64	10.1	77.8	0.24	
31/01/1996	21.7	15.7	1.3	1.6	1.3	4.2	4.2	<0.1	59	11.9	75.5	0.29	
13/02/1996	22.7	17.8	2.1	3.3	1.2	6.6	7.4	<0.1	81	10.4	98.9	0.15	
29/02/1996	20.5	18.4	1.9	2.2	1.2	5.3	4.2	<0.1	61	10.8	76.3	0.31	
20/03/1996	18.2	14.1	0.8	2.2	1.4	4.5	5.4	<0.1	76	14.2	95.3	0.56	
28/03/1996	16.8	14.6	1.3	1.8	1.4	4.5	4.7	<0.1	91	12.6	108.3	0.81	
18/04/1996	17.7	14.4	0.8	2.2			4.3	<0.1	61			0.41	
19/05/1996	14.8	14.7	0.8	3.0			6.8	<0.1	59			0.70	
14/06/1996	12.2	14.4	1.6	3.2			5.7	<0.1	71				
19/06/1996	12.2	14.4	1.0	1.2			4.0	<0.1	49			0.70	
9/07/1996	11.2	12.9	3.0		1.9		4.0	<0.1	47	11.3		0.80	
3/09/1996	10.5	13.1	0.7	2.0	3.0	5.7	2.5	0.2	52	17.0	71.7	1.03	
18/09/1996	10.7	14.2	1.3	1.2	2.4	4.9	2.1	0.2	42	14.0	58.3	0.75	
30/09/1996	12.5	11.2	0.9	1.6	1.8	4.3	3.3	0.2	58	11.0	72.5	0.28	
17/10/1996	13.3	12.6	0.6	2.1	2.6	5.3	2.9	2.5	64	19.0	88.4	0.59	
24/10/1996	12.6	13.4	0.7	2.3	2.2	5.2	2.4	0.4	64	15.0	81.8	0.47	
6/11/1996	13.5	14.9	0.8	2.6	2.2	5.6	3.2	1.0	64	17.0	85.2	0.45	
28/11/1996	13.6	14.1	0.4	1.9	2.4	4.7	2.6	0.4	49	20.0	72.0	0.90	
11/12/1996	14.8	14.7	1.3	1.7	1.3	4.3	6.2	0.8	98	17.0	122.0	0.33	
23/12/1996	16.3	17.7	1.3	1.1			5.2	0.3	46			0.23	
8/01/1997	17.9	15.1	0.7	1.7	1.9	4.3	2.0	0.6	50	15.0	67.6	0.33	
29/01/1997	17.8	15.2	0.7	1.8	1.6	4.1	1.9	0.4	54	17.0	73.3	0.21	
26/03/1997	17.7	15.3	0.6	1.7	2.1	4.4	2.4	1.8	57	19.0	80.2	0.46	
2/04/1997	17.3	16.0	0.9	1.3	1.6	3.8	1.7	0.3	51	16.0	69.0	0.69	
15/04/1997	16.7	17.7	0.7	2.5	1.5	4.7	3.2	0.8	57	12.0	73.0	0.40	
1/05/1997	15.6	16.0	0.6				1.7	0.1				0.58	
21/05/1997	14.2	14.6	1.0	8.8	1.7	11.5	4.5	0.3	92	15.0	111.8	1.05	
29/05/1997	14.3	14.5	1.1	1.1			3.3	1.0	51			0.89	
7/07/1997	11.6	12.5	0.6	0.9			4.7	2.1	53			0.90	
29/07/1997	10.9	13.5	0.5	1.6			1.5	2.1	39			1.13	
2/09/1997	10.6	14.1	1.4	1.1	1.7	4.2	7.0	1.8	47.0	13.1	68.9	1.08	
16/09/1997	10.6	12.0	0.5	1.1			1.3	0.7	35			2.16	
11/10/1997	11.6	13.7	2.4	2.8	1.7	6.9	4.8	0.9	63.3	16.2	85.2	1.14	
29/10/1997	12.1	12.5	0.7	1.9	1.9	4.5	1.3	7.3	32	19.0	59.6	1.49	
2/12/1997	14.5	14.5	0.2	2.3			3.2	1.7	55			0.83	
21/01/1998	17.7	14.7	1.4	1.1	1.2	3.7	2.8	1.5	46.0	10.0	60.3	0.48	
4/03/1998	20.0	11.5	1.5	1.7	2.6	5.8	6.4	4.0	76.0	19.8	106.2	0.58	
24/03/1998	19.3	13.5	1.0	1.4	1.8	3.2	2.1	1.1	48.0	13.2	64.4	1.25	
7/04/1998	17.7	13.5	0.9	1.4	1.8	4.1	1.9	2.5	52.0	13.7	70.1	1.04	
29/05/1998	14.2	15.5	1.0	1.9	1.9	4.8	5.0	3.5	51.0	16.4	75.9	1.36	
28/07/1998	11.4	10.0	1.2	1.0	3.1	5.3	2.1	1.4	45.0	26.0	74.5	1.19	
29/09/1998	12.9	10.5	1.5	1.0			2.2	0.5	41.0	20.3	64.0	0.70	
8/10/1998	12.9	10.4	1.5	<1			2.4	2.4	46.0	37.6	88.4	1.00	
1/11/1998	13.6	13.5	0.6	1.3	2.6	4.5	2.4	<0.5	36.0	15.2	53.6	0.90	
26/11/1998	18.4	15.0	1.3	2.6	2.1	6.0	9.6	1.6	42.0	16.4	69.6	0.61	
22/12/1998	18.5	14.5	1.1	0.4	2.5	4.0	2.7	1.1	36.0	17.7	61.5	0.25	
12/02/1999	20.1	12.5	0.8	2.8	1.7	5.3	4.0	1.6	39.0	11.4	56.0	0.60	165
3/03/1999	20.9	14.3	0.6	2.9	2.0	5.5	1.6	1.1	40.0	16.8	59.5	0.82	203
14/04/1999	18.3	13.0	0.6	<1	1.8	2.4	3.0	<0.5	41.0	19.0	61.6	1.20	250
30/04/1999	16.4	12.2	1.1	1.5	1.7	4.3	2.1	<0.5	38.0	19.6	60.2	0.94	198
19/05/1999	14.4	15.0	0.8	<1	1.5	5.1	1	<1	46.0	16.2	63.7	1.2	166
8/06/1999	14.1	14.5	1.0	<1	3.9	4.9	1	<1	48.0	25.4	74.9	1.1	
18/06/1999	13.0	15.0	0.8	<1	2.0	5.0	2	5	42.0	16.5	65.5	1.7	
20/07/1999	12.0	16.0	0.5	<1	3.1	3.6	1	<1	45.0	28.3	74.3	1.0	
9/08/1999	11.5	14.5	1.3	1.7	2.3	5.3	4	8	45.0	18.4	75.4	1.7	
6/09/1999	11.1	10.0	<0.5	2.5	2.1	5.1	2	1	60	16.2	79.2	0.5	
29/09/1999	11.5	10.0	0.7	1	4	5.7	3	1	54	32.6	90.6	1.8	
18/10/1999	12.7	14.9	0.5	3	2.5	6	<1	<1	41	19.4	60.4	0.4	
20/12/1999	16.4	18.0	0.7	2.3	5	8	4	2	39	38	83	1.6	
18/01/2000	17.6	19.1	0.9	2	2	4	5	2	52	18.5	70.5	0.6	
12/04/2000	17.3	15.0	0.8	3	2	5	1	1	61	22	83	0.8	
4/05/2000	15.8	14.0	1	3	2	5	1	2	48	17	68	1.3	
25/05/2000	14.3	14.0	1	4	1	6	2	<1	55	17	65	0.6	
20/06/2000	12.3	14.0	<1	4	0	4.0	2	2	52	16	72.0	1.7	194
11/07/2000	11.9	11.0	<1	4	3	7.0	3	2	46	22.5	73.5	1.65	198
5/08/2000	11.3	12.0	2	2	3	7.0	1	3.5	43.5	19.5	66.0	2.5	154
22/08/2000	11.2	15.0	2	2	2	6.0	2	4	49	16.5	71.5	1.65	159
12/09/2000	11.5	12.0	2	5	3.5	10.5	2	<1	63	23.5	88.5	1	148
29/09/2000	11.5	13.0	2	4	2	8.0	1	1	54	21	77.0	1.15	237
26/10/2000	13.1	11.0	0.8	4.2	3	8.0	1.0	0.4	41.6	25	68.0	1.3	237
14/11/2000	13.1	12.0	<1	4	2	6.0	1	<1	41	14.5	56.5	0.9	171
7/12/2000	15.1	17.0	2	2	1.55	5.6	7	4	63	14.75	88.8	0.6	166
4/01/2001	18.0	14.5	<1	2	1.5	3.5	1	<1	40	11	52.0	0.5	127
16/01/2001	19.0	18.0	0.5	2.5	1.5	4.5	1	0.5	53.5	13	68.0	0.5	119
21/02/2001	20.5	17.0	0.9	1.1	1.5	3.5	<1	0.5	46.5	12.5	59.5	0.6	191
2/03/2001	20.7	14.5	<1	2	2	4.0	2	<1	53	18	73.0	0.9	193
20/03/2001	19.0	17.0	<1	3	1.4	4.4	<1	<1	46	14.25	60.3	0.9	154
9/04/2001	17.0	13.5	0.8	1.2	2.15	4.2	<1	3	62	19.45	84.5	1.05	199
8/05/2001	15.8	17.0	0.8	3.2	1.7	5.7	2	<1	61	23	86.0	1.1	248
30/05/2001	13.6	14.5	1.5	1.5	2	5.0	1	<1	57	12	70.0	1.4	203
2/07/2001	12.1	12.0	<1	3	2.3	5.3	1	1	50	18.3	70.3	1.5	156
25/07/2001	11.3	14.5	2	1	2.65	5.7	<1	6	45	19.75	70.8	2.2	188
13/08/2001	11.2	13.5	1	1	2.85	4.9	1	<1	41	21.9	63.9	2.1	225
3/09/2001	10.2	17.5	1	1	2.6	4.6	<1	<1	37	19	56.0	1.7	203
25/09/2001	11.6	11.0	1.1	0.9	2.8	4.8	1	<1	56	24.5	81.5	0.9	283
25/10/2001	13.0	14.5	0.8	1.2	2.4	4.4	<1	<1	46	19.4	65.4	1.1	246
12/11/2001	14.3	15.5	0.7	<1 (0.3)	5.15	6.2	<1 (0.5)	<0.5 (0)	34	35.0	69.5	1.7	403
10/12/2001	15.5	16.0	1.0	2	2.55	5.6	<1 (0.9)	<0.5 (0.1)	48	17.6	65.6	0.5	228
20/12/2001	17.0	13.0	0.6	2.7	2.05	5.4	1.3	<0.5 (0.1)	48	14.85	64.2	0.5	204
8/01/2002	18.3	13.0	<0.5 (0.3)	2	2.2	4.2	<1 (0)	<0.5	50	17.15	67.2	0.8	247
22/01/2002	19.3	15.0	<0.5 (0)	7	2.25	9.3	<1 (0)	<0.5	40	20.35	60.4	0.9	188
6/03/2002	18.7	14.5	1.2	0.8	2.05	4.1	<1 (0)	<0.5 (0.4)	74	17.7	91.7	1.7	227
4/04/2002	17.4	19.0	0.6	3	1.45	5.1	1.1	<0.5 (0.1)	46	10.7	57.8	0.8	138
17/04/2002	17.4	22.0	<0.5 (0)	3	1.65	4.7	<1 (0.5)	0.5	47	13.1	60.6	0.9	157
22/04/2002	17.05	22.0	-	-	-	-	-	-	-	-	-	-	-
5/05/2002	15.5	16.4	0.7	1			3.1	0.7	48			1	
16/05/2002			0.9	1.1	1.5	3.5	<1	<0.5	49	15.1	64.1	0.7	153
19/06/2002	12.6	17.0	1.2	1.8	1.9	4.9	<1 (0.5)	1.4	43.6	15.8	60.8	1.1	165
1/07/2002	12.1	16.0	1.2	1.8	1.8	4.8	<1 (0.9)	1.7	37.3	14.3	53.3	1.5	214
17/07/2002	11.4	15.5	2.3	2.7	1.7	6.7	2.3	7.8	41.9	14.6	66.6	1.5	154
31/07/2002	11.2	12.0	2.3	2.7	2.5	7.5	<1 (0.9)	5.9	177.2	16.7	199.8	2.2	193
29/08/2002	11.1	9.5	1.6	1.4	3.1	6.1	<1 (0)	<0.5 (0)	90	23	113.0	2.6	196
5/09/2002		6.7	-	-	-	-	-	-	-	-	-	-	-

Special repeat analyses.
Detection limit <0.1 mg m^{-3}

Detection limits prior to 14 April 1999 were DL

DRP	0.2 mg m^{-3}
NH4-N	0.5 mg m^{-3}
NO3-N	0.5 mg m^{-3}

Values reported less than the DL were special estimates of low samples.

Detection limits from 14 April 1999 on are DL

DRP	0.5 mg m^{-3}
NH4-N	1 mg m^{-3}
NO3-N	1 mg m^{-3}

Values reported less than the DL were special estimates of low samples.

New LACHAT Flow Injection Analysis
Detection limits from 1 Dec 2001 on are DL

DRP	0.5 mg m^{-3}
NH4-N	1 mg m^{-3}
NO3-N	0.5 mg m^{-3}

High precision and confidence in the FIA results allow estimates below the nominal DL. Data in brackets are given as an indication of the likely absolute concentration

Lake Taupo cumulative database of 10 m tube sample data from June 2000 on
Samples collected from Mid Lake (Site A)

Date Collected	Temp. ºC	Secchi (m)	DRP (mg m^{-3})	DOP (mg m^{-3})	PP (mg m^{-3})	TP (mg m^{-3})	NH_4-N (mg m^{-3})	NO_3-N (mg m^{-3})	DON (mg m^{-3})	PN (mg m^{-3})	TN (mg m^{-3})	Chlorophyll *a* (mg m^{-3})	PC (mg m^{-3})
20/06/2000	12.3	14.0	<1	4	0	4.0	2	2	52	16	72.0	1.7	193.5
11/07/2000	11.9	11.0	<1	4	3	7.0	3	2	46	22.5	73.5	1.65	198
5/08/2000	11.3	12.0	2	2	3	7.0	1	3.5	43.5	19.5	36.0	2.5	153.5
22/08/2000	11.2	15.0	2	2	2	6.0	2	4	49	16.5	71.5	1.65	158.5
12/09/2000	11.5	12.0	2	5	3.5	10.5	2	<1	63	23.5	88.5	1	148
29/09/2000	11.5	13.0	2	4	2	8.0	1	1	54	21	77.0	1.15	236.5
26/10/2000	13.1	11.0	0.8	4.2	3	8.0	1.0	0.4	41.6	25	68.0	1.3	237
14/11/2000	13.1	12.0	<1	4	2	6.0	1	<1	41	14.5	56.5	0.9	171
7/12/2000	15.1	17.0	2	2	1.55	5.6	7	4	63	14.75	88.8	0.6	165.5
4/01/2001	18.0	14.5	<1	2	1.5	3.5	1	<1	40	11	52.0	0.5	127
16/01/2001	19.0	18.0	0.5	2.5	1.5	4.5	1	0.5	53.5	13	68.0	0.5	118.5
21/02/2001	20.5	17.0	0.9	1.1	1.5	3.5	<1	0.5	46.5	12.5	59.5	0.6	190.5
2/03/2001	20.7	14.5	<1	2	2	4.0	2	<1	53	18	73.0	0.9	193
20/03/2001	19.0	17.0	<1	3	1.4	4.4	<1	<1	46	14.25	60.3	0.9	154
9/04/2001	17.0	13.5	0.8	1.2	2.15	4.2	<1	3	62	19.45	84.5	1.05	199
8/05/2001	15.8	17.0	0.8	3.2	1.7	5.7	2	<1	61	23	86.0	1.1	248
30/05/2001	13.6	14.5	1.5	1.5	2	5.0	1	<1	57	12	70.0	1.4	203
2/07/2001	12.1	12.0	<1	3	2.3	5.3	1	1	50	18.3	70.3	1.5	155.5
25/07/2001	11.3	14.5	2	1	2.65	5.7	<1	6	45	19.75	70.8	2.2	188
13/08/2001	11.2	13.5	1	1	2.85	4.9	1	<1	41	21.9	63.9	2.1	225
3/09/2001	10.2	17.5	1	1	2.6	4.6	<1	<1	37	19	56.0	1.7	203
25/09/2001	11.6	11.0	1.1	0.9	2.8	4.8	1	<1	56	24.5	81.5	0.9	283
25/10/2001	13.0	14.5	0.8	1.2	2.4	4.4	<1	<1	46	19.4	65.4	1.1	246
12/11/2001	14.3	15.5	1.0	2	2.55	5.6	0.9	0.1	48	17.6	66.6	0.5	227.5
10/12/2001	15.5	16.0	1.0	2	2.55	5.6	0.9	0.1	48	17.6	66.6	0.5	227.5
20/12/2001	17.0	13.0	0.6	2.7	2.05	5.4	1.3	0.1	48	14.85	64.3	0.5	203.5
8/01/2002	18.3	13.0	0.3	2	2.2	4.5	0	<1	50	17.15	67.2	0.8	246.5
22/01/2002	19.3	15.0	0	7	2.25	9.3	0	<1	40	20.35	60.4	0.9	188
6/03/2002	18.7	14.5	1.2	0.8	2.05	4.1	0.0	0.4	74	17.7	92.1	1.7	226.5

Date Collected	Temp. ºC	Secchi (m)	DRP (mg m^{-3})	DOP (mg m^{-3})	PP (mg m^{-3})	TP (mg m^{-3})	NH_4-N (mg m^{-3})	NO_3-N (mg m^{-3})	DON (mg m^{-3})	PN (mg m^{-3})	TN (mg m^{-3})	Chlorophyll *a* (mg m^{-3})	PC (mg m^{-3})
4/04/2002	17.4	19.0	0.6	3	1.45	5.1	1.1	0.1	46	10.7	57.9	0.8	138
17/04/2002	17.4	22.0	0.0	3	1.65	4.7	0.5	0.5	47	13.1	61.1	0.9	157
5/05/2002	15.5	16.4	0.7	1			3.1	0.7	48			1	
19/06/2002	12.6	17.0	1.2	1.8	1.9	4.9	0.5	1.4	43.6	15.8	61.3	1.1	165.0
1/07/2002	12.1	16.0	1.2	1.8	1.8	4.8	0.9	1.7	37.3	14.3	54.2	1.5	214
17/07/2002	11.4	15.5	2.3	2.7	1.7	6.7	2.3	7.8	41.9	14.6	66.6	1.5	153.5
31/07/2002	11.2	12.0	2.3	2.7	2.5	7.5	0.9	5.9	177.2	16.7	200.7	2.2	193
29/08/2002	11.1	9.5	1.6	1.4	3.1	6.1	0.0	0	90	23	113.0	2.6	196
18/09/2002	11.4	12	1.3	1.7	2	5.0	0	0.3	47	13	60.3	0.9	196.5
9/10/2002	11.6	15.5	1.3	2.7	2.1	6.1	2.9	0	29	12	43.9	0.6	159.5
13/11/2002	12.6	18	0.9	1.1	2.4	4.4	1.7	1.3	41	14.0	58.0	0.7	158.5
28/11/2002	14.1	12.7	0.7	2.3	2.7	5.7	0.1	0.0	43.0	22.0	65.1	0.7	201.5
18/12/2002	15.0	13.5	0.6	1.8	2.5	4.9	0.2	0.1	47.0	14.0	61.3	0.4	123.0
30/01/2003	17.8	18	0.4	3.6	1.9	5.9	0.4	0.1	56.5	12.0	69.0	0.7	166.0
13/02/2003	19.3	19	0.5	2.5	1.6	4.6	0.0	0.4	43.6	8.0	52.0	0.5	146.0
17/03/2003	18.5	15	0.8	2.2	1.7	4.7	<1	0.4	45.6	13.0	59.0	1.0	212
3/04/2003	19.3	13.5	1.1	2.9	1.8	5.8	<1	0.5	78.5	17.7	96.7	1.1	234.5
28/04/2003	16.7	14	0.3	3.7	1.9	5.9	<1	0.3	73.7	15.6	89.6	1.5	208.5
15/05/2003	15.6	16.5	0.1	3.9	2.2	6.2	0.3	0.3	50.4	19.5	70.5	1.4	228.5
12/06/2003	13.5	11	1.3	2.7	2.2	6.2	0.3	0.4	40.3	13.7	54.7	1.3	111.0
14/07/2003	11.8	14.5	2.2	1.8	2.6	6.6	1.1	1.1	34.8	18.0	55.0	1.8	102.0
31/07/2003	11.4	14	2.4	1.6	2.4	6.4	1.3	3.7	46.0	16.7	67.7	2.0	89.5
14/08/2003	11.2	13.5	1.8	2.2	3.1	7.1	0.7	0.2	46.1	21.1	68.1	2.9	91.5
26/08/2003	11.2	13	3.0	1.0	4.0	8.0	1.0	0.2	42.8	21.7	65.7	2.9	135.5
8/09/2003	11.1	12.5	2.6	0.4	3.3	6.3	0.4	0.2	45.2	17.4	63.2	1.5	199.5
7/10/2003	11.4	13.0	2.6	1.6	2.8	7.0	0.3	0.2	54.5	17.8	72.8	1.2	157.5
21/10/2003	13.0	17.0	2.0	1.0	2.3	5.3	0.1	1.3	39.6	14.0	55.0	0.6	146.0
19/11/2003	13.9	16.0	1.7	1.3	2.8	5.8	0.3	0.1	45.6	20.0	66.0	0.8	148.0
4/12/2003	16.0	18.5	1.6	2.4	1.8	5.8	0.2	0.1	53.7	13.4	67.4	0.3	106.5
18/12/2003	17.7	17.5	1.1	3.9	3.1	8.1	0.0	0.0	49.0	20.6	69.6	0.4	151.5
13/01/2004	20.3	19.0	0.5	3.5	1.6	5.6	0.0	0.3	52.0	12.5	64.8	0.4	127.0
26/02/2004	17.2	17.0	1.4	1.7	1.6	4.7	0.0	0.1	40.9	15.5	56.5	0.7	139.0
8/03/2004	17.5	15.0	0.6	2.4	2.0	5.0	0.4	0.1	42.5	12.4	55.4	0.6	177.5
31/03/2004	16.4	16.0	0.8	5.2	1.9	7.9	0.2	0.2	78.6	11.5	90.5	1.2	159.5

Date Collected	Temp. ºC	Secchi (m)	DRP (mg m^{-3})	DOP (mg m^{-3})	PP (mg m^{-3})	TP (mg m^{-3})	NH_4-N (mg m^{-3})	NO_3-N (mg m^{-3})	DON (mg m^{-3})	PN (mg m^{-3})	TN (mg m^{-3})	Chlorophyll *a* (mg m^{-3})	PC (mg m^{-3})
14/04/2004	15.3	15.0	1.0	3.0	2.4	6.4	0.1	0.3	46.6	16.0	63.0	1.3	187.5
10/05/2004	14.7	18.0	0.6	4.4	1.8	6.8	0.1	0.2	64.7	16.8	81.8	1.2	215.0
10/06/2004	13.6	13.5	0.9	2.1	2.1	5.1	0.0	0.6	63.4	17.8	81.8	1.0	371.5
13/07/2004	11.6	12.0	1.8	3.2	2.4	7.4	0.3	4.5	37.2	19.4	61.4	1.6	193.3
26/07/2004	11.3	11.0	1.6	2.4	3.0	7.0	0.5	2.4	38.1	23.4	64.4	2.7	196.0
24/08/2004	10.9	12.5	0.8	3.2	2.7	6.7	0.0	0.5	58.5	18.6	77.6	2.3	181.5
7/09/2004	10.7	12.0	0.6	2.4	2.7	5.7	0.0	0.1	40.9	15.5	56.5	1.4	162.5
21/10/2004	11.6	15.0	1.0	3.0	2.0	6.0	0.0	0.0	33.0	13.0	46.0	0.7	185.0
2/11/2004	12.9	16.0	1.0	3.0	1.9	5.9	2.2	0.8	62.0	14.7	79.7	0.6	147.0
22/11/2004	15.1	16.0	0.7	2.3	2.1	5.1	0.1	0.2	49.7	16.4	66.4	0.4	195.0
15/12/2004	14.1	19.5	0.7	3.3	2.2	6.2	0.0	0.2	45.8	14.7	60.7	0.2	127.5
11/01/2005	16.0	20	0.4	2.6	1.4	4.4	0	0.1	42.9	12.5	55.5	0.2	137
25/01/2005	19.3	19.5	0.5	2.5	1.5	4.5	0.0	0.1	54.9	14.5	69.5	0.3	131.0
9/02/2005	20.7	18	2.2	0.8	1.4	4.4	0.5	0.0	38.5	12.7	51.7	0.2	136.0
22/02/2005	20.0	21.5	0.8	5.2	1.7	7.7	1.5	0.5	58.0	15.8	75.8	0.2	159.0
10/03/2005	19.3	18.5	0.2	2.8	1.4	4.4	1.8	0.2	34.0	14.5	50.5	0.4	158.0
21/03/2005	19.3	20	0.8	3.2	1.2	5.2	0.5	0.1	43.4	10.0	54.0	0.5	140.0
14/04/2005	17.9	17.2	0.9	2.1	1.6	4.6	0.8	0.2	54.0	14.0	69.0	0.7	177.0
18/05/2005	14.3	16	0.8	2.2	1.9	4.9	0.0	0.5	46.5	13.9	60.9	1.3	177.5
9/06/2005	13.0	14.1	0.6	3.4	2.2	6.2	0.1	1.6	41.3	17.4	60.4	1.3	140.5
20/06/2005	12.7	13.8	0.6	3.4	2.0	6.0	0.1	1.0	39.9	18.5	59.5	1.2	158.5
20/07/2005	11.5	13	3.9	6.1	2.5	12.5	0.8	0.8	97.4	19.1	118.1	2.1	169
3/08/2005	11.1	14	2.6	1.4	2.3	6.3	2.0	1.4	61.6	20.3	85.3	1.2	116
17/08/2005	11.2	13	3.1	1	3.2	7.3	0.3	2.1	49.6	26.4	78.4	1.7	172.5
31/08/2005	11.7	13	2	1	2.4	5.4	<1	1	69	22.2	92.2	1.3	330
14/09/2005	12.4	13	1	1	2.5	4.5	<1	<1	60	19.9	79.9	0.8	243
29/09/2005	11.9	14	1	1	2.4	4.4	<1	<1	67	18	85	0.8	253.5
12/10/2005	11.9	14	0.7	2.3	2.7	5.7	0.0	0.7	56.3	23.2	80.2	0.8	301
25/10/2005	13.4	15	0.8	4.2	1.8	6.8	0.6	0.7	54.7	16.8	72.8	0.6	193
10/11/2005	16.3	17.5	1.2	3.8	1.5	6.5	0.2	0.1	52.7	15.6	68.6	0.5	160
1/12/2005	15.1	19.3	0.6	2.4	1.4	4.4	0	0.3	39.7	16.1	56.1	0.4	141
10/01/2006	17.4	19	1	2	1.4	4.4	0.1	1	49.9	17.8	68.8	0.5	167
2/02/2006	20.2	15.5	1.1	8.9	1.5	11.5	0.0	0.0	54	18	72	1.1	193.5
1/03/2006	19.5	15.3	0.3	7.7	1.6	9.6	0.0	1.3	38.7	18.5	58.5	0.9	160.5
12/04/2006	16.7	15.8	0.6	2.4	1.6	4.6	0.0	0.0	43	20.4	63.4	1.0	230
27/04/2006	16.3	17	1.0	2	1.6	4.6	0.1	0.0	52.9	17.6	70.6	1.1	196.5
9/05/2006	15.7	17.5	0.7	2.3	1.6	4.6	0.7	0.1	46.2	17.2	64.2	0.9	233

Date Collected	Temp. ºC	Secchi (m)	DRP (mg m^{-3})	DOP (mg m^{-3})	PP (mg m^{-3})	TP (mg m^{-3})	NH_4-N (mg m^{-3})	NO_3-N (mg m^{-3})	DON (mg m^{-3})	PN (mg m^{-3})	TN (mg m^{-3})	Chlorophyll *a* (mg m^{-3})	PC (mg m^{-3})
27/06/2006	11.9	15.2	0.8	3.2	1.9	5.9	0.8	1.3	61.9	23.2	87.2	2	243
11/07/2006	11.5	13.5	1.4	5.6	2.3	9.3	0.2	1.7	93.1	21	116	1.7	209
25/07/2006	11.1	12	1.0	0	2.1	3.1	0.9	7.4	48.7	17.6	74.6	2.8	192
4/09/2006	11.1	11	1.8	1.2	2.5	5.5	0.0	0.6	31.4	24.5	56.5	2.8	218
26/09/2006	11.9	17.5	1.0	0.8	2.3	4.1	0.0	0.1	39.9	18.6	58.6	0.8	347
18/10/2006	11.7	13	0.8	1.2	2.5	4.5	0.0	0.3	35.7	18.2	54.2	0.9	227.5
1/11/2006	12.4	14.5	0.3	2.7	2.4	5.4	0.0	0.0	41	19.4	60.4	0.8	203
5/12/2006	14.7	16	0.0	3	2	5	0.0	0.0	52	20.2	72.2	0.7	186
19/12/2006	15.6	15.5	0.2	1.8	1.8	3.8	1.0	0.1	48.9	15.4	65.4	0.7	150
9/01/2007	16.5	13.5	0.5	1.5	1.6	3.6	0.9	0.4	60.7	15	77	0.3	207
25/01/2007	18.5	14.5	0.6	0	1.6	2.2	1.5	0.5	59	18.6	79.6	0.3	212
8/02/2007	19.3	16	0.6	0	1.6	2.2	0.4	0.5	58.1	16.8	75.8	0.4	156
21/02/2007	19.6	18.2	0.4	0	1.8	2.2	0.8	0.5	68.3	24.4	94	0.3	182
21/03/2007	18.6	16.5	1.1	0	2.1	3.2	1.8	1.3	47.2	22.1	72.4	0.8	175
3/04/2007	18.0	19	0.9	6.1	1.8	8.8	0.6	0.3	66.9	23.8	91.6	0.7	
19/04/2007	16.5	16	0.9	3.1	2.7	6.7	2.4	1.0	69.6	29.2	102.2	0.6	193
8/05/2007	19.3	16	1.1	3.9	1.2	6.2	0.3	0.4	63.3	17.8	81.8	1.2	169
22/05/2007	15.2	18.5	0.7	2.3	1.3	4.3	2.0	0.5	53.5	15.4	71.4	0.8	201
14/06/2007	13.6	18	0.6	2.4	1.8	4.8	4.0	0.8	65.2	21.8	91.8	1	159
27/06/2007	12.4	18.5	0.8	0.2	3.6	4.6	2.1	1.4	45.5	25.8	74.8	1.2	162
18/07/2007	11.4	14.5	1.1	1.9	2.9	5.9	1.3	1.0	44.7	37.8	84.8	1.7	
8/08/2007	11.1	14	1.1	1.9	2.8	5.8	2.0	2.2	46.8	28.2	79.2	1.3	229
23/08/2007	11.0	13	0.8	2.2	2.5	5.5	0.4	0.4	39.2	30.3	70.3	2.2	202
11/09/2007	11.0	11	1	4	3.3	8.3	0	1	67	34.7	102.7	1.4	324
9/10/2007	12.1	15	1	1	2.6	4.6	1.4	1.5	59.1	23.8	85.8	0.8	184
30/10/2007	12.8	16	1.1	0.9	2.4	4.4	1.2	0.6	64.2	30.5	96.5	0.7	253
15/11/2007	13.5	14	1.8	2.2	2.1	6.1	1.8	0.3	53.9	24.8	80.8	0.5	262
4/12/2007	16.6	15	0.9	2.1	2	5	0.9	0.6	40.5	20.6	62.6	0.3	196
20/12/2007	17.4	17.5	1.1	2.9	1.1	5.1	0.2	0.4	44.4	17	62	0.6	112
17/01/2008	21.1	22.5	1	4	1.5	6.5	0.9	0.4	62.7	24.5	88.5	0.3	230
31/01/2008	19.8	21.5	0.5	1.5	1.3	3.3	1.5	0.3	75.2	17.6	94.6	0.3	190
14/02/2008	19.9	25	0.3	1.7	1.6	3.6	1.4	0.7	75.9	19.8	97.8	0.4	138
27/02/2008	19.3	22	0.1	1.9	1.6	3.6	0.7	0.2	70.1	20	91	0.4	143
13/03/2008	18.8	22	1	1	1.2	3.2	1.2	0.6	56.2	19.6	77.6	0.5	147
26/03/2008	19.3	19	1	0	0.9	1.9	0.4	0.5	63.1	17.1	81.1	0.5	160
17/04/2008	17.8	20.5	1.2	0.8	1.3	3.3	1.1	1	51.9	14.2	68.2	0.8	189
7/05/2008	15.7	16	0.7	2.3	1.5	4.5	1.3	0.3	60.4	21.1	83.1	0.6	189
22/05/2008	14.7	17	0.2	1.8	1.5	3.5	0.4	0.4	71.2	23.6	95.6	0.7	191
5/06/2008	13.6	15	1.3	0.7	1.6	3.6	1	2.1	29.9	17.5	50.5	1	177
19/06/2008	12.9	16.5	0.5	1.5	1.6	3.6	2	0.7	34.3	29.2	66.2	1.2	259
1/07/2008	12.0	14	0.9	2.1	2.15	5.15	0.6	0.7	50.7	34.6	86.6	1.7	242

Date Collected	Temp. ºC	Secchi (m)	DRP (mg m^{-3})	DOP (mg m^{-3})	PP (mg m^{-3})	TP (mg m^{-3})	NH_4-N (mg m^{-3})	NO_3-N (mg m^{-3})	DON (mg m^{-3})	PN (mg m^{-3})	TN (mg m^{-3})	Chlorophyll *a* (mg m^{-3})	PC (mg m^{-3})
15/07/2008	11.4	13	1.3	1.7	2.7	5.7	0.0	0.9	38.1	26.5	65.5	1.9	193
7/08/2008	11.1	12.5	1.8	1.2	3.4	6.4	0.0	0.7	25.3	28.8	54.8	3.0	119
20/08/2008	10.7	12.5	1.3	1.7	2.1	5.1	0.7	0.6	24.7	25	51	1.5	179
4/09/2008	11.0	13	0.6	3.4	2	6	1.0	0.0	50	21.5	72.5	1.1	217
16/09/2008	11.3	14.5	1.4	2.6	2.1	6.1	2.2	0.5	28.3	24.3	55.3	0.7	202
14/10/2008	12.6	12.2	0.5	2.5	2.6	5.6	0.5	0.0	45.5	27.1	73.1	0.6	203
4/11/2008	13.4	12	1.0	4	2.5	7.5	3.2	0.5	35.3	28.5	67.5	0.9	140
26/11/2008	15.7	10	1.1	1.9	2.4	5.4	0.4	0.0	47.6	27.6	75.6	1	217
22/12/2008	18.8	12	0.3	1.7	2.3	4.3	1.8	0.0	53.2	35.2	90.2	0.6	245
13/01/2009	19.7	13	1.4	1.6	2.1	5.1	0.3	1.4	61.3	29.4	92.4	0.5	266
28/01/2009	20.9	18	0.4	4.6	1.8	6.8	0.0	3.8	52.2	27.6	83.6	0.3	204
11/02/2009	21.4	22	0.1	4.9	1.6	6.6	4.1	0.5	49.4	25.6	79.6	0.4	185.5
25/02/2009	20.5	20	0.5	2.5	1.6	4.6	2.7	0.4	37.9	21.3	62.3	0.5	186.5
26/03/2009	18.0	18.5	1.1	1.9	2.7	5.7	0.0	1.3	56.7	25.1	83.1	0.6	285
15/04/2009	16.6	18	1.5	2.5	3.4	7.4	1.1	0.7	60.8	22.7	85.3	0.8	240
7/05/2009	15.0	16	1.4	4.6	2.3	8.3	1.3	1.1	56.6	21.7	80.7	1.3	223
27/05/2009	13.0	15	1.2	4.8	1.5	7.5	0.0	0.6	58.4	16.7	75.7	1.2	190
18/06/2009	11.6	16	1.9	0.1	1.7	3.7	0.7	1.7	45.6	23.5	71.5	1.5	201
6/07/2009	10.9	15	2.8	1.2	2.4	6.4	0.1	8.1	46.8	23.4	78.4	1.6	190
13/08/2009	10.43	12	1.9	2.1	2.7	6.7	0.6	0.5	46.9	31.4	79.4	1.9	230
7/09/2009	10.56	15	4.2	0	2.9	7.1	0.1	0.6	54.3	32.3	87.3	1.5	301

Date Collected	Temp. ºC	Secchi (m)	DRP (mg m^{-3})	DOP (mg m^{-3})	PP (mg m^{-3})	TP (mg m^{-3})	NH_4-N (mg m^{-3})	NO_3-N (mg m^{-3})	DON (mg m^{-3})	PN (mg m^{-3})	TN (mg m^{-3})	Chlorophyll *a* (mg m^{-3})	Chl-a at 50m (mg m^{-3})	PC (mg m^{-3})
19/10/2009	11.72	13	4.2	0	2.7	6.9	0.5	1.1	42.4	23.4	67.4	0.6	0.8	282.5
12/11/2009	13.00	12.5	1.2	2.8	2.4	6.4	1.0	0.3	33.7	19.5	54.5	0.7	0.8	249
17/12/2009	16.99	15	0.9	2.1	1.4	4.4	0.0	0.7	58.3	21	80.0	0.7	0.8	239.5
13/01/2010	17.89	14.5	0.6	1.4	1.8	3.8	0.0	1.0	47	21.6	69.6	0.6	1.2	306.5
2/02/2010	19.23	16	0.7	2.3	1.7	4.7	0.0	0.1	55.9	28.3	84.3	0.8	1.2	274.5
18/02/2010	20.45	17	1.1	1.9	3.9	6.9	1.3	2.3	102.4	85.4	191.4	0.9	1.1	530
10/03/2010	20.10	19	0.8	2.2	1.3	4.3	0.0	4	58	19.1	81.1	0.4	0.9	158.5
8/04/2010	17.40	21.5	0.8	2.2	1.7	4.7	0.0	1.2	58.8	26	86.0	0.7	1.3	231
28/04/2010	16.38	19	1.2	1.8	2.5	5.5	0.3	1.1	61	39.6	101.6	0.9	1.3	262
20/05/2010	15.09	19.5	1.9	1.1	2.1	5.1	7.6	2.5	66.9	25.1	102.1	0.9	0.8	248
3/06/2010	14.11	14.5	0.9	2.1	1.8	4.8	1.1	0.1	44.8	13.7	59.7	1.1	0.7	141.5
23/06/2010	12.23	14	1.1	1.9	2.4	5.4	1.1	0.8	46.1	22.1	70.1	1.1	0.7	196.5
13/07/2010	11.31	14.5	1.5	7.5	2.3	11.3	0.9	1.0	52.1	27.9	81.9	1.7	0.8	217
10/08/2010	11.01	12.8	1.7	1.3	2.6	5.6	0.9	1.0	30.1	29.7	61.7	1.9	2.0	225
24/08/2010	10.92	11	1.6	1.4	1.5	4.5	0.6	0.5	30.9	34.5	66.5	2.4	2.5	244.5
13/09/2010	11.37	10.5	1.1	0.9	3.3	5.3	1.3	0.3	28.4	33.7	63.7	1.6	1.6	342.5
5/10/2010	11.90	10.8	3.1	0	2.5	5.6	2.0	2.3	28.7	22.8	55.8	0.9	1.6	269
26/10/2010	13.00	12.5	1.7	1.3	2.4	5.4	0.9	0.9	34.2	18.2	54.2	0.8	1.7	237
10/11/2010	13.98	11.5	0.8	2.2	2.3	5.3	0.5	0.3	59.2	21.1	81.1	0.7	1.8	250.5
25/11/2010	16.14	14.2	1.4	2.6	1.7	5.7	2.9	1.4	41.7	18	64.0	0.4	2.0	184.5
8/12/2010		15.5	1.2	2.8	1.8	5.8	1.8	0.6	43.6	18.3	64.3	0.4	0.9	181
21/12/2010	18.41	17	0.8	3.2	1.8	5.8	5.7	0.4	66.9	41.4	114.4	0.4	0.9	259.5
11/01/2011	19.81	11	0.8	1.2	1.9	3.9	1.8	0.5	48.7	27.1	78.1	0.5	0.4	281.5
27/01/2011	19.69	17	1.0	1	1.7	3.7	1.4	0.7	45.9	21.5	69.5	0.4	0.7	178.5
17/02/2011	20.61	12	0.9	1.1	2.1	4.1	0.5	0.5	57	23.6	81.6	0.5	0.7	224
1/03/2011	20.41	19	0.5	2.5	1.5	4.5	0.7	0.9	48.4	19.9	69.9	0.6	0.3	150.5
15/03/2011	20.07	15	3.0	0	1.4	4.4	0.2	2.7	50.1	21.6	74.6	0.5	0.6	179.5
13/04/2011	17.62	17	3.1	0	1.5	4.6	0.0	0.8	64.2	24.7	89.7	0.8	0.6	223
10/05/2011	15.53	16.5	1.4	2.6	1.5	5.5	0.9	0.9	74.2	17.5	93.5	0.7	0.7	207
31/05/2011	14.05	17	1.2	0.8	1.6	3.6	0.3	0.8	44.9	22.5	68.5	0.9	0.6	166.5
22/06/2011	12.95	14	0.4	1.6	2	4	1.1	0.4	42.5	22	66	1.0	0.9	190.5
5/07/2011	12.13	13	1.0	1	1.8	3.8	0.0	0.2	41.8	28.8	70.8	1.3	1.2	233
9/08/2011	11.10	16	1.8	1.2	2.3	5.3	3.4	5.0	75.6	24.7	108.7	1.7	1.9	346
24/08/2011	10.86	9	1.6	1.4	2.8	5.8	1.0	0.2	86.8	39.2	127.2	1.6	2.1	311
7/09/2011	11.22	16	0.6	3.4	1.8	5.8	2.0	1.1	44.9	23.2	71.2	0.8	1.4	198
28/09/2011	10.96	13	1.0	2	2.9	5.9	2.0	0.8	59.2	32.1	94.1	1.2	1.5	341
26/10/2011	13.00	14	0.6	3.4	1.7	5.7	0.7	0.0	42.3	25.5	68.5	0.5	1.2	227
8/11/2011	14.12	14	1.1	2.9	1.2	5.2	1.3	3.0	60.7	13.3	78.3	0.4	1.0	210

Date Collected	Temp. ºC	Secchi (m)	DRP (mg m^{-3})	DOP (mg m^{-3})	PP (mg m^{-3})	TP (mg m^{-3})	NH_4-N (mg m^{-3})	NO_3-N (mg m^{-3})	DON (mg m^{-3})	PN (mg m^{-3})	TN (mg m^{-3})	Chlorophyll *a* (mg m^{-3})	Chl-a at 50m (mg m^{-3})	PC (mg m^{-3})
22/11/2011	14.57	18	1.1	1.9	2.1	5.1	1.2	0.0	44.8	28.1	74.1	0.7	0.9	202
8/12/2011	16.80	18.5	0.9	2.1	1.7	4.7	3.3	0.8	58.9	27.3	90.3	0.6	1.0	292
22/12/2011	18.22	13	0.6	0.4	1.6	2.6	2.0	2.4	63.6	22.9	90.9	0.5	0.9	323
12/01/2012	19.15	16.5	1.3	0.7	1.8	3.8	4.9	0.3	53.8	42.8	101.8	0.4	1.0	304
26/01/2012	19.02	15	0.9	2.1	1.4	4.4	3.7	0.5	41.8	29.4	75.4	0.5	0.9	245
16/02/2012		16	0.6	1.4	1.6	3.6	2.5	0.7	55.8	22.5	81.5	0.6	0.8	235
7/03/2012	18.17	16	0.7	1.3	1.6	3.6	0.8	1.0	54.2	24.5	80.5	0.6	1.2	230
10/04/2012	16.78	17	0.9	1.1	2.5	4.5	1.9	2.3	54.8	26.5	85.5	0.8	1.0	221
7/05/2012	15.06	17	0.8	2.2	1.5	4.5	2.7	0.8	73.5	20.1	97.1	0.7	1.0	235
30/05/2012	13.41	17	3.3	1.7	2.2	7.2	3.4	0.9	59.7	31.6	95.6	1.1	0.8	200
14/06/2012	12.64	14	2.0	3	1.8	6.8	2.6	0.1	54.3	30.1	87.1	1.0	0.8	218
2/07/2012	11.63	15.5	2.3	0	1.7	4	2.8	2.3	91.9	22.5	119.5	1.2	1.8	215
18/07/2012	11.44	17	2.2	1.5	2.1	5.8	2.3	1.3	54.4	34.5	92.5	1.3	1.7	284
1/08/2012	10.85	17	3.7	1.3	1.9	6.9	0.8	8.8	56.4	22.3	88.3	1.5	1.5	140
17/08/2012	11.06	14	2.2	1.6	2.5	6.3	2.6	1.8	48.6	28.2	81.2	1.4	1.2	190
29/08/2012			1.4	2.6	1.8	5.8	4.9	1.7	56.4	30.6	93.6	1.3	1.0	252
20/09/2012	11.14	13	3.4	0	4.0	7.4	0.6	0.4	53	39.0	93	1.1	1.6	576
4/10/2012	11.45	12.5	2.1	0.9	2.6	5.6	0.4	1.1	51.5	26.3	79.3	1.2	2.1	269
24/10/2012	12.25	13.6	1.8	1.2	2.4	5.4	1.0	0.6	45.4	28.1	75.1	1.0	1.3	265
8/11/2012	13.44	17	1.2	2.8	1.8	5.8	1.3	0.6	41.1	17.7	60.7	0.5	1	173
22/11/2012	16.44	18	0.9	3.1	1.6	5.6	2.1	0.3	57.6	21.2	81.2	0.4	1	201
6/12/2012	14.96	19	0.7	1.3	2.3	4.3	0.6	0.8	44.6	23.5	69.45	0.6	0.9	148
19/12/2012	17.75	19	1.0	2	1.6	4.6	1.9	2.5	95.6	28.9	128.85	0.6	1.7	222
23/01/2013	19.00	15.8	0.3	1.7	1.5	3.5	0.5	0.1	53.4	22.3	76.3	0.6	0.9	273
7/02/2013	18.81	15	0.2	1.8	1.9	3.9	1.3	0.4	83.3	42.8	127.8	0.6	1.1	333
21/02/2013	20.41	19	1.1	0.9	2.1	4.1	3.7	0.5	87.8	27.5	119.5	0.3	1.1	242
6/03/2013	20.00	21	1.0	2	1.8	4.8	5.0	1.0	113	35.6	154.6	0.6	1	253
20/03/2013	19.5	14	0.2	2.7	2.4	5.3	4.1	0.2	86.7	39.8	130.8	0.7	0.7	543
4/04/2013	19.57	18	1.3	2.7	2.9	6.9	3.3	0.6	100.1	39.3	143.3	1	0.7	300
22/04/2013	17.48	14.7	6.4	2.6	2.7	11.7	2.0	2.9	73.1	36.9	114.9	1.4	0.7	300
7/05/2013	16.50	14.3	2.4	1.6	2.6	6.6	5.0	1.1	127.9	60.1	194.1	1.5	0.2	398
23/05/2013	15.25	15	1.3	2.7	3	7	1.4	0.6	76	51.8	129.8	1.4	0.5	345
6/06/2013	14.00	14.5	1.1	2.9	2	6	2.5	1.0	95.5	41.3	140.3	1.7	0.5	363
19/06/2013	13.20	15.0	1.2	0.8	2.1	4.1	1.9	0.5	80.6	37.8	120.8	1.2	1.2	318
22/07/2013	11.50	14	1.2	1.5	2.5	5.2	4.0	5.6	70.4	24.4	104.4	1.6	1.8	242
6/08/2013	11.54	12	1.4	0.6	3.5	5.5	2.4	0.6	51.0	31	85	1.9	1.7	223
21/08/2013	11.21	12.8	3.1	0.9	3.1	7.1	2.9	3.5	60.6	41.4	60.6	1.9	1.9	354.5
3/09/2013	11.20	11.5	2.8	2.3	3.7	8.8	2.6	1.1	89.3	50.1	143.1	2.3	2.4	417
18/09/2013	11.56	12	2.2	2.4	3.2	7.8	4.8	0.6	76.6	36.9	118.9	1.8	2.2	166

Date Collected	Temp. ºC	Secchi (m)	DRP (mg m^{-3})	DOP (mg m^{-3})	PP (mg m^{-3})	TP (mg m^{-3})	NH_4-N (mg m^{-3})	NO_3-N (mg m^{-3})	DON (mg m^{-3})	PN (mg m^{-3})	TN (mg m^{-3})	Chlorophyll *a* (mg m^{-3})	Chl-a at 50m (mg m^{-3})	PC (mg m^{-3})
2/10/2013	11.73	12	4.5	0.5	3.1	8.1	1.5	0.2	62.3	33.3	97.3	1.7	2.1	295
21/10/2013	12.81	11	3.3	0.7	3.5	7.5	3.1	1.9	61	32.9	98.9	1.1	1.8	254
7/11/2013	13.53	10	3.0	3	3.6	9.6	1.6	0.7	63.7	48	114	1.3	1.4	380.5
20/11/2013	16.69	9	1.3	3.7	3	8	2.2	0.3	74.5	41.2	118.2	0.9	0.7	356.5
2/12/2013	17.41	10	1.1	3.9	3.1	8.1	2.5	0.4	56.1	38.5	97.5	1.2	0.9	305.5
8/01/2014	18.54	12	1.4	3.6	2	7.0	5.7	0.5	121.8	39.6	167.6	1.1	1.1	347.5
28/01/2014	18.06	13	1.7	1.3	1.3	4.3	3.4	1.4	117.2	19.8	141.8	1.0	0.8	289
12/02/2014	18.55	13.5	1.4	2.6	2.8	6.8	6.8	0.7	110	43.4	160.9	0.9	0.8	382
25/02/2014	19.16	15	0.2	2.8	2.35	5.4	2.9	0.3	76	27.7	106.9	0.8	0.9	256.5
12/03/2014	19.05	18	0.4	2.6	2.45	5.5	11.8	0.9	163.4	34.9	210.9	0.7	1.1	267
27/03/2014	18.21	14.5	0.9	3.1	2.2	6.2	1.9	0.9	92.2	33.8	128.8	1.0	1.1	375
9/04/2014	18.60	16.5	1.0	2	1.9	4.9	6.1	0.8	113.1	28.8	148.8	0.9	0.8	297.5
23/04/2014	17.42	14.8	1.2	1.8	1.8	4.8	1.3	1.1	88.6	20.5	111.5	1.1	0.8	213
8/05/2014	16.32	17.7	0.8	2.2	1.8	4.8	0.7	0.3	50	22.9	73.9	1.0	0.6	210.5
20/05/2014	15.41	16	0.5	2.5	1.6	4.6	2.4	0.2	52.4	18.1	73.1	0.9	0.6	228
5/06/2014	14.01	12	1.1	1.9	1.9	4.9	1.3	0.4	71.3	28.5	101.5	1.1	0.8	318.5
19/06/2014	13.38	14	0.6	2.4	2.15	5.2	3.7	0.9	65.4	32.6	102.6	1.5	1.6	292
1/07/2014	12.86	12.75	0.9	2.1	2	5	2.0	3.0	67.0	26.7	98.7	1.6	1.9	222
21/07/2014	11.76	15.5	2.4	1.6	1.8	5.8	2.7	7.6	38.7	24.6	73.6	1.7	1.1	221
1/08/2014			2.2	1.8	3.5	7.5	1.5	1.8	64.7	45	113	2.7	2.8	353.5
26/08/2014	11.51	11	1.5	1.5	3.4	6.4	4.0	0.8	132.2	46.6	183.6	2.0	3.2	350.5
9/09/2014	12.08	11.25	0.7	2.3	3.0	6	1.0	3.2	47.8	27.5	79.5	3.8	3.4	336.5
8/10/2014	11.15	14	1.1	1.9	1.5	4.5	2.7	0.9	54.4	19.7	77.7	1.4	1.5	413
20/10/2014	12.91	13	0.8	2.2	0.75	3.8	5.1	0.4	78.5	19.5	103.5	0.9	1.7	238.5
5/11/2014	13.34	15	1.6	0.4	0.9	2.9	2.9	1.8	37.3	10.3	52.3	0.8	0.9	166.5
25/11/2014	14.64	12	1.6	1.4	1.3	4.3	2.9	0.4	74.7	20.3	98.3	0.4	0.6	222.5
17/12/2014	15.42	15	0.6	2.5	1.55	4.65	<1	<0.5	52.5	17	71	0.41	0.615	169
15/01/2015	20.36	16	1	2	1.475	4.475	6	1	45.0	23.25	75.25	0.515	0.71	237
29/01/2015	20.91	17.25	<0.5	3.5	1.6	5.6	4	<0.5	71.5	37.5	113.5	0.41	0.55	215.5
12/02/2015	19.47	17	0.6	1.4	1.2	3.2	1.2	0.2	51.6	15.2	68.2	0.6	1.2	220
26/02/2015	20.00	18	0.8	1.2	2	4.0	7.5	0.0	149.5	25.75	182.75	0.5	0.7	199
9/03/2015	20.08	18	1.0	2	1.7	4.7	7.5	1.1	85.4	27.55	121.55	0.6	1.1	254.5
25/03/2015	19.10	18	1.0	2	2	5	0.0	1.3	64.7	26.5	92.5	0.6	0.6	282.5
9/04/2015	no profile		0.8	1.2	1.3	3.3	3.6	0.2	103.2	16.95	123.95	0.9	1.0	233
22/04/2015	17.10	17.25	0.6	2.4	2.3	5.3	1.3	0.5	77.2	26.45	105.45	1.0	1.1	243.5
12/05/2015	15.70	13	1.1	2.9	2.8	6.8	3.7	1.0	98.3	51.2	154.2	1.1	0.84	340
27/05/2015	13.90	12	1.5	1.5	2.25	5.25	3.2	0.6	91.2	33.3	128.3	1.2	1.205	269
18/06/2015	12.30	16.25	1.8	1.2	2.15	5.15	3.7	0.7	89.6	36.8	130.8	1.3	1.2	230.5
2/07/2015	11.59	14.25	1.7	2.3	2.85	6.85	6.8	1.5	95.7	55.55	159.55	1.7	0.8	433.5
30/07/2015	11.04	13.00	2.3	1.7	3.05	7.05	0.8	1.0	35.2	37.55	74.55	2.7	NA	202.5
13/08/2015	10.86	10.00	1.6	3.4	3.15	8.15	3.4	1.7	58.9	38.3	102.3	2.2	2.4	244

Date Collected	Temp. ºC	Secchi (m)	DRP (mg m^{-3})	DOP (mg m^{-3})	PP (mg m^{-3})	TP (mg m^{-3})	NH_4-N (mg m^{-3})	NO_3-N (mg m^{-3})	DON (mg m^{-3})	PN (mg m^{-3})	TN (mg m^{-3})	Chlorophyll *a* (mg m^{-3})	Chl-a at 50m (mg m^{-3})	PC (mg m^{-3})
27/08/2015	10.78	12.50	1.7	2.0	2.25	5.95	1.6	0.1	46.3	21.4	69.4	1.2	1.6	161.5
17/09/2015	10.79	18.5	1.9	1.7	2.35	5.95	0	3.9	51.1	22.85	77.85	1.33	1.23	233
1/10/2015	11.84	17.25	1.2	1.8	2.2	5.2	0	0.1	52.9	20.2	73.2	0.77	1.09	235.5
15/10/2015	12.33	14.5	1.3	1.7	1.6	4.6	0.1	0.1	52.8	15.5	68.5	0.37	1.11	145.5
2/11/2015	13.42	16	1.8	2.2	1.75	5.75	4.6	1.6	97.8	24.3	128.3	0.455	0.8	205
19/11/2015	13.96	14	1.1	2.9	1.9	5.9	0.4	0.5	55.1	22.65	78.65	0.605	1.375	198.5
1/12/2015	16.27	14.5	1.1	1.9	2.25	5.25	1.2	0.8	50	20.25	72.25	0.38	1.03	196.5
7/01/2016	18.30	18	0.8	2.2	1.6	4.6	1.2	0.4	59.4	21.4	82.4	0.385	0.715	184
21/01/2016	19.68	14	1.1	2.6	1.5	5.2	2.9	0.6	117.5	35.2	156.2	0.48	0.685	280.5
3/02/2016	22.21	18	3.3	-0.3	1.4	4.4	3.7	0.4	85.9	28.75	118.75	0.335	0.82	281.5
16/02/2016	22.25	17	1.2	1.4	1.6	4.2	2.8	0.3	56.9	26.6	86.6	0.4	0.8	242
9/03/2016	20.67	no secchi	1.8	2.2	0.95	4.95	0.5	0.2	45.3	9.85	55.85	0.555	0.72	86.5
22/03/2016	19.79	17	1.9	2.1	1.95	5.95	1.6	0.5	66.9	19.3	88.3	0.635	0.845	121
7/04/2016	19.02	15	0.515	3.185	1.7	5.4	8.05	0.2	111.7	20	140	0.78	0.77	243
19/04/2016	18.31	14.75	0.9	1.1	2.15	4.15	2.4	0.5	84.1	28.7	115.7	0.8	0.9	288
5/05/2016	17.11	14.2	0.6	1.4	1.9	3.9	0.8	0.3	65.9	25.05	92.05	1.05	0.74	278.5
2/06/2016	14.63	14.3	0.8	1.2	1.85	3.85	1.5	0.2	65.3	22.25	89.25	1.1	0.965	266.35
6/07/2016	12.56	13	1.5	3.5	2.75	7.8	1.5	0.5	64.0	27.5	93.5	1.4	0.2	264.5
27/07/2016	11.53	12	1.3	2.7	2.35	6.35	3.1	0.6	55.3	28.4	87.4	1.4	1.46	
10/08/2016	11.01	13	2.5	1.5	2.20	6.2	0.2	3.6	55.2	20.1	79.1	1.7	1.68	
23/08/2016	10.95	12.25	1.6	2.4	3.05	7.1	0.0	0.5	57.5	27.9	85.9	1.9	1.72	205.50
12/09/2016	11.17	14.5	2.3	2.7	3.10	8.1	4	1	105.0	33.6	143.6	1.27	1.85	387.50
27/09/2016	11.59	15.5	1.2	1.8	2.10	5.1	5.0	0.9	79.1	33.5	118.5	0.5	0.87	223.83
12/10/2016	12.44	15	1.2	2.4	2.85	6.5	1.2	0.4	53.4	25.5	80.5	0.5	1.10	178.00
1/11/2016	13.54	12	1.3	0.7	2.35	4.4	0.0	0.3	56.7	30.7	87.7	0.5	0.73	234.50
22/11/2016	14.41	12.5	0.6	0.4	2.30	3.3	1.3	0.4	71.3	33.5	106.5	0.8	0.98	238.00
7/12/2016	16.49	15	0.7	2.3	2.30	5.3	0.9	0.6	60.5	36.3	98.3	0.6	0.96	255.50
26/01/2017	17.26	15	0.7	5.3	1.85	7.85	2.2	0.4	65.4	26.2	94.2	0.605	0.79	267.96
16/02/2017	18.66	16	0.7	5.3	1.75	7.75	1.7	0.8	58.5	24.2	85.2	0.485	0.66	664.00
1/03/2017	20.48	16	0.7	1.9	1.35	3.95	1.9	1.1	57.0	24.1	84.1	0.435	0.65	221.00
16/03/2017	19.42	16.25	0.6	2.4	1.85	4.85	1.7	0.7	72.6	27.7	102.7	0.475	0.77	267.00
28/03/2017	18.96	16.5	0.3	1.7	1.6	3.6	2.2	0.3	62.5	22.25	87.25	0.545	0.58	242.50
18/04/2017	17.88	12.3	0.8	2.2	2.25	5.25	2.5	0.4	61.1	32.45	96.45	1.04	0.64	233.00
3/05/2017	16.73	13	0.8	1.2	1.9	3.9	2.2	1.5	63.3	29.25	96.25	1.42	0.51	267.50
16/05/2017	15.315	10.25	0.5	2.5	2.00	5	1.3	0.3	56.4	26.05	84.05	1.04	0.40	328.00
29/05/2017	14.607	11	0.7	2.3	1.85	4.85	6.4	0.5	66.1	28.05	101.05	1.02	0.41	243.00
15/06/2017	13.106	12.5	0.7	1.3	2.15	4.15	2.3	0.5	46.2	23.5	72.5	1.08	1.13	201.00
28/06/2017	12.5	14.5	0.4	1.6	2	4	2.5	0.6	57.9	23.8	84.8	1.14	1.07	265.00

Date Collected	Temp.	Secchi	DRP	DOP	PP	TP	NH4-N	NO3-N	DON	PN	TN	Chlorophyll a	Chl-a 50m	PC
	°C	m	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
18/07/2017	11.66	12.0	<1	2	2.4	4.9	1.2	<1	50.3	29.5	81.5	1.9	1.8	170
7/08/2017	11.24	10.8	1.3	1.7	2.7	5.7	2.8	3.3	41.9	26.4	74.4	1.9	1.9	212
21/08/2017	11.33	9.3	1.5	1.5	2.55	5.6	0.4	0.1	45.5	26.4	72.4	3.7	4.0	223
27/09/2017	11.62	9.5	0.9	2.4	2.35	5.7	0.7	0.2	51.1	22.2	74.2	2.9	3.6	249
31/10/2017	13.72	10.3	1.7	1.6	2.6	5.9	1.7	1.0	73.3	41.3	117.3	0.9	1.1	350
14/11/2017	14.54	13.0	1.2	0.8	1.45	3.5	3.0	2.1	45.9	18.5	69.5	0.4	1.5	196
27/11/2017		13.5	1.1	1.9	1.95	5.0	1.6	0.9	53.5	23.2	79.2	0.5	1.8	211
9/01/2018	18.76	17.0	0.3	2.7	2	5.0	5.5	2.0	56.5	22.1	86.1	0.3	0.6	187
24/01/2018	21.02	15.3	0.7	2.3	1.35	4.4	9.7	0.2	58.1	23.5	91.5	0.4	0.6	237
19/02/2018	22.04	11.3	1.1	0.9	1.55	3.6	3.0	1.4	70.6	29.5	104.5	0.7	0.8	851
22/03/2018	19.87	13.8	<1	1.5	1.8	3.8	4.0	0.5	64.5	25.3	94.3	0.6	0.7	555
5/04/2018	18.83	19.0	<1	1.5	1.45	3.5	5.0	2.0	49.0	20.4	76.4	1.3	0.9	247
1/05/2018	15.94		0.22	2.0	1.45	3.7	6.2	0.3	44.5	25.9	76.9	1.0	0.5	369
31/05/2018	13.26	16.0	0.5	1.8	1.45	3.8	2.0	0.0	59.0	32.4	93.4	1.3	0.2	305
19/06/2018	12.55	14.0	1.2	0.8	1.8	3.8	3.0	2.1	75.9	25.7	106.7	1.5	0.4	172
5/07/2018	11.79	12.5	1.2	1.0	2.5	4.7	2.4	0.5	52.1	25.4	80.4	2.2	2.6	333
25/07/2018	11.39	15.0	1.0	1.2	2.1	4.3	2.9	1.8	42.3	21.3	68.3	2.4	2.6	205
11/09/2018	11.93		0.6	2.4	2.9	5.9	1.4	2.2	62.4	43.7	109.7	1.3	2.6	514
16/10/2018	12.67	12.0	0.2	2.0	2.1	4.3	1.0	1.5	43.5	15.4	61.4	0.8	0.7	199
31/10/2018	13.86	15.0	0.5	1.5	1.4	3.4	1.4	0.3	35.3	13.1	50.1	0.3	0.5	241
20/11/2018	16.47	15.0	0.5	1.5	1.4	3.4	0.2	0.4	43.4	15.0	59.0	0.6	0.3	191
10/12/2018	17.23	19.0	1	3.6	1.45	5.7	2.0	1.0	48.0	18.8	69.8	0.5	1.5	127
8/01/2019	20.31	19.0	0.8	4.2	1.7	6.7	5.0	1.5	60.5	15.7	82.7	0.6	0.4	241
31/01/2019	21.28	18.0	0.7	1.3	1.6	3.6	0.8	0.3	53.9	19.1	74.1	0.4	0.5	423
20/02/2019	21.14	23.0	0.9	2.1	1.8	4.8	1.0	0.6	56.4	22.1	80.1	0.3		542
4/04/2019	19.62	16.0	1.0	1.0	1.65	3.7	1.0	0.7	45.3	17.8	64.8	0.7	0.6	285
2/05/2019	16.20	22.0	0.5	3.5	1.4	5.4	3.7	6.3	47.0	19.4	76.4	0.8	0.4	197
26/06/2019	12.65	17.0	0.7	2.3	1.45	4.5	1.3	0.6	50.1	18.5	70.5	1.3	0.7	258

Lake Taupo cumulative database of 10 m tube sample data
Samples collected from Kuratau Basin (Site B)

Date Collected	Temp.	Secchi	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	PN	TN	Chlorophyll *a*	PC
	°C	m	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
8/01/2002	18.1	13.5	0.4	2	2.2	4.6	0.4	1.3	48	16.7	66.4	0.9	233
22/01/2002	18.8	12	0.9	2	2.6	5.5	0.9	0.3	41	19.9	62.1	0.9	221
6/03/2002	18.6	14.5	0.3	2	2.3	4.6	1.4	0.5	73	18.3	93.2	0.9	207
4/04/2002	17.4	19.5	0.6	2	1.5	4.1	0.4	0.1	40	11.2	51.7	0.9	162
17/04/2002	16.8	19	0.0	3	1.6	4.6	0.5	0.1	45	12.3	57.9	0.9	143
5/05/2002	15.1	13.2	0.3	1.1			1.6	0.4	40			0.9	
19/06/2002	12.5	15	1.0	1	2.2	4.2	0.4	0.8	48.2	17.4	66.8	1.5	182
1/07/2002	12.1	16	1.5	1.5	1.8	4.8	0.8	1.7	41.5	14.2	58.2	1.6	146
17/07/2002	11.5	12.5	1.8	2.2	2	6	0.8	5.1	51.1	16.1	73.1	1.5	156.5
31/07/2002	11.3	10.5	2.0	3	2.5	7.5	1.5	2.2	81.5	18.5	103.7	2.6	194.5
29/08/2002	11.0	8	1.2	4.8	3.3	9.3	0	0.2	184.0	22.9	207.1	2.3	221
18/09/2002	11.1	11	1.9	2.1	2.1	6.1	0.4	0.6	43.4	14	58.4	1.1	149
9/10/2002	11.7	16	1.4	1.6	1.7	4.7	4.4	0.2	19.6	11.7	35.9	0.5	149
13/11/2002	12.0	14	1	3	2.5	6.5	0.3	0	35	15.2	50.5	1.8	478
28/11/2002	13.8	12.7	0.9	2.9	2	5.8	0	0	40	16.7	56.7	0.7	203.5
18/12/2002	15.2	14	0.6	1.4	2.1	4.1	0	0.1	36	11.2	47.3	0.4	143
30/01/2003	16.8	18	0.5	2.5	1.7	4.7	<1	0.8	43	12.1	55.9	0.6	148.5
13/02/2003	18.8	11	0.7	1.3	1.6	3.6	0.4	0.2	45	9.3	54.9	0.7	131
17/03/2003	18.7	14	0.5	3.5	2	6	<1	0.7	49	16.3	66.0	1.0	208
3/04/2003	19.0	12.8	0.6	3.4	2.1	6.1	<1	0.1	50	19.6	69.7	1.1	239.5
28/04/2003	16.7	13.5	0.6	3.4	1.6	5.6	<1	0.2	57	13.1	70.3	1.4	218.5
15/05/2003	15.7	15.5	0.4	3.6	1.8	5.8	<1	0.2	63	13.5	76.7	1.7	229.5
12/06/2003	12.5	12	1.7	1.3	2.2	5.2	0.1	2.8	39.1	13.9	55.9	1.3	
14/07/2003	11.8	12	1.7	2.3	2.2	6.2	0.9	1.9	39.4	15.9	58.1	1.7	96.5
31/07/2003	11.3	13	2.1	1.9	2.7	6.7	1.2	2.0	43.8	18.0	65.0	2.1	108.5
14/08/2003	11.4	13	1.8	2.2	3.3	7.3	0.3	0.3	33	22.3	55.9	2.5	112.0
26/08/2003	11.3	11.5	3.1	0.9	4.0	8	0.4	0.1	37	22.4	59.9	3.1	148.0
8/09/2003	11.1	11	2.5	1.5	3.3	7.3	0.4	0.1	36	23.5	60.0	1.4	196.5
7/10/2003	11.7	9.5	2.3	1.7	3.0	7.0	0.0	0.1	49.9	20.5	70.5	1.2	185.5

Date Collected	Temp.	Secchi	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	PN	TN	Chlorophyll *a*	PC
	°C	m	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
21/10/2003	13.2	15.0	2.2	0.8	2.7	5.7	0.3	0.2	38.5	14.9	53.9	0.8	155.5
19/11/2003	13.8	17.0	1.6	2.4	2.4	6.4	0.0	0.1	51.0	14.6	65.7	0.6	139.5
4/12/2003	15.6	17.0	1.8	2.2	1.8	5.8	0.2	0.1	44.7	13.5	58.5	0.4	126.5
18/12/2003	17.0	15.0	0.5	3.5	1.9	5.9	0.0	0.2	56.0	12.4	68.6	0.5	145.5
13/01/2004	20.3	16.0	0.4	4.6	1.8	6.8	0.0	0.2	54.0	13.7	67.9	0.5	125.0
26/02/2004	16.8	13.5	1.1	1.9	1.8	4.8	0.6	0.1	42.3	15.8	58.8	0.8	157.0
8/03/2004	17.6	5.0	0.8	2.2	3.1	6.1	1.0	0.3	41.7	17.5	60.5	0.9	172.0
31/03/2004	15.9	11.0	0.8	3.2	1.8	5.8	0.7	0.2	45.1	9.9	55.9	1.4	124.5
14/04/2004	15.0	14.0	0.9	4.1	2.2	7.2	0.6	0.3	52.1	14.9	67.9	1.3	171.5
10/05/2004	14.7	15.5	0.8	2.2	1.7	4.7	0.0	0.2	59.8	15.9	75.9	1.3	179.0
10/06/2004	12.9	12.0	1.4	2.6	2.1	6.1	0.0	0.2	108.8	18.6	127.6	1.2	183.0
13/07/2004	11.4	11.0	2.1	2.9	2.5	7.5	0.0	8.4	40.6	19.3	68.3	1.4	154.0
26/07/2004	11.2	10.0	1.3	2.7	3.2	7.2	0.2	5.8	38.0	25.0	69.0	2.7	204.0
24/08/2004	10.9	10.0	0.7	3.3	3.1	7.1	0.0	0.0	47.0	20.9	67.9	2.5	158.0
7/09/2004	10.8	11.0	0.7	2.3	2.6	5.6	0.0	0.2	44.8	17.1	62.1	1.5	172.5
21/10/2004	11.7	11.0	1.2	1.8	2.1	5.1	0.2	0.0	30.8	16.1	47.1	0.8	172.5
2/11/2004	13.1	15.0	1.0	2.0	1.7	4.7	0.2	0.1	42.7	11.0	54.0	0.5	152.0
22/11/2004	14.9	15.0	0.6	3.4	1.6	5.6	0.6	0.0	33.4	9.5	43.5	0.5	141.5
15/12/2004	13.2	17.2	0.6	3.4	1.6	5.6	0.4	0.1	39.5	12.6	52.6	0.2	120.0

Lake Taupo cumulative database of 10 m tube sample data

Samples collected from Western Bays (site C)

Date Collected	Temp.	Secchi	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	PN	TN	Chlorophyll *a*	PC
	°C	m	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
8/01/2002	18.72	14.5	0.9	4	2.3	7.2	0.9	0.6	88	16.1	105.6	0.8	213
22/01/2002	18.82	15.5	0.7	2	2.2	4.9	0.7	0.0	37	16.8	54.5	0.8	221
6/03/2002	18.68	16	0.2	2	2	4.2	0	0.1	45	16	61.1	0.7	177
4/04/2002	17.47	19	0.6	2	1.4	4	0.0	0.0	38	8.8	46.8	0.9	152
17/04/2002	16.88	18.5	0	3	1.6	4.6	0.7	0.2	44	11.8	56.7	0.9	167
5/05/2002	15.6	15.6	0.4	1			2	0.2	45			1.1	
19/06/2002	12.58	16	0.9	2.1	2	5	0.3	1.2	38.8	15.9	56.2	0.9	161
1/07/2002	12.22	14	1.3	1.7	1.9	4.9	0.3	0.4	45	15	60.7	1.4	148
17/07/2002	11.52	12.5	1.9	2.1	2	6	0.9	4.9	46.1	16.3	68.2	1.5	160
31/07/2002	11.6	12	2.3	2.7	2.3	7.3	1.7	4.0	113.3	16.7	135.7	2.3	150
29/08/2002	11.4	8	1	3	3.2	7.2	0	0	177	22.3	199.3	2.4	217
18/09/2002	11.24	12	2.8	2.2	2	7	1.7	0.4	45.3	11.7	59.1	0.9	152
9/10/2002	12.10	19	1.5	1.5	1.7	4.7	0.3	0.2	28	10.2	38.7	0.4	116
13/11/2002	12.60	16	1.1	2.9	2	6	0.1	0	51	12.2	63.3	0.6	141
28/11/2002	13.90	15.5	0.9	2.1	2	5	0.4	0.4	40	14.4	55.2	0.8	125.5
18/12/2002	15.10	13.5	0.8	2.2	1.9	4.9	0	0.3	45	10.2	55.5	0.5	136.5
30/01/2003	17.60	18.5	0.5	2.5	1.5	4.5	<1	0.1	46	8.6	54.7	0.4	141.5
13/02/2003	19.50	19	0.6	1.4	1.6	3.6	0	0.1	42	8.4	50.5	0.5	104
17/03/2003	18.70	15	0.5	2.5	1.7	4.7	<1	0.4	46	14.6	61.0	1.1	215
3/04/2003	18.80	14.5	0.5	2.5	1.6	4.6	<1	0.4	49	16.5	65.9	1.2	204
28/04/2003	17.00	14.5	0.4	2.6	1.4	4.4	<1	0.4	54	12.2	66.6	1.5	191
15/05/2003	15.60	17	0.1	3.9	2.2	6.2	<1	0.1	56	18	74.1	1.3	197
12/06/2003	13.70	11	1.3	1.7	2	5	0.1	0.9	40	13.8	54.8	1.3	
14/07/2003	11.80	14	1.9	2.1	2	6	1	4.7	39.3	14.9	59.9	1.5	85.0
31/07/2003	11.40	12	3.1	5.9	2.8	11	0.1	4.0	55	20.3	79.4	2.3	101.5
14/08/2003	11.50	14.5	2.4	2.6	2.9	7.9	1.1	3.8	46.1	19.5	70.5	2.8	92.5
26/08/2003	11.30	13	2.8	2.2	3.8	8.8	0.5	0.2	39	25.0	64.7	3.2	174.5
8/09/2003	11.30	12	2.6	0.4	3	6	0.1	0.1	40	19.5	59.7	1.3	233.0
7/10/2003	11.7	12.5	2.7	1.3	2.8	6.8	0.0	0.3	44.7	18.4	63.4	1.5	157.5

Date Collected	Temp. ºC	Secchi (m)	DRP (mg m^{-3})	DOP (mg m^{-3})	PP (mg m^{-3})	TP (mg m^{-3})	NH_4-N (mg m^{-3})	NO_3-N (mg m^{-3})	DON (mg m^{-3})	PN (mg m^{-3})	TN (mg m^{-3})	Chlorophyll *a* (mg m^{-3})	PC (mg m^{-3})
21/10/2003	13.0	12.0	1.5	1.5	3.1	6.1	0.3	0.0	44.7	17.4	62.4	1.1	195.0
19/11/2003	14.3	17.2	1.5	1.5	2.3	5.3	0.8	0.0	38.2	14.4	53.4	0.7	123.0
4/12/2003	15.5	17.0	1.7	3.3	1.7	6.7	0.0	0.2	46.8	11.2	58.2	0.5	129.0
18/12/2003	17.0	19.0	0.5	4.5	1.5	6.5	0.0	0.0	47.0	9.9	56.9	0.4	124.5
13/01/2004	20.2	17.5	0.7	4.3	1.6	6.6	0.0	0.1	53.0	11.9	65.0	0.4	118.5
26/02/2004	16.9	14.0	0.9	2.1	2.2	5.2	0.8	0.4	40.8	17.2	59.2	0.7	156.0
8/03/2004	18.4	13.0	0.8	2.2	2.0	5.0	0.7	0.1	34.2	11.1	46.1	0.6	124.0
31/03/2004	16.4	12.5	0.6	3.4	2.0	6.0	0.7	0.3	51.0	12.3	64.3	1.2	175.5
14/04/2004	15.4	16.5	0.9	3.1	2.3	6.3	0.6	0.3	50.1	14.2	65.2	1.2	159.0
10/05/2004	14.9	16.0	0.8	3.2	1.6	5.6	0.0	0.2	48.8	15.4	64.4	1.1	153.0
10/06/2004	13.1	14.0	0.8	2.2	2.0	5.0	0.0	0.2	41.8	16.6	58.6	1.0	151.0
13/07/2004	11.6	12.5	1.3	2.7	2.5	6.5	0.0	5.9	39.1	19.9	64.9	1.6	156.5
26/07/2004	11.5	11.0	1.5	2.5	2.9	6.9	0.3	2.7	46.0	22.2	71.2	2.4	180.5
24/08/2004	10.9	10.0	1.0	3.0	2.9	6.9	0.0	0.4	37.6	18.5	56.5	2.5	161.0
7/09/2004	11.1	12.0	1.2	3.8	2.6	7.6	0.0	0.0	54.0	16.8	70.8	1.5	202.0
21/10/2004	11.7	12.0	1.1	1.9	1.9	4.9	0.2	0.0	35.8	14.8	50.8	0.6	167.5
2/11/2004	12.4	17.0	1.0	3.0	1.7	5.7	0.3	1.2	45.5	16.3	63.3	0.4	173.0
22/11/2004	14.8	16.0	0.5	3.5	1.7	5.7	0.0	0.2	37.8	10.8	48.8	0.5	149.0
15/12/2004	14.2	20.8	0.9	4.1	1.4	6.4	0.0	0.0	42.0	12.2	54.2	0.2	131.0

Lake Taupo biannual nutrient database									2018-2019											
Collection date 16 October 2018				Secchi Depth= 12 m																
	NIWA ID	***Depth (m)***	***pH pH units***	***EC @25° C µS/cm***	***Temp ° C***	***DO g m^{-3}***	***SS g/m3***	***VSS g/m3***	***Chla-Av mg/m3***	***DRP mg/m3***	***DOP mg/m3***	***PP mg/m3***	***TP mg/m3***	***NH_4-N mg/m3***	***NO_3-N mg/m3***	***DON mg/m3***	***PartN mg/m3***	***TN mg/m3***	***DOC mg/m3***	***PC mg/m3***	***PN mg/m3***
	SC1	Surface	7.82	121	12.67	11.3	0.5	<0.5	0.56	0.5	1.8	1.1	3.4	2.0	1.7	46	10.4	60	509	112	8.2
	SC2	10 m	7.70	120	12.65	11.3	0.7	<0.5	0.80	0.7	2.1	1.6	4.4	2.9	1.3	39	14.5	57	492	131	8.9
	SC3	20 m	7.60	121	12.60	11.3	0.8	<0.5	0.87	0.6	1.8	1.4	3.8	1.8	0.4	37	9.5	49	451	93	7.0
	SC4	30 m	7.62	120	11.95	11.3	0.6	<0.5	0.69	0.8	1.3	1.2	3.3	2.2	0.1	38	9.4	49	458	133	9.2
	SC5	40 m	7.30	120	11.47	11.1	0.8	<0.5	0.92	0.8	1.3	1.3	3.4	3.0	0.2	36	10.2	49	514	100	7.3
	SC6	50 m	7.32	122	11.39	11.0	0.7	<0.5	1.16	0.5	1.5	1.5	3.5	3.1	0.2	38	12.7	54	447	102	9.0
	SC7	60 m	7.29	121	11.23	10.7	0.5	<0.5	0.99	0.4	1.9	1.4	3.7	1.9	0.4	46	9.0	57	450	67	5.6
	SC8	70 m	7.26	122	11.16	10.6	0.5	<0.5	0.93	0.5	1.6	1.3	3.4	4.4	0.2	36	11.2	52	484	64	5.9
	SC9	80 m	7.24	122	11.12	10.6	0.6	<0.5	0.95	1.2	1.8	1.2	4.2	4.7	0.4	39	5.9	50	431	76	5.7
	SC10	90 m	7.28	122	11.11	10.6	0.8	<0.5	1.22	1.8	0.4	1.1	3.3	2.4	0.9	42	6.8	52	461	60	6.0
	SC11	100 m	7.25	120	11.10	10.5	0.5	<0.5	1.27	0.7	1.8	1.0	3.5	1.9	0.8	38	9.0	50	452	64	6.4
	SC12	110 m	7.33	122	11.09	10.5	0.8	<0.5	1.00	0.6	1.6	1.1	3.3	4.5	1.0	34	5.8	45	566	56	5.8
	SC13	120 m	7.36	122	11.08	10.4	0.6	<0.5	1.37	0.7	1.9	1.6	4.2	4.8	1.4	32	8.3	46	448	72	5.1
	SC14	130 m	7.31	121	11.07	10.3	0.7	<0.5	1.09	0.9	1.5	1.3	3.7	11.5	3.5	34	7.9	57	505	64	5.8
	SC15	140 m	7.31	121	11.06	9.9	0.6	<0.5	1.03	1.2	1.4	1.7	4.3	13.2	5.8	39	10.0	68	473	55	5.2
	SC16	150 m	7.29	121	11.06	9.8	0.7	<0.5	0.65	1.1	1.8	1.7	4.6	13.6	4.9	39	10.7	68	476	52	5.5
	PartN = by wet digestion method, PN = by combustion furnace method																				
Collection date 7 May 2019					Secchi Depth = 22m on 2/05/2019																
					2/05/2020	2/05/2020															
	NIWA ID	***Depth (m)***	***pH pH units***	***EC @25° C µS/cm***	***Temp ° C***	***DO g m^{-3}***	***SS g/m3***	***VSS g/m3***	***Chla-Av mg/m3***	***DRP mg/m3***	***DOP mg/m3***	***PP mg/m3***	***TP mg/m3***	***NH_4-N mg/m3***	***NO3-N mg/m3***	***DON mg/m3***	***PartN mg/m3***	***TN mg/m3***	***DOC mg/m3***	***PC mg/m3***	***PN mg/m3***
	LO1	Surface	7.90	121	16.20	9.5	<0.5	<0.5	0.6	0.6	2.4	1.4	4.4	6.0	1.0	66	13.1	86	726	149	12.1
	LO2	10m	7.91	120	16.21	9.4	<0.5	<0.5	0.8	0.8	2.2	13.6	16.6	4.0	1.5	50	1.5	58	621	115	10.0
	LO3	20m	7.87	121	16.21	9.4	0.5	<0.5	0.8	0.7	2.3	17.4	20.4	1.6	0.2	48	1.9	52	663	300	15.3
	LO4	30m	7.67	119	14.71	9.3	<0.5	<0.5	0.6	0.8	2.2	9.9	12.9	2.5	0.7	40	1.3	44	647	101	11.9
	LO5	40m	7.45	120	12.32	9.1	<0.5	<0.5	0.7	1.0	2.0	10.1	13.1	0.1	0.4	32	1.3	33	591	187	12.1
	LO6	50m	7.29	120	11.67	8.6	<0.5	<0.5	0.4	1.4	1.6	9.4	12.4	0.0	3.9	32	1.0	37	547	198	6.9
	LO7	60m	7.35	120	11.48	8.5	<0.5	<0.5	0.3	1.9	2.1	9.3	13.3	0.0	4.4	34	0.7	39	556	102	4.2
	LO8	70m	7.25	121	11.33	8.5	<0.5	<0.5	0.2	3.7	1.3	8.6	13.6	0.2	13.5	31	0.8	46	521	62	4.2
	LO9	80m	7.18	121	11.24	8.2	<0.5	<0.5	0.2	4.3	1.7	9.3	15.3	0.0	18.4	38	0.7	57	589	96	6.0
	LO10	90m	7.15	121	11.22	7.9	<0.5	2.2	0.1	6.4	1.6	8.1	16.1	0.0	23.2	24	0.8	48	524	67	9.5
	LO11	100m	7.20	121	11.21	7.9	<0.5	<0.5	0.1	5.7	2.3	9.5	17.5	0.0	21.3	24	0.8	46	600	47	4.0
	LO12	110m	7.20	121	11.19	8.0	<0.5	<0.5	0.1	5.9	2.1	9.8	17.8	0.0	23.2	33	0.6	57	647	56	6.3
	LO13	120m	7.24	121	11.18	7.8	<0.5	<0.5	0.1	7.5	2.5	5.4	15.4	0.0	25.3	28	0.8	54	597	49	5.0
	LO14	130m	7.20	121	11.16	7.8	<0.5	<0.5	0.1	9.0	3.0	3.4	15.4	0.0	29.1	37	0.6	67	642	64	6.1
	LO15	140m	7.15	121	11.16	7.1	0.8	<0.5	0.2	9.7	1.3	10.3	21.3	0.0	29.4	33	6.8	69	525	99	10.5
	LO16	150m	7.11	120	11.16	7.0	*	*	*	49.2	9.8	*		1.0	35.7	50	*		595	*	*
	* sediment interfered with analysis																				

Lake Taupo biannual nutrient database **2017-2018**

Collection date 14 November 2017 Secchi Depth= 13 m

NIWA ID	Depth (m)	pH pH units	EC @25° C µS/cm	Temp ° C	DO g m^{-3}	SS g/m3	VSS g/m3	Chla-Av mg/m3	DRP mg/m3	DOP mg/m3	PP mg/m3	TP mg/m3	NH_4-N mg/m3	NO_3-N mg/m3	DON mg/m3	PartN mg/m3	TN mg/m3	DOC mg/m3	PC mg/m3	PN mg/m3
QS1	Surface	7.83	118	14.49	10.30	0.5	<0.5	0.35	0.9	1.1	1.1	3.1	1.7	1.6	71	15.9	90	1313	121.5	13.0
QS2	10 m	7.89	118	14.08	9.87	0.6	<0.5	0.52	1.5	0.5	1.7	3.7	1.8	0.6	33	13.1	48	575	166.0	14.0
QS3	20 m	7.86	118	13.88	9.85	0.7	<0.5	0.56	0.2	1.8	2.0	4.0	0.0	0.0	36	16.8	53	570	180.0	18.3
QS4	30 m	7.88	120	13.48	9.88	0.8	<0.5	0.47	0.5	1.5	1.7	3.7	0.0	0.0	40	14.6	55	994	160.0	13.4
QS5	40 m	7.91	116	11.81	9.55	0.9	<0.5	1.11	0.9	1.1	2.3	4.3	0.0	0.0	33	17.5	51	512	190.5	19.3
QS6	50 m	7.70	118	11.41	8.92	0.9	<0.5	1.55	1.3	1.7	2.4	5.4	0.0	1.8	34	16.2	52	480	159.5	17.2
QS7	60 m	7.70	117	11.27	8.73	0.9	<0.5	1.68	1.2	0.8	2.2	4.2	0.0	1.1	34	15.4	50	593	159.0	15.2
QS8	70 m	7.62	121	11.21	8.65	0.6	<0.5	1.14	1.7	1.3	1.7	4.7	0.4	10.3	31	10.4	52	487	77.6	9.8
QS9	80 m	7.60	119	11.14	8.73	0.5	<0.5	1.01	1.9	1.1	1.7	4.7	0.0	15.4	34	9.5	59	486	63.6	8.6
QS10	90 m	7.50	119	11.12	8.64	<0.5	<0.5	0.75	2.7	1.3	1.6	5.6	1.1	20.0	28	8.3	57	627	53.8	7.1
QS11	100 m	7.52	119	11.09	8.50	0.5	<0.5	0.70	2.0	1.0	1.7	4.7	0.0	14.3	31	8.0	53	566	66.2	7.8
QS12	110 m	7.61	119	11.09	8.40	0.6	<0.5	0.75	1.7	1.3	1.5	4.5	0.9	14.5	33	8.2	56	506	50.0	7.6
QS13	120 m	7.49	119	11.08	8.31	0.6	<0.5	0.85	3.7	1.3	1.8	6.8	0.7	25.7	28	8.4	62	514	64.9	9.1
QS14	130 m	7.51	119	11.07	8.21	1.4	<0.5	0.97	4.0	1.0	2.1	7.1	0.2	27.4	27	8.9	64	452	63.5	9.1
QS15	140 m	7.50	119	11.06	8.05	0.7	<0.5	1.16	4.2	1.8	2.8	8.8	0.9	29.7	27	9.4	67	453	71.4	9.7
QS16	150 m	7.44	119	11.06	7.85	0.7	<0.5	1.13	4.5	2.5	2.9	9.9	1.0	29.2	28	10.0	68	439	68.9	10.7

PartN = by wet digestion method, PN = by combustion furnace method

Collection date 1 May 2018 Secchi Depth (none, was entered in the phone which died)

NIWA ID	Depth (m)	pH pH units	EC @25° C µS/cm	Temp ° C	DO g m^{-3}	SS g/m3	VSS g/m3	Chla-Av mg/m3	DRP mg/m3	DOP mg/m3	PP mg/m3	TP mg/m3	NH_4-N mg/m3	NO3-N mg/m3	DON mg/m3	PartN mg/m3	TN mg/m3	DOC mg/m3	PC mg/m3	PN mg/m3
DK1	Surface	7.63	121	15.94	9.12	<0.5	<0.5	1.05	0.3	2.2	1.0	3.5	3.4	0.6	46.9	11.8	63	627	174.5	8.75
DK2	10m	7.80	121	15.88	9.15	<0.5	<0.5	1.20	0.3	1.9	1.3	3.5	5.3	0.1	30.6	14.5	51	597	149	10.45
DK3	20m	7.78	121	15.79	9.11	<0.5	<0.5	1.23	0.5	1.8	1.6	3.9	6.4	0.1	43.5	18.6	69	585	198	11.6
DK4	30m	7.81	120	15.78	9.08	<0.5	<0.5	0.85	0.4	1.6	1.6	3.6	1.8	0.2	39.1	15.8	57	557	113	8.2
DK5	40m	7.69	122	13.60	8.84	<0.5	<0.5	0.76	0.3	1.7	1.2	3.2	1.2	1.0	36.8	10.5	50	494	82.8	5.8
DK6	50m	7.44	122	12.04	8.37	<0.5	<0.5	0.55	0.8	1.5	0.8	3.1	0.2	1.7	46.1	6.6	55	443	44.45	3.9
DK7	60m	7.41	124	11.63	8.17	<0.5	<0.5	0.47	1.4	1.5	0.8	3.7	1.0	4.7	33.3	6.6	46	429	55.75	3.45
DK8	70m	7.23	124	11.43	7.81	<0.5	<0.5	0.33	2.8	0.9	0.7	4.4	2.1	16.6	45.3	5.9	70	460	46.85	3.9
DK9	80m	7.22	123	11.34	7.79	<0.5	<0.5	0.25	2.7	1.3	0.6	4.6	0.8	18.9	29.3	4.9	54	415	73	3.45
DK10	90m	7.33	122	11.29	7.87	<0.5	<0.5	0.20	1.9	1.6	0.6	4.1	0.5	15.7	30.9	5.1	52	444	43.3	2.4
DK11	100m	7.26	125	11.26	7.58	<0.5	<0.5	0.13	3.4	1.5	0.7	5.6	1.8	26.1	31.1	6.5	66	436	45.75	3.8
DK12	110m	7.24	123	11.23	7.34	<0.5	<0.5	0.13	3.8	1.7	0.6	6.1	1.2	27.8	30.0	4.9	64	440	43.15	1.85
DK13	120m	7.38	123	11.22	7.27	<0.5	<0.5	0.11	4.8	1.2	0.6	6.6	2.6	31.6	26.8	4.6	66	440	29.45	3.95
DK14	130m	7.23	123	11.20	7.24	<0.5	<0.5	0.12	4.7	1.3	0.6	6.6	2.2	31.5	23.2	5.1	62	445	50.5	2.55
DK15	140m	7.36	131	11.18	7.10	<0.5	<0.5	0.10	6.1	1.1	0.7	7.9	1.1	38.3	26.6	5.4	71	448	60	2.85
DK16	150m	7.29	126	11.18	6.55	<0.5	<0.5	0.14	6.8	1.9	1.0	9.7	3.4	40.9	27.7	5.0	77	448	41.25	3.45

Lake Taupo biannual nutrient database **2016-2017**

Collection date 8 December 2016 Secchi Depth= 15 m

NIWA ID	Depth (m)	pH pH units	EC @25°C µS/cm	Temp °C	DO g m^{-3}	SS g/m3	VSS g/m3	Chla-Av mg/m3	DRP mg/m3	DOP mg/m3	PP mg/m3	TP mg/m3	NH_4-N mg/m3	NO_3-N mg/m3	DON mg/m3	Urea mg/m3	PartN mg/m3	TN mg/m3	DOC mg/m3	PC mg/m3	PN mg/m3
QI1	Surface	8.01	120	16.49	9.66	<0.5	<0.5	0.6	0.2	1.8	1.6	3.6	0.4	0.7	48.9	4	19.5	69.5	644	158	16.7
QI2	10m	8.02	120	16.04	9.68	<0.5	<0.5	0.5	0.4	1.6	2.3	4.3	0.7	0.1	48.2	<2	19.8	68.8	673	118	12.5
QI3	20m	8.02	120	14.61	9.73	<0.5	<0.5	0.7	0.2	1.8	1.8	3.8	0.2	0.3	41.6	<2	15.7	57.7	624	141	9.2
QI4	30m	7.96	120	14.17	9.68	<0.5	<0.5	0.9	0.4	1.6	1.6	3.6	0.4	0.1	42.5	2	14.7	57.7	580	143	11.8
QI5	40m	7.86	120	12.44	9.23	<0.5	<0.5	0.8	0.1	1.9	1.4	3.4	1.1	0.2	41.7	<2	13.8	56.8	592	107	10.9
QI6	50m	7.46	121	11.27	8.79	<0.5	<0.5	1.1	1.3	1.7	2.0	5.0	0.0	1.4	50.6	<2	16.6	68.6	584	105	15.0
QI7	60m	7.45	121	10.96	8.87	<0.5	<0.5	0.7	1.6	1.4	1.5	4.5	0.0	0.7	34.3	<2	16.5	51.5	608	65	6.6
QI8	70m	7.38	121	10.90	8.95	<0.5	<0.5	0.6	2.0	1.0	1.2	4.2	0.1	3.7	30.2	<2	10.8	44.8	488	58	6.0
QI9	80m	7.44	122	10.87	8.96	<0.5	<0.5	0.4	1.8	1.2	1.2	4.2	0.0	5.5	31.5	<2	9.4	46.4	544	63	6.8
QI10	90m	7.45	121	10.85	8.94	<0.5	<0.5	0.3	2.3	0.7	1.2	4.2	0.0	8.1	31.9	<2	5.2	45.2	532	50	4.1
QI11	100m	7.40	121	10.84	8.95	<0.5	<0.5	0.3	2.0	1.0	1.1	4.1	0.0	9.5	30.5	<2	7.9	47.9	497	37	4.3
QI12	110m	7.39	121	10.83	8.85	<0.5	<0.5	0.3	2.3	0.7	1.0	4.0	0.0	10.4	31.6	<2	6.8	48.8	493	43	4.7
QI13	120m	7.37	122	10.82	8.68	<0.5	<0.5	0.2	3.5	0.5	1.1	5.1	0.0	16.7	31.3	<2	5.6	53.6	492	48	4.9
QI14	130m	7.43	121	10.81	8.54	<0.5	<0.5	0.2	2.8	0.2	1.0	4.0	0.1	14.5	27.5	<2	5.9	47.9	509	45	4.2
QI15	140m	7.39	122	10.81	8.34	<0.5	<0.5	0.2	4.0	1.0	1.5	6.5	0.0	19.9	29.1	<2	10.2	59.2	505	73	5.1
QI16	150m	7.36	122	10.81	8.32	<0.5	<0.5	0.3	4.5	2.5	1.3	8.3	0.0	21.5	30.5	<2	7.2	59.2	498	50	5.2

Collection date 18 April 2017 Secchi Depth= 12.3 m

NIWA ID	Depth (m)	pH pH units	EC @25°C µS/cm	Temp °C	DO g m^{-3}	SS g/m3	VSS g/m3	Chla-Av mg/m3	DRP mg/m3	DOP mg/m3	PP mg/m3	TP mg/m3	NH_4-N mg/m3	NO_3-N mg/m3	DON mg/m3	Urea mg/m3	PartN mg/m3	TN mg/m3	DOC mg/m3	PC mg/m3	PN mg/m3
ZT1	Surface	7.73	107	17.520	9.8717	0.78	<0.50	0.395	<0.500	1.75	1.55	3.55	2	<0.500	55.75	10	16.6	74.6	596	148.5	16.5
ZT2	10m	7.83	106	17.780	8.9363	<0.50	<0.50	1.01	<0.500	1.75	2	4	<1.00	<0.500	39.25	2	19.4	59.4	666	158.5	19.5
ZT3	20m	7.81	108	17.762	8.8945	<0.50	<0.50	1.36	<0.500	1.75	1.9	3.9	<1.00	<0.500	40.25	1	19.7	60.7	603	154	17.4
ZT4	30m	7.79	106	17.756	8.8669	0.57	<0.50	1.41	<0.500	1.75	1.85	3.85	1	<0.500	41.75	1	17.4	60.4	612	148.5	15.55
ZT5	40m	7.59	108	13.840	8.5863	<0.50	<0.50	0.925	0.5	1.5	1.25	3.25	<1.00	1	35.5	1	9.2	46.2	530	83.45	9.22
ZT6	50m	7.65	107	11.993	8.5589	<0.50	<0.50	1.04	<0.500	1.75	1.25	3.25	<1.00	1	34.5	<1.00	10.5	46.5	521	72.2	8.51
ZT7	60m	7.59	108	11.410	8.4790	<0.50	<0.50	0.42	1.9	2.1	0.9	4.9	<1.00	3	30.5	1	16.5	50.5	445	50.2	5.065
ZT8	70m	7.54	108	11.114	8.4577	<0.50	<0.50	0.34	3	1	0.8	4.8	<1.00	8	30.5	<1.00	11.6	50.6	401	38.6	3.545
ZT9	80m	7.7	109	11.015	8.3852	<0.50	<0.50	0.28	3.8	1.2	0.7	5.7	<1.00	11	26.5	1	11.7	49.7	468	47.05	4.765
ZT10	90m	7.7	109	10.968	8.3019	<0.50	<0.50	0.19	4.7	1.3	0.75	6.75	1	18	25	<1.00	7.05	51.05	431	41.5	4.27
ZT11	100m	7.59	109	10.936	8.2271	<0.50	<0.50	0.18	4.9	1.1	0.65	6.65	<1.00	21	25.5	1	7.65	54.65	467	33.45	3.995
ZT12	110m	7.61	108	10.921	8.0697	<0.50	<0.50	0.175	6.1	0.9	0.65	7.65	1	24	26	1	4.1	55.1	460	34.35	3.375
ZT13	120m	7.69	109	10.905	7.9872	<0.50	<0.50	0.155	6.4	1.6	0.75	8.75	<1.00	26	21.5	1	3.5	51.5	398	38.4	6.85
ZT14	130m	7.57	109	10.899	7.9611	<0.50	<0.50	0.135	6.1	1.9	0.9	8.9	<1.00	26	27.5	<1.00	6.2	60.2	433	35.25	5.01
ZT15	140m	7.55	110	10.899	7.4755	<0.50	<0.50	0.17	7.7	1.3	0.95	9.95	<1.00	30	27.5	1	5.05	63.05	504	41.45	5.585
ZT16	150m	7.63	109	10.898	7.4908	<0.50	<0.50	0.225	7.8	1.2	1.2	10.2	<1.00	31	32.5	3	8.35	72.35	405	47.2	6.895

PartN = by wet digestion method, PN = by combustion furnace method

Lake Taupo biannual nutrient database								**2015-2016**						Started 27 October 1994						
Collection date 2 November 2015					Secchi depth = 16 m															
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PartP	TP	NH_4-N	NO_3-N	DON	UREA	PartN*	TN	DOC	PC	PN**
	m		$\mu S\ cm^{-1}$	^oC	$g\ m^{-3}$	$g\ m^{-3}$	$g\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$	$mg\ m^{-3}$
UK1	1	7.86	119	13.42	10.43	0.51	<0.50	0.43	1.3	1.7	1.1	4.1	0.5	0.4	48.1	4	9.5	58.5	507	98.1	8.6
UK2	10	7.87	119	13.04	10.36	0.63	<0.50	0.24	1.2	2.8	1.45	5.5	0.6	0.3	40.1	<3	10.5	51.5	459	102.4	9.3
UK3	20	7.91	120	12.89	10.45	0.67	<0.50	0.5	0.9	2.1	2.1	5.1	0.3	0.3	40.4	<3	19	60.0	466	122.0	10.7
UK4	30	7.89	119	12.17	10.44	0.78	<0.50	0.5	1.2	1.8	2.2	5.2	0.2	0.2	38.6	<3	17.2	56.2	460	183.5	15.7
UK5	40	7.84	119	11.67	10.35	0.65	<0.50	0.71	1.1	1.9	2.75	5.8	0.3	0.1	41.6	<3	20.3	62.3	523	120.5	12.8
UK6	50	7.77	119	10.92	10.18	0.75	<0.50	0.885	1.2	1.8	1.9	4.9	0.9	0.4	32.7	<3	14.5	48.5	449	152.0	15.3
UK7	60	7.69	119	10.77	9.98	0.76	<0.50	1.29	1.5	1.5	1.85	4.9	0.5	0.2	34.3	<3	12.4	47.4	411	86.1	7.3
UK8	70	7.62	120	10.74	9.96	0.63	<0.50	1.59	1.6	1.4	2	5.0	0.4	0.6	37.0	<3	12.5	50.5	426	85.2	6.7
UK9	80	7.62	120	10.73	9.85	<0.50	<0.50	1.32	1.9	0.1	1.7	3.7	0.7	1.7	37.6	<3	10.3	50.3	450	74.9	7.1
UK10	90	7.62	120	10.72	9.83	<0.50	<0.50	1.5	2	1.0	1.95	5.0	1.2	2	33.8	<3	10.2	47.2	420	68.8	6.5
UK11	100	7.61	119	10.71	9.81	0.54	<0.50	1.42	1.7	1.3	2.15	5.2	0.6	2.5	33.9	<3	11.6	48.6	411	59.8	5.9
UK12	110	7.6	119	10.71	9.80	0.76	<0.50	1.06	2	2.0	1.9	5.9	0.7	2.5	31.8	<3	13.6	48.6	427	66.8	7.2
UK13	120	7.63	119	10.70	9.73	0.78	<0.50	1.26	2.2	0.8	1.95	5.0	0.8	3.7	30.5	<3	9.75	44.8	422	51.1	6.4
UK14	130	7.6	120	10.70	9.75	0.69	<0.50	1.45	2.1	0.9	1.7	4.7	0.5	3.9	32.6	<3	8.75	45.8	469	53.4	5.7
UK15	140	7.6	119			0.59	<0.50	1.28	2.2	1.8	1.95	6.0	1.1	4.4	31.5	<3	10	47.0	459	64.4	6.6
UK16	150	7.52	120			0.58	<0.50	1.26	2.4	0.6	1.4	4.4	2	4.2	30.8	<3	8.3	45.3	436	69.7	7.6

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 $mg\ m^{-3}$

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database									**2014-2015**						Started 27 October 1994						
Collection date 25 November 2014					Secchi depth = 12 m																
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
CK1	1	7.70	118	14.55	10.03	<0.5	<0.5	0.4	0.8	2.2	0.8	3.8	1.0	<0.5	42.0	2	7.0	50.0	546	119.5	13.5
CK2	10	7.75	118	13.58	10.18	0.6	<0.5	0.8	0.8	1.2	1.2	3.2	<1.0	<0.5	47.0	<1	9.3	56.3	563	139.5	13.6
CK3	20	7.75	118	13.44	10.20	0.7	<0.5	0.9	0.9	2.1	1.3	4.3	<1.0	<0.5	40.0	<1	11.0	51.0	748	151.5	16.9
CK4	30	7.73	118	13.32	10.18	<0.5	<0.5	0.9	0.8	2.2	1.4	4.4	<1.0	<0.5	38.0	<1	10.8	48.8	584	119.5	10.6
CK5	40	7.68	118	12.57	9.93	<0.5	<0.5	0.7	1.0	2.0	1.0	4.0	<1.0	<0.5	37.0	<1	7.4	44.4	522	103.7	12.5
CK6	50	7.74	118	11.56	9.88	<0.5	<0.5	0.7	1.0	1.7	1.7	4.4	<1.0	0.5	37.0	<1	10.6	48.1	538	83.7	10.8
CK7	60	7.68	118	11.32	9.79	<0.5	<0.5	0.8	1.1	1.9	1.1	4.1	<1.0	<0.5	40.0	<1	7.4	47.4	715	74.5	8.9
CK8	70	7.68	118	11.25	9.76	<0.5	<0.5	0.7	1.1	1.9	1.4	4.4	<1.0	0.6	36.4	1	8.7	45.7	677	75.0	7.6
CK9	80	7.62	118	11.19	9.69	<0.5	<0.5	0.7	1.1	1.9	1.0	4.0	1.1	0.8	35.1	1	6.0	43.0	663	62.8	7.3
CK10	90	7.55	118	11.15	9.58	<0.5	<0.5	0.8	1.0	1.7	1.1	3.8	<1.0	1.8	35.2	<1	6.5	43.5	505	53.7	7.6
CK11	100	7.55	119	11.13	9.38	<0.5	<0.5	0.8	1.4	2.6	1.3	5.3	<1.0	5.9	36.1	1	7.8	49.8	543	50.2	7.9
CK12	110	7.56	119	11.11	9.27	<0.5	<0.5	0.8	1.5	1.5	1.2	4.2	<1.0	4.4	35.6	<1	7.2	47.2	656	86.3	8.8
CK13	120	7.46	119	11.09	9.15	<0.5	<0.5	0.8	1.9	2.1	1.5	5.5	<1.0	8.6	34.4	<1	8.0	51.0	535	65.9	8.8
CK14	130	7.59	119	11.07	9.11	<0.5	<0.5	0.9	1.8	2.2	1.7	5.7	<1.0	9.0	33.0	1	8.4	50.4	644	62.4	10.1
CK15	140	7.45	118	11.05	8.87	<0.5	<0.5	1.0	2.4	1.6	2.1	6.1	<1.0	13.7	36.3	<1	10.2	60.2	515	58.3	9.5
CK16	150	7.58	119	11.05	8.72	0.5	<0.5	1.1	2.8	2.2	1.7	6.7	<1.0	16.3	33.7	1	8.6	58.6	524	67.5	9.6
Collection date 9 April 2015					Secchi depth = not measured																
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
JS1	1	7.8	118	18.11	9.32	<0.5	<0.5	1.0	0.2	0.8	2.0	3.1	0.6	0.2	54.3	3	18.0	73.0	617	107.0	11.3
JS2	10	7.8	118	18.02	9.26	<0.5	<0.5	1.2	0.4	1.4	2.2	4.0	0.3	0.3	53.4	5	18.4	72.4	584	136.5	12.5
JS3	20	7.9	118	17.99	9.32	<0.5	<0.5	1.1	0.5	0.0	2.0	2.5	0.7	0.1	62.2	<1	15.0	78.0	563	108.5	9.8
JS4	30	7.8	118	15.33	9.44	<0.5	<0.5	0.7	0.4	0.9	1.5	2.8	3.4	0.1	51.5	<1	14.7	69.7	540	102.9	8.7
JS5	40	7.7	118	12.99	9.75	<0.5	<0.5	1.5	0.5	0.1	1.7	2.2	0.6	0.0	41.4	1	13.1	55.1	473	111.0	8.2
JS6	50	7.7	118	11.93	9.51	<0.5	<0.5	1.2	1.1	0.0	1.4	2.5	0.0	2.2	37.8	1	10.4	50.4	484	71.4	6.9
JS7	60	7.7	118	11.54	8.88	<0.5	<0.5	1.2	1.2	0.0	1.3	2.5	0.1	1.1	40.8	1	10.8	52.8	437	61.4	6.0
JS8	70	7.6	118	11.34	8.86	<0.5	<0.5	0.8	1.6	0.6	0.9	3.1	0.4	2.4	36.2	1	7.6	46.6	462	62.5	5.1
JS9	80	7.5	118	11.28	8.53	<0.5	<0.5	0.4	2.3	1.3	0.9	4.4	0.0	9.0	31.0	<1	6.5	46.5	440	44.7	3.9
JS10	90	7.5	119	11.23	8.36	<0.5	<0.5	0.3	4.4	0.3	0.9	5.5	0.1	12.3	31.7	1	5.9	49.9	462	50.4	3.5
JS11	100	7.6	118	11.21	8.17	<0.5	<0.5	0.3	2.5	2.2	0.8	5.5	0.0	10.4	31.6	<1	5.5	47.5	415	54.1	3.7
JS12	110	7.5	118	11.18	8.05	<0.5	<0.5	0.2	5.0	0.8	0.7	6.5	0.1	16.1	32.8	<1	5.1	54.1	500	43.0	4.7
JS13	120	7.5	119	11.16	8.07	<0.5	<0.5	0.1	8.2	0.0	1.0	9.2	0.7	24.7	34.7	<1	3.4	63.4	474	28.1	3.1
JS14	130	7.5	119	11.14	7.68	<0.5	<0.5	0.1	6.2	1.7	1.0	8.8	0.0	25.7	38.3	1	3.5	67.5	503	48.0	2.9
JS15	140	7.4	119	11.14	7.23	<0.5	<0.5	0.1	11.1	0.8	1.4	13.2	0.0	30.5	37.4	<1	7.2	75.2	494	69.0	4.9
JS16	150	7.5	119	11.14	7.03	<0.5	<0.5	0.3	15.8	0.0	1.5	17.3	0.0	39.5	37.5	<1	4.9	81.9	563	61.7	4.9

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Temp & DO data for 9 April are the average of profiles on 25 March and 21 April

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

No actual profile taken

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database									**2013-2014**						Started 27 October 1994						
Collection date 7 November 2013					Secchi depth = 10.0 m																
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
JK1	1	7.97	120	13.53	10.3	0.6	0.3	0.7	2.3	2.1	2.0	6.4	0.3	1.2	53.5	2	15.2	70.2	563	119.5	12.0
JK2	10	7.90	121	13.42	10.3	0.9	0.4	1.3	2.0	3.1	2.9	8.0	0.0	0.1	43.9	<1	21.0	65.0	570	168.5	17.4
JK3	20	7.84	120	13.12	10.1	0.8	0.4	1.3	1.8	2.1	2.9	6.8	0.0	0.0	45.0	<1	21.2	66.2	547	167.0	18.4
JK4	30	7.84	120	12.23	9.9	0.8	0.4	1.0	1.5	2.6	2.2	6.3	0.3	0.4	46.3	<1	13.5	60.5	512	109.5	10.4
JK5	40	7.77	119	11.81	9.7	0.7	0.3	1.1	1.9	2.7	2.2	6.8	1.0	0.8	37.2	1	13.2	52.2	487	83.4	7.7
JK6	50	7.73	119	11.55	9.7	0.6	0.2	1.2	2.3	1.7	2.4	6.4	0.5	1.2	36.3	1	13.7	51.7	496	101.9	9.4
JK7	60	7.79	121	11.42	9.5	0.6	0.2	1.2	3.3	0.9	2.5	6.7	0.3	6.2	34.5	<1	12.7	53.7	530	57.1	8.9
JK8	70	7.64	121	11.30	9.3	0.6	0.2	1.0	3.8	1.6	2.3	7.7	0.3	8.3	36.4	1	12.2	57.2	477	46.8	7.9
JK9	80	7.66	121	11.23	9.2	0.6	0.2	1.0	4.4	1.2	2.3	7.9	0.2	10.7	34.1	1	11.2	56.2	483	42.5	7.5
JK10	90	7.63	121	11.19	9.0	0.5	0.1	0.9	5.0	1.1	2.3	8.4	0.0	12.3	35.7	<1	10.9	58.9	479	44.4	6.6
JK11	100	7.73	123	11.17	8.9	0.5	0.1	0.9	4.5	2.5	2.2	9.2	0.6	12.5	33.9	1	11.1	58.1	485	68.9	6.3
JK12	110	7.66	121	11.15	8.7	0.4	0.1	0.8	5.3	1.4	2.1	8.8	0.2	13.2	28.6	1	10.0	52.0	484	49.1	7.1
JK13	120	7.69	120	11.14	8.5	0.5	0.1	1.0	4.2	1.2	2.2	7.6	0.2	12.2	35.6	<1	10.0	58.0	483	38.7	7.6
JK14	130	7.67	119	11.13	8.2	0.4	0.2	0.9	4.5	1.3	2.5	8.3	0.4	14.7	34.9	<1	11.8	61.8	484	43.5	7.3
JK15	140	7.69	120	11.12	8.1	0.4	0.1	0.9	5.3	2.0	2.1	9.4	0.0	15.7	38.3	2	10.1	64.1	485	41.7	5.9
JK16	150	7.66	121	11.12	8.0	0.6	0.1	0.9	5.5	1.7	2.2	9.4	0.0	16.1	37.9	<1	11.6	65.6	494	57.2	7.3
Collection date 9 April 2014					Secchi depth = 16.75 m																
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
RQ1	1	7.91	119	18.56	9.2	<0.5	<0.5	0.6	0.6	1.4	1.0	3.0	1.9	0.1	75.0	10	11.4	88.4	721	120.5	8.8
RQ2	10	7.92	120	18.53	9.2	<0.5	<0.5	0.9	1.4	0.6	1.7	3.7	0.1	0.0	48.9	<2	16.4	65.4	672	133.5	12.1
RQ3	20	7.89	120	18.52	9.2	<0.5	<0.5	0.5	1.6	0.4	1.5	3.5	0.7	0.0	51.3	<2	14.1	66.1	697	113.0	11.4
RQ4	30	7.83	120	17.76	9.0	<0.5	<0.5	1.0	1.4	0.6	1.5	3.5	0.1	0.1	48.8	<2	14.1	63.1	644	134.5	11.0
RQ5	40	7.69	119	12.99	8.5	<0.5	<0.5	1.2	2.0	3.0	1.5	6.5	0.2	0.5	40.3	<2	13.3	54.3	497	79.7	6.8
RQ6	50	7.56	120	11.87	8.4	<0.5	<0.5	0.7	2.6	1.4	1.2	5.2	0.4	2.5	39.1	<2	8.0	50.0	457	66.8	6.1
RQ7	60	7.66	119	11.58	8.3	<0.5	<0.5	0.5	3.1	0.9	0.9	4.9	0.5	5.3	35.2	<2	5.5	46.5	462	56.5	4.8
RQ8	70	7.60	121	11.45	8.3	<0.5	<0.5	0.3	3.1	0.9	0.7	4.7	0.1	7.7	35.2	<2	4.6	47.6	434	45.5	3.6
RQ9	80	7.52	120	11.38	8.1	<0.5	<0.5	0.2	4.1	0.9	0.7	5.7	0.5	12.5	35.0	<2	5.1	53.1	433	37.8	3.5
RQ10	90	7.73	124	11.35	8.1	<0.5	<0.5	0.2	5.0	1.0	0.7	6.7	0.1	16.6	27.3	<2	5.0	49.0	440	40.4	2.9
RQ11	100	7.68	120	11.33	8.0	<0.5	<0.5	0.1	5.5	1.5	0.6	7.6	0.7	20.9	30.4	<2	4.7	56.7	443	31.2	3.5
RQ12	110	7.64	122	11.31	7.8	<0.5	<0.5	0.1	5.1	1.9	0.7	7.7	0.1	21.9	32.0	<2	4.4	58.4	436	33.2	3.1
RQ13	120	7.44	121	11.30	7.7	<0.5	<0.5	0.1	6.3	1.7	0.6	8.6	0.3	24.1	32.6	<2	4.9	61.9	461	30.3	2.7
RQ14	130	7.56	119	11.28	7.6	<0.5	<0.5	0.1	6.3	1.7	0.6	8.6	0.4	24.4	30.2	2	6.4	61.4	433	29.9	2.7
RQ15	140	7.36	122	11.27	7.2	<0.5	<0.5	0.1	7.9	1.1	0.7	9.7	0.5	32.0	30.5	<2	6.0	69.0	446	29.6	2.5
RQ16	150	7.35	122	11.26	6.7	<0.5	<0.5	0.1	8.3	1.7	1.0	11.0	0.2	35.7	33.1	<2	9.4	78.4	494	38.7	3.4

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database									**2012-2013**							Started 27 October 1994					
Collection date 24 October 2012					Secchi depth = 13.6 m																
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
RF1	1	7.70	118	12.29	9.63	<0.5	<0.5	0.4	1.3	0.7	1.3	3.3	0.4	1.5	36.1	3	9.6	47.6	502	94.8	9.5
RF2	10	7.66	118	11.59	9.74	0.9	<0.5	1.0	0.9	1.1	2.4	4.4	0.0	0.0	36.0	<3	14.6	50.6	509	170.5	17.9
RF3	20	7.56	119	11.55	9.68	0.9	<0.5	1.0	1.4	1.6	2.7	5.7	2.2	0.0	34.8	<3	17.2	54.2	751	159.5	17.1
RF4	30	7.63	119	11.52	9.64	0.9	<0.5	1.0	0.9	1.1	2.4	4.4	0.0	0.0	34.0	<3	15.7	49.7	608	196.5	18.1
RF5	40	7.62	118	11.51	9.51	0.9	<0.5	1.0	0.8	2.2	2.3	5.3	0.0	0.0	38.0	<3	13.2	51.2	543	161.0	17.0
RF6	50	7.72	118	11.49	9.55	0.8	<0.5	1.2	1.0	2.0	2.3	5.3	0.2	0.0	33.8	<3	13.7	47.7	530	155.5	16.8
RF7	60	7.60	119	11.43	9.34	1.4	0.7	1.3	1.5	1.5	2.5	5.5	0.1	0.0	34.9	<3	14.2	49.2	527	190.5	16.5
RF8	70	7.65	118	11.37	9.41	0.8	<0.5	1.5	1.1	0.9	2.4	4.4	0.0	0.2	31.8	<3	13.8	45.8	528	134.0	16.7
RF9	80	7.58	118	11.34	9.28	0.9	<0.5	1.6	1.3	1.7	2.5	5.5	0.2	0.5	34.3	<3	15.4	50.4	511	137.5	15.7
RF10	90	7.56	119	11.29	9.29	0.9	<0.5	1.5	1.3	0.7	2.5	4.5	0.3	0.2	40.5	<3	14.4	55.4	516	145.0	18.2
RF11	100	7.49	118	11.25	9.16	0.9	<0.5	1.7	1.4	0.6	2.7	4.7	0.6	0.1	34.3	<3	15.2	50.2	530	136.0	17.4
RF12	110	7.61	118	11.18	9.13	0.9	<0.5	1.7	1.5	1.5	2.5	5.5	0.0	0.8	55.2	<3	14.6	70.6	543	125.0	17.3
RF13	120	7.54	119	11.10	8.96	0.7	<0.5	1.6	2.0	1.0	2.3	5.3	1.6	3.4	42.0	<3	12.7	59.7	504	83.1	15.0
RF14	130	7.54	119	11.00	8.97	0.7	<0.5	1.6	1.7	0.3	2.3	4.3	1.1	3.2	33.7	<3	13.0	51.0	504	105.2	14.1
RF15	140	7.55	119	10.97	8.77	0.7	<0.5	1.6	2.0	1.0	3.1	6.1	0.7	2.7	33.6	<3	14.1	51.1	503	99.2	16.8
RF16	150	7.57	119	10.91	8.57	0.8	<0.5	1.6	1.8	1.2	3.0	6.0	0.0	0.7	36.3	<3	22.3	59.3	530	110.0	18.8
Collection date 4 April 2013					Secchi depth = 18.0 m																
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
ZE1	1	8.12	119	19.58	9.11	0.3	0.3	1.5	0.0	2.9	1.5	4.4	0.8	0.4	59.8	<3	21.9	82.9	682	154.5	20.1
ZE2	10	7.97	120	19.48	13.37	0.4	0.3	1.4	0.2	2.2	1.4	3.8	0.0	0.2	51.8	<3	16.5	68.5	619	143.5	16.8
ZE3	20	7.96	120	19.45	9.73	0.3	0.3	1.4	0.3	2.0	1.2	3.5	0.0	0.0	49.0	<3	14.6	63.6	607	122.5	16.1
ZE4	30	7.85	121	15.96	10.07	0.4	0.3	1.2	0.3	2.1	1.7	4.1	0.8	0.9	49.3	<3	16.0	67.0	618	134.0	16.3
ZE5	40	7.73	119	12.95	9.90	0.3	0.2	1.0	0.5	1.4	1.0	2.9	0.5	0.2	42.3	<3	9.4	52.4	527	94.8	11.1
ZE6	50	7.63	122	11.88	9.38	0.1	0.1	0.6	1.9	0.8	0.7	3.4	0.0	3.9	39.1	<3	5.8	48.8	483	75.7	8.6
ZE7	60	7.68	120	11.52	9.08	-	-	0.5	2.7	0.5	0.8	4.0	0.0	4.2	35.8	<3	5.1	45.1	477	116.1	9.4
ZE8	70	7.80	120	11.32	8.74	0.2	0.1	0.5	3.4	0.4	0.9	4.7	0.0	5.6	36.4	<3	5.4	47.4	485	108.0	9.0
ZE9	80	7.61	120	11.21	8.71	0.2	0.1	0.4	3.6	0.1	0.8	4.5	0.0	7.0	35.0	<3	5.2	47.2	494	100.8	8.6
ZE10	90	7.53	120	11.13	8.28	0.2	0.1	0.2	4.9	0.0	0.8	5.7	0.0	11.3	34.7	<3	7.6	53.6	473	63.1	5.7
ZE11	100	7.55	120	11.09	8.06	0.1	0.1	0.2	5.9	0.0	0.8	6.7	0.0	15.7	37.3	<3	6.0	59.0	456	50.1	6.3
ZE12	110	7.47	120	11.06	7.86	0.1	0.1	0.1	6.9	0.0	0.8	7.7	0.0	18.4	35.6	<3	5.3	59.3	477	54.2	5.9
ZE13	120	7.50	121	11.05	7.73	0.2	0.1	0.1	9.7	0.0	0.9	10.6	0.0	24.6	36.4	<3	5.5	66.5	468	63.9	6.5
ZE14	130	7.48	120	11.03	7.69	0.3	0.1	0.1	12.4	0.0	1.4	13.8	0.0	29.9	38.1	<3	6.8	74.8	464	76.8	6.7
ZE15	140	7.46	120	11.02	7.57	0.3	0.1	0.1	14.4	0.0	1.7	16.1	0.3	32.8	42.9	<3	8.0	84.0	464	65.3	7.5
ZE16	150	7.58	123	11.00	7.23	0.3	0.1	0.1	13.2	0.0	1.4	14.6	0.0	30.7	35.3	<3	6.5	72.5	474	49.7	6.7

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database									2011-2012						Started 27 October 1994						
Collection date 22 November 2011					Secchi depth = 18.0 m																
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
ZH1	1	7.95	119.4	14.59	10.32	0.5	0.2	0.5	0.3	1.7	1.3	3.3	0.6	0.0	30.4	<2	10.8	41.8	550	147.4	8.7
ZH2	10	7.94	119.1	14.55	11.18	0.5	0.3	0.5	0.3	1.7	1.7	3.7	0.3	0.0	35.7	<2	11.6	47.6	552	129.9	7.1
ZH3	20	7.91	119.5	14.52	11.66	0.4	0.2	0.6	0.3	1.7	1.5	3.5	0.0	0.0	30.0	<2	11.9	41.9	555	122.8	13.1
ZH4	30	7.91	119.2	14.20	11.57	0.4	0.3	0.6	0.4	1.6	1.6	3.6	0.6	0.0	27.4	<2	12.3	40.3	550	124.9	13.5
ZH5	40	7.86	119.2	12.23	11.72	0.5	0.2	1.2	0.4	1.6	2.0	4.0	0.0	0.0	25.0	<2	14.1	39.1	542	107.6	9.6
ZH6	50	7.83	118.0	11.36	11.61	0.3	0.2	1.2	0.4	1.6	1.9	3.9	1.0	0.1	22.9	<2	13.0	37.0	526	105.2	18.2
ZH7	60	7.78	119.4	11.00	10.84	0.4	0.2	0.9	0.6	1.4	1.5	3.5	0.4	0.3	22.3	<2	11.3	34.3	523	92.2	9.6
ZH8	70	7.76	119.6	10.89	10.79	0.2	0.1	0.7	0.8	2.2	1.3	4.3	0.3	0.5	28.2	<2	9.7	38.7	528	65.6	5.9
ZH9	80	7.70	120.0	10.86	10.38	0.3	0.1	0.6	0.9	1.1	1.4	3.4	1.3	0.6	29.1	<2	7.4	38.4	502	61.9	7.7
ZH10	90	7.65	119.6	10.83	10.30	0.3	0.2	0.6	0.8	1.2	1.3	3.3	1.3	0.9	24.8	<2	7.5	34.5	522	49.7	9.5
ZH11	100	7.70	119.6	10.82	9.92	0.2	0.1	0.5	0.9	1.1	1.2	3.2	1.5	1.6	24.9	<2	8.3	36.3	478	52.1	10.1
ZH12	110	7.65	119.2	10.80	9.93	0.2	0.1	0.6	1.0	1	1.3	3.3	0.9	1.1	27.0	<2	8.1	37.1	527	47.3	12.6
ZH13	120	7.65	119.5	10.79	9.47	0.2	0.1	0.6	1.1	0.9	1.3	3.3	2.8	2.8	29.4	<2	7.2	42.2	516	39.6	6.6
ZH14	130	7.69	119.5	10.78	9.39	0.3	0.1	0.6	1.1	1.9	1.1	4.1	1.7	2.8	33.5	<2	7.6	45.6	513	44.9	9.1
ZH15	140	7.69	119.6	10.77	9.13	0.3	0.1	0.5	1.3	1.7	1.3	4.3	5.8	4.4	32.8	<2	7.6	50.6	515	41.5	6.3
ZH16	150	7.63	119.7	10.76	9.06	0.3	0.1	0.4	1.2	1.8	1.3	4.3	5.7	4.5	30.8	<2	3.7	44.7	544	50.7	6.6
Collection date 10 April 2012					Secchi depth = 17.0 m																
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
HC1	1	7.92	119	16.63	9.19	<0.5	<0.5	0.6	0.4	1.6	1.8	3.8	0.4	3.7	54.9	7	15.7	74.7	644	134.5	15.5
HC2	10	7.90	121	16.44	9.74	<0.5	<0.5	0.6	0.5	1.5	1.9	3.9	3.8	0.6	56.6	3	15.2	76.2	723	131.0	14.5
HC3	20	7.88	124	16.40	9.39	<0.5	<0.5	0.7	0.4	1.6	1.9	3.9	1.4	0.6	30.0	<2	15.6	47.6	635	131.5	14.8
HC4	30	7.86	120	16.17	9.44	<0.5	<0.5	0.9	0.5	1.5	1.5	3.5	0.0	0.4	40.6	<2	11.5	52.5	670	114.0	14.9
HC5	40	7.78	120	14.03	9.55	<0.5	<0.5	1.7	0.4	0.6	2.1	3.1	0.0	0.4	35.6	<2	16.4	52.4	605	134.0	17.1
HC6	50	7.65	120	11.67	9.34	<0.5	<0.5	1.2	1.6	0.4	2.0	4.0	0.0	1.8	31.2	<2	14.3	47.3	530	100.1	12.9
HC7	60	7.60	117	10.97	9.46	<0.5	<0.5	0.7	1.2	0.8	1.2	3.2	0.0	1.8	32.2	<2	9.3	43.3	497	66.5	8.2
HC8	70	7.54	118	10.80	9.37	<0.5	<0.5	0.5	2.4	0.6	1.1	4.1	0.0	6.7	32.3	<2	8.5	47.5	476	66.1	7.9
HC9	80	7.57	120	10.71	9.11	<0.5	<0.5	0.4	2.6	0.4	1.1	4.1	0.0	8.1	28.9	<2	8.5	45.5	481	53.5	6.7
HC10	90	7.51	116	10.64	8.83	<0.5	<0.5	0.3	3.5	0.5	1.0	5.0	0.0	11.6	41.4	<2	7.6	60.6	536	62.4	7.0
HC11	100	7.41	121	10.62	9.04	<0.5	<0.5	0.2	3.4	0.6	1.1	5.1	0.0	13.1	28.9	<2	8.2	50.2	489	48.7	6.0
HC12	110	7.25	121	10.59	8.55	<0.5	<0.5	0.2	3.8	0.2	0.8	4.8	0.0	13.6	26.4	3	5.0	45.0	557	41.3	4.9
HC13	120	7.38	112	10.56	8.94	<0.5	<0.5	0.2	4.0	1	0.9	5.9	0.0	15.4	27.6	<2	6.7	49.7	587	45.0	6.7
HC14	130	7.36	117	10.54	8.66	<0.5	<0.5	0.2	4.8	0.2	1.0	6.0	0.0	16.8	29.2	<2	7.2	53.2	585	50.8	5.7
HC15	140	7.42	119	10.54	8.72	<0.5	<0.5	0.2	6.3	0.7	1.2	8.2	0.0	22.2	28.8	<2	8.1	59.1	618	48.5	5.8
HC16	150	7.35	121	10.54	7.92	<0.5	<0.5	0.2	8.2	0	1.7	9.9	0.1	27.4	28.5	<2	8.7	64.7	596	52.2	5.7
				DO sensor failed; indicative data from 14 March																	
NH_4, NO_3, DON, Urea all as N				* = PN by wet digestion method, ** = PN by combustion furnace method.																	
Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}																					
New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.																					
FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.																					

Lake Taupo biannual nutrient database								**2010-2011**						Started 27 October 1994							
Collection date 10 November 2010					Secchi depth = 11.5 m																
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**	SO_4
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}
KD1	1	7.8	121	14.12	9.4	1.0	<0.5	0.7	0.9	2.1	4.6	7.6	0.0	0.2	49.8	<2	20.8	70.8	503	192.0	20.0	7.4
KD2	10	7.82	120	13.46	9.1	0.8	<0.5	0.7	0.6	2.4	2.0	5.0	0.0	0.1	41.9	<2	12.1	54.1	478	182.5	12.1	7.5
KD3	20	7.77	120	13.27	9.1	0.8	<0.5	0.8	0.6	1.4	2.1	4.1	0.0	0.0	42.0	<2	14.2	56.2	536	192.5	13.4	7.5
KD4	30	7.8	119	12.24	9.0	0.7	<0.5	1.1	0.5	1.5	2.2	4.2	0.2	0.0	40.8	<2	14.2	55.2	500	211.0	13.2	7.6
KD5	40	7.72	120	11.73	9.6	0.6	<0.5	1.3	0.7	1.3	2.5	4.5	0.2	0.0	41.8	<2	14.8	56.8	447	179.0	12.5	7.7
KD6	50	7.73	119	11.33	9.9	0.9	<0.5	1.6	1.0	1.0	2.6	4.6	0.0	0.0	42.0	<2	14.7	56.7	443	173.5	13.7	7.8
KD7	60	7.57	120	11.16	9.4	0.9	<0.5	2.3	1.8	1.2	2.8	5.8	0.0	0.2	30.8	<2	13.1	44.1	433	140.5	13.3	7.8
KD8	70	7.67	120	11.03	8.3	0.9	<0.5	2.5	0.8	2.2	2.8	5.8	0.0	0.2	44.8	<2	13.1	58.1	437	150.0	14.0	7.9
KD9	80	7.62	119	10.96	8.3	0.8	<0.5	2.0	0.8	2.2	2.9	5.9	0.0	0.2	40.8	<2	14.0	55.0	427	137.5	13.3	7.9
KD10	90	7.57	120	10.89	8.3	0.6	<0.5	2.2	0.8	3.2	2.7	6.7	0.0	1.6	39.4	<2	13.2	54.2	423	70.3	10.0	8.0
KD11	100	7.58	119	10.86	8.0	<0.5	<0.5	2.0	0.8	4.2	2.8	7.8	0.0	2.1	42.9	<2	10.5	55.5	436	72.5	9.6	8.2
KD12	110	7.54	120	10.83	8.0	0.5	<0.5	2.1	1.1	2.9	2.6	6.6	0.0	2.7	40.3	<2	11.7	54.7	428	73.4	9.9	8.0
KD13	120	7.6	119	10.82	7.9	0.5	<0.5	1.7	1.0	2.0	2.5	5.5	0.0	3.8	47.2	<2	11.3	62.3	440	74.9	9.6	8.6
KD14	130	7.62	120	10.80	8.1	3.3	<0.5	2.1	0.8	2.2	3.1	6.1	0.0	7.3	37.7	<2	12.8	57.8	432	83.7	10.9	8.6
KD15	140	7.57	119	10.79	7.8	0.6	<0.5	2.1	1.5	2.5	3.1	7.1	0.0	9.3	39.7	<2	13.5	62.5	430	72.0	12.0	8.1
KD16	150	7.55	120	10.80	8.1	0.8	<0.5	2.8	1.6	2.4	4.3	8.3	0.0	10.8	41.2	<2	17.0	69.0	442	87.1	14.8	8.0
													(for summations <1 use 0.5)									
Collection date 13 April 2011					Secchi depth = 17.0 m																	
Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**	SO_4
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}
RL1	1	7.84	116	17.62	9.2	0.4	0.3	0.46	2.0	0.0	0.8	2.8	0.0	0.1	44.7	<2	8.8	53.6	661	102.0	9.9	7.8
RL2	10	7.74	116	17.65	9.6	0.4	0.2	0.64	1.9	0.1	1.1	3.1	0.2	0.2	43.1	<2	10.8	54.3	684	109.5	9.5	7.8
RL3	20	7.73	116	17.62	9.9	0.4	0.3	0.65	1.5	0.5	1.7	3.7	0.0	0.1	40.1	<2	13.6	53.8	713	160.5	17.9	8.2
RL4	30	7.75	117	17.61	9.9	0.4	0.3	0.59	1.5	0.5	1.3	3.3	0.8	0.1	43.2	<2	12.1	56.2	669	139.0	14.7	8.1
RL5	40	7.63	117	12.52	10.2	0.2	0.1	0.74	3.2	0.8	1.1	5.1	0.0	1.2	29.2	<2	8.0	38.4	543	62.6	9.4	8.0
RL6	50	7.68	118	11.63	9.8	0.2	0.2	0.67	3.0	0.0	1.0	4.0	0.0	4.0	27.8	<2	7.3	39.1	587	58.7	5.0	7.9
RL7	60	7.56	118	11.29	9.7	0.3	0.2	0.46	2.6	0.4	0.9	3.9	0.0	6.1	28.0	<2	6.0	40.1	519	75.1	6.6	8.1
RL8	70	7.54	118	11.14	9.1	0.2	<0.1	0.18	2.7	0.3	1.0	4.0	0.0	8.7	25.8	<2	6.7	41.2	519	62.5	8.5	8.0
RL9	80	7.51	118	11.06	9.1	0.2	<0.1	0.16	2.9	0.1	0.8	3.8	0.0	11.8	31.4	<2	5.5	48.7	515	48.6	7.0	8.0
RL10	90	7.45	118	11.00	8.5	0.2	<0.1	0.15	3.4	0.6	0.9	4.9	0.9	14.0	26.3	<2	5.4	46.6	501	56.4	5.6	7.8
RL11	100	7.45	118	10.96	8.2	0.2	0.1	0.14	3.2	0.8	0.9	4.9	0.3	15.2	45.6	<2	5.5	66.6	517	86.8	8.0	8.3
RL12	110	7.40	118	10.92	8.1	0.2	<0.1	0.17	4.4	0.6	0.9	5.9	0.0	20.8	46.4	<2	4.1	71.3	512	41.0	4.2	7.8
RL13	120	7.43	118	10.90	7.9	0.1	<0.1	0.17	4.0	0.0	0.8	4.8	0.1	20.9	28.1	<2	4.5	53.6	512	51.4	5.8	7.9
RL14	130	7.45	118	10.88	7.5	0.2	0.1	0.16	4.5	0.5	1.0	6.0	0.8	23.4	43.4	<2	5.3	72.9	532	50.0		7.6
RL15	140	7.49	117	10.87	7.5	0.2	<0.1	0.17	5.1	0.9	1.0	7.0	0.2	25.1	33.3	<2	5.5	64.1	527	49.8	7.6	7.9
RL16	150	7.39	118	10.86	7.0	0.3	<0.1	0.27	6.1	0.0	1.4	7.5	0.3	28.7	28.3	<2	6.5	63.8	520	59.2	7.2	8.1

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database **2009-2010** Started 27 October 1994

Collection date 9 October 2009 Secchi depth = 13.0 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	oC	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
OT1	1	7.89	118	11.72	11.67	0.6	<0.5	0.3	4.0	<0.5	2.0	6.0	0.8	<0.5	36.0	3	13.2	50.2	553	227.0	18.4
OT2	10	7.87	121	11.25	12.13	0.7	<0.5	0.5	3.5	<0.5	2.2	5.7	0.5	<0.5	39.3	<1	14.0	54.0	538	267.0	20.2
OT3	20	7.78	120	11.24	11.79	0.6	<0.5	0.5	3.8	<0.5	2.2	6.0	0.2	<0.5	33.6	1	14.7	48.7	531	288.0	24.1
OT4	30	7.87	120	11.20	11.78	0.6	<0.5	0.5	4.0	<0.5	2.4	6.4	0.4	<0.5	31.4	1	14.4	46.4	531	264.0	21.3
OT5	40	7.86	120	10.98	11.24	0.6	<0.5	0.6	4.2	<0.5	2.0	6.2	0.4	<0.5	25.4	2	12.3	38.3	522	312.0	18.4
OT6	50	7.73	121	10.67	11.10	<0.5	<0.5	0.7	4.6	<0.5	2.0	6.6	1.0	<0.5	34.8	2	12.1	48.1	521	214.2	18.5
OT7	60	7.65	121	10.58	10.10	<0.5	<0.5	0.6	4.6	<0.5	1.7	6.3	0.9	<0.5	28.9	<1	11.2	41.2	508	161.6	17.4
OT8	70	7.70	121	10.53	10.02	<0.5	<0.5	0.5	4.6	<0.5	1.9	6.5	0.8	1.2	34.0	1	10.2	46.2	505	88.9	22.7
OT9	80	7.67	121	10.50	9.70	<0.5	<0.5	0.5	5.1	<0.5	1.7	6.8	0.8	2.7	30.5	1	9.9	43.9	514	129.3	10.3
OT10	90	7.62	122	10.49	9.72	<0.5	<0.5	0.4	4.9	<0.5	1.4	6.3	0.9	4.7	40.4	2	8.2	54.2	493	121.1	9.4
OT11	100	7.61	121	10.47	9.51	<0.5	<0.5	0.4	5.2	<0.5	1.5	6.7	0.5	7.3	44.2	1	8.1	60.1	493	117.6	8.6
OT12	110	7.62	121	10.46	9.50	<0.5	<0.5	0.2	5.7	<0.5	1.2	6.9	0.8	7.6	34.6	1	7.5	50.5	494	105.6	10.4
OT13	120	7.55	122	10.44	9.20	<0.5	<0.5	0.3	5.5	<0.5	7.7	13.2	0.6	9.3	37.1	2	8.1	55.1	517	114.7	9.1
OT14	130	7.62	122	10.43	9.18	<0.5	<0.5	0.3	5.9	<0.5	1.7	7.6	0.5	12.2	31.3	<1	9.6	53.6	504	125.3	10.1
OT15	140	7.41	122	10.41	8.82	<0.5	<0.5	0.3	6.5	<0.5	1.7	8.2	1.7	13.6	29.7	1	9.0	54.0	503	149.9	13.8
OT16	150	7.71	120	10.41	8.79	<0.5	<0.5	0.5	3.4	0.6	1.6	5.6	0.4	1.0	30.6	1	10	42.0	491	135.0	12.2

Collection date 8 April 2010 Secchi depth = 21.5 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	oC	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
YZ1	1	7.76	115	17.36	9.48	1.0	<0.5	0.7	0.8	1.2	3.2	5.2	0.0	0.3	69.7	8	19.6	89.6	893	173.0	21.2
YZ2	10	7.78	119	17.35	10.17	<0.5	<0.5	0.6	0.8	1.2	1.6	3.6	0.0	0.2	50.8	<2	11.5	62.5	814	142.5	16.8
YZ3	20	7.83	118	17.35	9.66	0.6	<0.5	0.7	0.8	2.2	1.4	4.4	1.9	0.2	38.9	<2	12.8	53.8	683	121.5	14.2
YZ4	30	7.79	120	17.34	9.43	<0.5	<0.5	0.6	1.1	0.9	1.4	3.4	0.8	0.0	40.2	<2	12.2	53.2	710	115.0	12.6
YZ5	40	7.74	119	12.28	9.04	<0.5	<0.5	1.4	1.0	2.0	1.9	4.9	0.7	0.1	36.2	<2	16.0	53.0	593	117.0	23.8
YZ6	50	7.71	120	11.19	8.57	<0.5	<0.5	1.4	2.2	0.8	1.4	4.4	0.7	0.5	32.8	<2	11.5	45.5	545	88.1	9.4
YZ7	60	7.61	121	10.82	8.31	<0.5	<0.5	0.8	2.2	0.8	1.1	4.1	0.0	0.6	31.4	<2	7.6	39.6	496	53.5	7.7
YZ8	70	7.59	121	10.67	8.11	<0.5	<0.5	0.4	4.4	0.6	0.6	5.6	0.0	7.7	28.3	<2	4.7	40.7	525	62.2	6.4
YZ9	80	7.52	121	10.62	7.97	<0.5	<0.5	0.3	5.2	0.8	0.6	6.6	0.0	16.8	28.2	<2	4.0	49.0	491	43.3	6.3
YZ10	90	7.55	121	10.60	7.74	<0.5	<0.5	0.2	6.2	0.8	0.6	7.6	0.0	20.8	29.2	<2	3.9	53.9	496	42.1	10.1
YZ11	100	7.53	122	10.57	7.43	<0.5	<0.5	0.2	7.2	0.0	0.6	7.8	0.0	23.8	27.2	<2	3.5	54.5	491	38.2	7.8
YZ12	110	7.53	121	10.57	7.27	<0.5	<0.5	0.2	6.5	0.5	0.5	7.5	0.0	24.3	24.7	<2	2.9	51.9	481	26.7	5.9
YZ13	120	7.46	122	10.55	7.11	<0.5	<0.5	0.2	8.3	0.7	0.9	9.9	0.0	29.4	28.6	<2	6.0	64.0	505	43.6	7.3
YZ14	130	7.68	122	10.53	7.09	<0.5	<0.5	0.2	10.1	0.0	1.1	11.2	0.0	31.5	34.5	<2	5.6	71.6	519	43.2	8.1
YZ15	140	7.4	122	10.53	6.82	<0.5	<0.5	0.1	9.3	5.7	1.0	16.0	0.0	33.3	37.7	<2	5.3	76.3	517	48.2	6.6
YZ16	150	7.4	122	10.53	6.75	<0.5	<0.5	0.2	10.4	0.6	1.4	12.4	0.0	33.4	29.6	<2	6.6	69.6	514	49.5	8.5

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database **2008-2009** Started 27 October 1994

Collection date 14 October 2008 Secchi depth = 12.2 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	oC	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
SZ1	1	7.66	119	12.59	10.29	1.1	<0.5	0.7	1.0	2.0	4.2	7.2	4.1	0.0	70.9		26.1	101.1	816	235.0	24.6
SZ2	10	7.70	121	12.09	10.29	0.7	<0.5	0.8	0.6	2.4	3.9	6.9	0.1	0.0	39.9		18.7	58.7	690	169.5	23.5
SZ3	20	7.70	121	11.93	10.50	0.8	<0.5	0.8	0.7	2.3	7.8	10.8	0.0	0.0	59.0		32.7	91.7	638	250.0	33.1
SZ4	30	7.70	120	11.85	10.46	1.0	0.6	0.7	0.7	2.3	5.6	8.6	0.0	0.0	65.0		24.2	89.2	632	195.5	31.8
SZ5	40	7.70	120	11.75	10.34	0.7	<0.5	0.9	0.3	1.7	4.6	6.6	0.0	0.0	52.0		16.2	68.2	597	162.5	15.5
SZ6	50	7.69	120	11.59	10.05	0.5	<0.5	0.9	0.4	2.6	4.5	7.5	0.5	0.0	48.5		15.6	64.6	602	139.5	29.2
SZ7	60	7.56	120	10.90	9.89	0.8	0.5	0.8	1.0	2.0	5.0	8.0	0.7	1.6	69.7		16.7	88.7	603	94.0	18.2
SZ8	70	7.52	121	10.76	9.86	0.6	<0.5	0.6	1.2	1.8	3.6	6.6	0.0	2.6	45.4		20.4	68.4	593	77.2	16.8
SZ9	80	7.45	122	10.71	9.81	0.7	<0.5	0.4	1.3	2.7	3.1	7.1	0.0	4.7	36.3		9.5	50.5	589	61.8	25.9
SZ10	90	7.49	121	10.69	9.85	0.7	<0.5	0.3	1.8	0.2	2.3	4.3	0.0	5.7	29.3		9.7	44.7	561	57.5	9.1
SZ11	100	7.23	121	10.68	10.03	0.6	<0.5	0.2	1.5	0.5	2.5	4.5	2.2	6.6	33.2		9.2	51.2	605	71.8	23.1
SZ12	110	7.32	121	10.66	10.13	<0.5	<0.5	0.3	1.5	1.5	2.2	5.2	3.5	7.4	33.1		8.0	52.0	617	46.8	10.6
SZ13	120	7.36	122	10.64	10.09	0.7	<0.5	0.2	1.2	2.8	2.5	6.5	1.6	9.5	34.9		9.9	55.9	613	57.6	28.5
SZ14	130	7.45	121	10.60	9.83	0.8	<0.5	0.2	2.6	0.4	2.1	5.1	1.6	11.7	34.7		7.5	55.5	652	56.6	27.2
SZ15	140	7.43	120	10.59	9.76	<0.5	<0.5	<0.1	2.9	3.1	2.5	8.5	1.4	17.1	37.5		8.7	64.7	686	46.6	24.1
SZ16	150	7.40	121	10.59	9.85	<0.5	<0.5	0.2	2.7	2.3	3.5	8.5	2.3	17.3	39.4		11.0	70.0	656	68.9	23.5

Collection date 15 April 2009 Secchi depth = 18.0 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	oC	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
EU1	1	7.89	123	16.60	9.33	<0.5	<0.5	0.7	1.1	0.9	1.7	3.7	4.3	1.4	74.3	17	16.7	96.7	834	187.0	19.2
EU2	10	7.84	122	16.59	10.11	<0.5	<0.5	0.8	1.3	1.7	2.0	5.0	0.1	0.0	26.9	<1	13.1	40.1	669	116.0	16.2
EU3	20	7.83	121	16.59	10.76	<0.5	<0.5	0.9	1.2	2.8	2.0	6.0	0.3	0.0	29.7	1	17.2	47.2	691	152.0	18.4
EU4	30	7.84	123	16.58	10.83	<0.5	<0.5	0.9	0.9	3.1	1.8	5.8	0.8	0.0	38.2	2	15.8	54.8	650	143.0	19.1
EU5	40	7.8	121	12.53	10.39	<0.5	<0.5	1.0	1.4	6.6	1.5	9.5	0.7	0.1	37.3	1	13.0	51.1	627	81.9	13.2
EU6	50	7.79	121	11.56	9.58	<0.5	<0.5	0.7	2.2	3.8	1.2	7.2	0.0	2.0	20.0	<1	9.3	31.3	574	79.5	12.1
EU7	60	7.58	122	11.12	9.06	<0.5	<0.5	0.5	3.9	3.1	1.2	8.2	0.0	8.5	24.5	2	7.4	40.4	581	68.6	11.6
EU8	70	7.49	123	10.98	8.84	<0.5	<0.5	0.3	5.5	4.5	1.1	11.1	0.7	18.7	14.6	2	8.7	42.7	553	59.6	15.2
EU9	80	7.03	124	10.92	8.21	<0.5	<0.5	0.2	6.6	6.4	1.2	14.2	0.0	24.5	26.5	<1	9.3	60.3	635	51.7	11.8
EU10	90	7.03	124	10.88	8.24	12	12	0.1	7.2	2.8	1.1	11.1	0.0	27.0	16.0	1	6.7	49.7	514	46.6	9.4
EU11	100	7.16	123	10.86	8.07	<0.5	<0.5	0.1	6.3	5.7	0.9	12.9	0.0	24.7	32.3	1	5.1	62.1	554	35.9	8.8
EU12	110	7.21	124	10.84	8.12	<0.5	<0.5	0.1	7.0	4	1.0	12.0	0.2	26.3	12.5	<1	6.9	45.9	562	42.7	10.1
EU13	120	7.2	123	10.82	8.02	<0.5	<0.5	0.1	7.1	4.9	1.0	13.0	0.2	26.8	25.0	4	6.8	58.8	549	53.7	10.1
EU14	130	7.61	123	10.79	8.15	<0.5	<0.5	<0.1	7.6	8.4	1.0	17.0	0.0	27.6	<1	2	7.2	34.8	562	45.4	11.8
EU15	140	7.23	122	10.78	8.01	<0.5	<0.5	<0.1	8.1	4.9	1.1	14.1	0.0	29.0	8.0	<1	7.3	44.3	661	50.3	9.8
EU16	150	7.22	122	10.78	7.55	<0.5	<0.5	<0.1	9.0	2	1.3	12.3	1.3	30.6	21.1	1	7.1	60.1	544	42.8	12.7

NH_4, NO_3, DON, Urea all as N * = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database **2007-2008** Started 27 October 1994

Collection date 30 October 2007 Secchi depth = 12.8 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
ZA1	1	7.80	119	12.84	10.18	0.7	<0.5	0.6	1.3	0.7	2.1	4.1	1.5	0.7	79.8	16	20.1	102.1	617	170.0	19.2
ZA2	10	7.83	120	11.83	10.27	<0.5	<0.5	1.0	0.9	1.1	2.5	4.5	0.0	0.0	42.0	<5	18.5	60.5	553	204.0	19.8
ZA3	20	7.79	115	11.76	10.25	0.5	<0.5	1.1	1.1	0.9	2.6	4.6	0.2	0.0	42.8	<5	19.0	62.0	405	169.0	19.4
ZA4	30	7.76	119	11.70	10.07	0.7	<0.5	1.2	0.8	1.2	2.5	4.5	0.0	0.0	49.0	<5	19.1	68.1	417	173.5	19.0
ZA5	40	7.72	120	11.64	10.02	0.7	<0.5	1.1	1.0	1.0	2.6	4.6	0.0	0.0	36.0	<5	16.8	52.8	417	131.5	17.4
ZA6	50	7.61	121	11.51	9.85	0.8	<0.5	1.4	0.9	1.1	3.3	5.3	0.0	0.0	39.0	<5	18.3	57.3	434	140.0	18.1
ZA7	60	7.54	120	11.43	9.52	0.9	<0.5	1.4	1.2	0.8	2.7	4.7	0.2	0.0	32.8	<5	19.5	52.5	414	127.5	17.1
ZA8	70	7.46	123	11.32	9.77	0.8	<0.5	1.5	1.5	0.5	2.7	4.7	0.1	0.3	46.6	<5	19.1	66.1	443	130.0	19.0
ZA9	80	7.42	122	11.23	9.58	0.8	<0.5	1.1	1.9	1.1	2.1	5.1	0.4	2.6	41.0	5	15.8	59.8	422	95.8	14.4
ZA10	90	7.42	121	11.16	9.42	0.7	<0.5	0.9	2.1	0.9	2.1	5.1	0.3	4.8	42.9	<5	13.3	61.3	410	92.0	13.0
ZA11	100	7.38	122	11.07	9.49	<0.5	<0.5	0.7	2.8	0.2	1.8	4.8	0.0	8.5	36.5	<5	11.2	56.2	400	64.0	11.0
ZA12	110	7.40	122	11.04	9.16	0.7	<0.5	0.7	2.9	0.1	1.8	4.8	0.0	9.2	56.8	<5	11.6	77.6	386	68.3	11.1
ZA13	120	7.38	122	11.02	9.27	0.7	<0.5	0.6	2.8	1.2	2.1	6.1	0.0	10.0	46.0	<5	12.7	68.7	359	105.3	12.5
ZA14	130	7.44	120	11.00	9.01	0.6	<0.5	0.6	2.6	1.4	1.9	5.9	0.0	10.4	35.6	<5	10.9	56.9	348	61.8	10.5
ZA15	140	7.44	121	10.98	9.11	0.6	<0.5	0.6	3.0	0.0	1.7	4.7	0.0	10.8	39.2	<5	10.3	60.3	351	64.1	11.2
ZA16	150	7.42	121	10.96	8.91	<0.5	<0.5	0.6	3.5	1.5	1.8	6.8	0.0	13.3	38.7	<5	10.8	62.8	305	63.1	10.6

Collection date 17 April 2008 Secchi depth = 17.8 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
KA1	1	7.79	122	17.88	9.49	<0.5	<0.5	0.4	0.8	0.2	0.7	1.7	2.8	0.4	64.8	14	13.3	81.3	656	138.5	8.4
KA2	10	7.87	121	17.87	8.97	<0.5	<0.5	0.8	0.5	0.5	0.7	1.7	1.1	0.3	48.6	<5	12.0	62.0	576	112.5	8.3
KA3	20	7.83	124	17.85	8.46	<0.5	<0.5	0.8	0.9	0.1	0.8	1.8	0.4	0.3	38.3	<5	13.7	52.7	528	142.0	9.4
KA4	30	7.71	122	15.58	8.52	<0.5	<0.5	0.5	1.0	0.0	0.9	1.9	3.1	0.1	27.8	<5	10.9	41.9	526	110.0	9.1
KA5	40	7.58	121	12.38	8.72	<0.5	<0.5	0.6	1.7	1.3	0.8	3.8	1.8	0.8	36.4	<5	14.6	53.6	459	107.0	6.7
KA6	50	7.38	121	11.72	8.48	<0.5	<0.5	0.5	1.9	2.1	0.6	4.6	0.2	3.4	29.4	<5	10.2	43.2	417	75.1	6.1
KA7	60	7.36	122	11.48	8.20	<0.5	<0.5	0.4	3.5	0.5	0.8	4.8	0.6	5.3	32.1	<5	9.6	47.6	353	84.9	6.7
KA8	70	7.31	122	11.34	7.84	<0.5	<0.5	0.3	3.5	1.5	0.7	5.7	0.9	10.8	42.3	<5	10.7	64.7	481	85.4	6.8
KA9	80	7.25	122	11.27	7.71	<0.5	<0.5	0.2	4.2	0.8	1.2	6.2	0.4	14.7	82.9	<5	9.5	107.5	347	97.5	4.9
KA10	90	7.19	122	11.20	7.57	<0.5	<0.5	0.1	5.1	0.0	0.7	5.8	0.3	19.8	43.9	<5	10.2	74.2	370	107.0	5.4
KA11	100	7.18	122	11.17	7.45	<0.5	<0.5	0.1	4.6		0.6	5.2	0.6	21.2	30.2	<5	8.6	60.6	412	59.8	4.0
KA12	110	7.12	123	11.14	7.29	<0.5	<0.5	<0.1	5.0	1.0	0.6	6.6	0.8	28.2	26.0	<5	4.5	59.5	346	44.6	3.3
KA13	120	7.07	123	11.15	7.29	0.6	<0.5	<0.1	7.4	0.0	0.8	8.2	0.1	30.2	29.7	<5	7.9	67.9	373	85.8	5.8
KA14	130	7.28	123	11.12	7.18	<0.5	<0.5	<0.1	5.6	1.4	0.8	7.8	1.1	29.5	26.4	<5	9.0	66.0	395	89.1	4.4
KA15	140	7.12	123	11.11	7.13	<0.5	<0.5	<0.1	8.4	1.6	1.5	11.5	1.1	36.8	27.1	<5	8.5	73.5	393	72.6	4.1
KA16	150	7.11	123	11.11	6.72	<0.5	<0.5	<0.1	8.3	0.7	1.5	10.5	0.4	36.4	27.2	<5	7.2	71.2	379	98.8	4.1

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database **2006-2007** Started 27 October 1994

Collection date 1 November 2006 Secchi depth = 14.5 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
HW1	1	7.79	118	12.43	10.2	0.5	<0.5	0.5	1.2	0.0	1.7	2.9	0.1	1.0	75.9		13.6	90.6	413	168.0	15.4
HW2	10	7.77	119	12.27	10.1	0.8	<0.5	0.6	1.0	0.0	1.9	2.9	0.0	0.1	61.9		13.8	75.8	419	187.0	13.8
HW3	20	7.77	120	12.25	10.1	0.7	<0.5	0.7	0.9	1.1	2.3	4.3	0.0	0.1	32.9		17.8	50.8	373	209.5	17.4
HW4	30	7.81	119	12.20	10.1	0.8	<0.5	0.6	1.0	0.0	2.7	3.7	0.3	0.0	38.7		22.3	61.3	456	215.5	18.1
HW5	40	7.78	119	12.10	10.1	0.9	<0.5	0.6	1.1	0.9	2.2	4.2	0.0	0.1	30.9		17.9	48.9	368	227.5	19.8
HW6	50	7.74	119	11.96	10.0	0.6	<0.5	0.7	1.2	0.0	1.9	3.1	0.0	0.2	29.8		14.0	44.0	468	169.0	13.9
HW7	60	7.67	120	11.34	9.7	0.7	<0.5	1.1	1.5	0.0	1.8	3.3	0.6	0.1	31.3		13.9	45.9	411	123.5	13.5
HW8	70	7.64	119	11.17	9.5	<0.5	<0.5	1.3	1.2	1.8	2.0	5.0	0.5	0.1	29.4		14.5	44.5	378	98.0	12.3
HW9	80	7.57	119	11.06	9.4	0.7	<0.5	1.3	1.3	0.7	2.2	4.2	2.5	1.8	27.7		14.1	46.1	330	91.5	11.2
HW10	90	7.56	119	10.99	9.3	<0.5	<0.5	1.3	1.2	0.8	2.2	4.2	2.7	2.3	52.0		14.4	71.4	352	122.5	15.3
HW11	100	7.56	119	10.94	9.3	0.5	<0.5	1.1	1.4	0.0	2.3	3.7	2.9	3.1	43.0		13.4	62.4	378	105.5	13.2
HW12	110	7.50	121	10.91	9.2	<0.5	<0.5	0.9	1.8	0.0	2.3	4.1	3.7	4.6	73.7		14.3	96.3	382	106.5	12.8
HW13	120	7.50	119	10.88	9.1	<0.5	<0.5	0.7	1.8	2.2	2.2	6.2	3.7	5.8	52.5		11.5	73.5	421	87.5	11.5
HW14	130	7.57	120	10.85	9.0	<0.5	<0.5	0.9	1.8	2.2	2.2	6.2	3.3	4.4	38.3		12.0	58.0	354	84.5	11.6
HW15	140	7.50	119	10.84	8.9	0.6	<0.5	0.8	1.4	0.6	2.3	4.3	3.0	4.5	43.5		13.4	64.4	428	110.5	12.9
HW16	150	7.49	120	10.84	8.7	<0.5	<0.5	0.7	2.0	3.0	2.4	7.4	4.7	7.6	52.7		12.8	77.8	368	98.0	10.7

Collection date 3 April 2007 Secchi depth = 19.0 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
HW17	1	7.94	119	18.04	9.4	<0.5	<0.5	0.7	1.6	2.4	1.4	5.4	4.7	0.9	62.4		14.9	82.9	567	122.0	18.4
HW18	10	8.09	119	18.03	9.5	<0.5	<0.5	0.8	1.1	3.9	1.8	6.8	0.0	0.1	59.9		14.9	74.9	522	317.5	19.2
HW19	20	8.09	119	17.94	9.4	<0.5	<0.5	0.8	1.2	2.8	1.6	5.6	0.0	0.2	65.8		14.8	80.8	498	177.5	16.8
HW20	30	7.95	119	16.72	9.3	<0.5	<0.5	1.2	1.0	4.0	2.0	7.0	0.0	0.1	63.9		17.5	81.5	481	133.0	19.6
HW21	40	7.73	119	13.50	8.9	<0.5	<0.5	1.2	1.8	2.2	1.6	5.6	0.0	0.3	55.7		12.3	68.3	444	76.4	12.1
HW22	50	7.62	120	12.33	8.9	<0.5	<0.5	0.8	1.5	4.5	1.3	7.3	0.1	0.8	53.2		9.0	63.1	419	68.1	10.1
HW23	60	7.54	119	11.65	8.8	<0.5	<0.5	0.7	1.2	3.8	1.5	6.5	0.1	3.4	51.5		7.7	62.7	393	49.9	6.3
HW24	70	7.48	120	11.28	8.8	<0.5	<0.5	0.9	2.0	2.0	1.3	5.3	0.0	9.7	70.2		6.4	86.3	434	68.3	8.6
HW25	80	7.43	115	11.22	8.5	<0.5	<0.5	0.6	2.0	3.0	1.2	6.2	0.0	14.6	52.4		6.4	73.4	436	58.0	8.3
HW26	90	7.39	121	11.11	8.5	<0.5	<0.5	0.3	1.7	3.3	1.0	6.0	0.1	16.3	54.7		7.1	78.2	460	62.7	8.4
HW27	100	7.35	121	11.10	8.2	<0.5	<0.5	0.3	2.5	1.5	1.1	5.1	0.0	19.4	50.5		7.0	76.9	469	48.9	6.7
HW28	110	7.31	121	11.04	8.2	<0.5	<0.5	0.2	2.7	2.3	0.9	5.9	1.5	20.9	47.1		5.9	75.4	437	40.4	7.5
HW29	120	7.32	120	11.04	8.0	<0.5	<0.5	0.2	3.0	2.0	0.9	5.9	0.0	23.8	57.7		4.9	86.4	452	48.5	7.8
HW30	130	7.73	121	11.01	8.1	<0.5	<0.5	0.2	2.7	3.3	0.9	6.9	0.0	24.8	51.2		3.8	79.8	389	42.7	6.7
HW31	140	7.30	118	11.00	7.7	<0.5	<0.5	0.2	3.7	2.3	1.3	7.3	0.0	24.6	47.4		3.8	75.8	413	43.2	6.4
HW32	150	7.25	121	10.99	7.4	<0.5	<0.5	0.2	4.5	3.5	1.6	9.6	0.0	30.5	50.5		6.1	87.1	439	51.7	9.5

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database **2005-2006** Started 27 October 1994

Collection date 25 October 2005 Secchi depth = 15.0 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
QD1	1	7.81	119	13.40	10.1	<0.5	<0.5	0.4	1.0	3.0	1.3	5.3	0.6	0.3	51.1	4	8.5	60.5	613	132.5	11.0
QD2	10	7.88	119	12.88	10.0	0.5	<0.5	0.5	0.7	2.3	1.9	4.9	0.1	0.0	52.9	3	12.8	65.8	623	169.0	13.5
QD3	20	7.74	119	12.17	10.1	0.6	<0.5	0.7	0.6	2.4	2.7	5.7	0.4	0.2	43.4	2	17.0	61.0	625	216.5	20.0
QD4	30	7.77	118	11.65	9.9	0.7	<0.5	0.6	0.6	5.4	2.6	8.6	0.7	0.0	57.3	2	17.3	75.3	566	212.0	16.0
QD5	40	7.68	119	11.49	9.8	<0.5	<0.5	0.9	0.6	3.4	3.1	7.1	0.0	0.2	49.8	2	22.2	72.2	581	229.5	20.5
QD6	50	7.59	119	11.29	9.5	<0.5	<0.5	1.4	0.8	1.2	2.2	4.2	1.4	0.1	35.5	2	15.9	52.9	599	172.5	14.0
QD7	60	7.46	120	11.18	9.2	0.7	<0.5	0.7	1.7	2.3	1.6	5.6	1.7	9.6	41.7	2	9.8	62.8	503	103.5	6.5
QD8	70	7.37	120	11.07	9.0	0.5	<0.5	0.8	1.9	2.1	1.5	5.5	1.6	12.8	56.6	2	9.2	80.2	482	101.5	6.0
QD9	80	7.35	120	11.01	8.8	0.6	<0.5	0.6	2.5	1.5	1.4	5.4	0.6	15.3	30.1	13	9.0	55.0	521	86.5	6.0
QD10	90	7.36	121	10.97	8.8	0.7	<0.5	0.4	2.8	1.2	1.4	5.4	0.3	17.1	47.6	2	7.3	72.3	478	62.5	4.0
QD11	100	7.29	121	10.97	8.6	<0.5	<0.5	0.5	2.8	1.2	1.4	5.4	0.4	17.4	39.2	2	7.8	64.8	476	77.5	4.5
QD12	110	7.34	120	10.94	8.5	<0.5	<0.5	0.5	3.0	1.0	1.3	5.3	1.5	18.7	48.8	2	7.4	76.4	462	92.5	3.0
QD13	120	7.29	121	10.94	8.5	<0.5	<0.5	0.5	2.8	2.2	1.2	6.2	0.8	20.4	42.8	2	6.2	70.2	549		5.0
QD14	130	7.32	120	10.93	8.4	<0.5	<0.5	0.5	2.7	1.3	1.3	5.3	0.1	20.3	35.6	3	5.9	61.9	504	69.5	6.0
QD15	140	7.34	121	10.93	8.4	<0.5	<0.5	0.6	3.0	2.0	1.4	6.4	1.4	20.9	34.7	1	7.8	64.8	352	77.5	6.5
QD16	150	7.26	120	10.92	8.2	<0.5	<0.5	0.5	3.8	1.2	1.5	6.5	0.9	23.5	29.6	3	7.1	61.1	533	66.0	6.0

Collection date 12 April 2006 Secchi depth = 15.8 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
ZD1	1	7.9	119	16.72	9.6	<0.5	<0.5	1.2	1.1	0.9	1.9	3.9	0.0	0.2	50.8	2	19.2	70.2		213.5	19.0
ZD2	10	7.9	118	16.72	9.2	<0.5	<0.5	1.3	0.8	1.2	1.6	3.6	0.0	0.0	38.0	2	16.6	54.6		196.0	13.5
ZD3	20	7.9	116	16.72	9.0	0.5	<0.5	1.1	0.7	0.3	1.3	2.3	0.0	0.0	42.0	<1	15.65	57.7		235.0	15.5
ZD4	30	7.88	120	16.71	9.4	<0.5	<0.5	1.2	0.6	1.4	1.6	3.6	0.1	0.0	50.9	<1	15.45	66.5		172.0	13.5
ZD5	40	7.9	116	16.64	9.2	0.8	0.7	1.3	0.5	1.5	1.55	3.6	0.0	0.0	41.0	2	15.45	56.5		224.5	13.0
ZD6	50	7.6	119	12.11	8.7	<0.5	<0.5	1.0	0.7	2.3	1.2	4.2	0.0	0.1	33.9	8	11.4	45.4		133.0	8.5
ZD7	60	7.43	121	11.52	8.5	<0.5	<0.5	1.0	0.7	2.3	1.05	4.1	0.0	0.5	44.5	2	9.15	54.2		171.5	8.0
ZD8	70	7.49	121	11.31	8.3	<0.5	<0.5	0.9	0.7	2.3	1.15	4.2	0.0	0.7	37.3	6	9.55	47.6		130.5	9.0
ZD9	80	7.9	120	11.18	8.3	<0.5	<0.5	1.1	0.5	2.5	1.4	4.4	0.3	0.0	50.7	5	16.1	67.1		182.0	12.5
ZD10	90	7.31	122	11.11	8.1	<0.5	<0.5	0.2	3.0	1	0.45	4.5	0.0	23.0	28.0	2	4.1	55.1		62.5	6.0
ZD11	100	7.31	122	11.08	8.1	<0.5	<0.5	0.3	3.2	0.8	0.5	4.5	0.1	22.8	24.1	<1	4.95	52.0		68.5	6.5
ZD12	110	7.91	119	11.05	8.0	0.7	0.5	1.1	3.2	1.8	1.5	6.5	0.1	22.2	25.7	3	16.5	64.5		196.0	15.0
ZD13	120	7.42	122	11.03	7.9	<0.5	<0.5	0.3	3.1	1.9	0.5	5.5	0.0	21.6	27.4	<1	5.2	54.2		86.5	7.0
ZD14	130	7.5	121	11.02	7.7	<0.5	<0.5	0.3	3.0	2	0.55	5.6	0.0	19.9	32.1	2	5.45	57.5		69.5	6.5
ZD15	140	7.3	119	11.02	7.3	<0.5	<0.5	0.2	3.4	1.6	0.55	5.6	0.0	23.1	31.9	2	6.5	61.5		87.0	7.5
ZD16	150	7.24	122	11.02	7.2	<0.5	<0.5	0.3	2.9	1.1	0.55	4.6	0.2	21.0	28.8	5	5.85	55.9		77.5	7.0

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database **2004-2005** Started 27 October 1994

Collection date 21 October 2004 Secchi depth = 15.0 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	oC	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
VZ1	1	7.88	122	11.75	10.4	0.6	0.5	0.6	1.3	2.7	1.6	5.6	0.1	0.4	39.5	19	9.7	49.7	500	110.0	8
VZ2	10	7.82	120	11.61	10.2	0.8	0.6	0.8	1.1	2.9	2.0	6.0	0.2	0.1	35.7	24	12.8	48.8	447	157.0	8.5
VZ3	20	7.87	120	11.59	10.1	0.9	0.7	0.8	1.0	3.0	1.9	5.9	0.0	0.0	33.0	16	11.3	44.3	440	153.0	8.5
VZ4	30	7.91	123	11.59	10.2	1.5	1.0	0.7	1.0	2.0	1.9	4.9	0.0	0.0	34.0	15	11.3	45.3	490	157.5	8
VZ5	40	7.82	117	11.58	10.1	1.1	0.6	0.7	1.4	3.6	2.0	7.0	0.2	0.1	33.7	7	11.2	45.2	445	155.0	10
VZ6	50	7.83	120	11.58	9.9	1.1	0.7	0.9	1.0	4.0	2.1	7.1	0.0	0.1	33.9	9	13.2	47.2	494	197.5	15
VZ7	60	7.79	119	11.15	9.9	1.1	0.7	1.0	1.6	2.4	2.3	6.3	0.5	0.4	34.1	11	26.0	61.0	585	167.0	16
VZ8	70	7.66	118	10.79	9.7	0.7	0.5	1.0	1.9	1.1	1.9	4.9	2.4	0.8	40.8	21	11.5	55.5	468	114.0	11.5
VZ9	80	7.63	118	10.74	9.6	0.6	<0.5	0.9	2.0	1.0	1.7	4.7	2.8	1.3	47.9	16	8.9	60.9	440	103.0	9.5
VZ10	90	7.61	119	10.72	9.5	0.6	<0.5	0.7	2.0	2.0	1.6	5.6	3.9	2.2	28.9	9	9.1	44.1	633	100.5	10
VZ11	100	7.53	118	10.70	9.4	0.7	0.5	0.7	2.3	1.7	1.5	5.5	5.1	3.6	34.3	7	9.0	52.0	570	93.0	10
VZ12	110	7.56	119	10.68	9.4	0.5	<0.5	0.7	2.0	5.0	1.6	8.6	5.3	2.8	28.9	9	9.2	46.2	514	101.5	9
VZ13	120	7.49	119	10.66	9.3	0.5	<0.5	0.7	2.1	1.9	1.5	5.5	5.3	3.9	35.8	6	8.5	53.5	391	91.5	11
VZ14	130	7.48	118	10.65	9.3	<0.5	<0.5	0.6	2.5	1.5	1.6	5.6	5.8	5.3	34.9	5	8.6	54.6	366	73.5	8.5
VZ15	140	7.58	118	10.61	9.2	<0.5	<0.5	0.6	2.9	1.1	1.6	5.6	5.9	7.3	33.8	13	9.1	56.1	491	93.5	10.5
VZ16	150	7.58	119	10.56	9.1	<0.5	<0.5	0.6	2.4	1.6	1.5	5.5	4.5	3.3	35.2	21	8.7	51.7	464	78.0	9

Collection date 14 April 2005 Secchi depth = 17.2 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	oC	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
GC1	1	7.85	119	17.92	9.1	0.4	0.4	0.7	0.8	1.2	1.9	3.9	1.2	0.2	64.6	7	15.1	81.1	690	176.0	19.0
GC2	10	7.86	118	17.96	9.0	0.3	0.4	0.9	0.8	2.2	1.9	4.9	0.0	0.0	46	3	14.1	60.1	580	199.5	19.0
GC3	20	7.9	119	17.95	9.0	0.3	0.3	0.9	0.8	2.2	2.0	5.0	0.0	0.1	55.9	1	14.5	70.5	580	179.0	17.0
GC4	30	7.82	118	15.13	8.4	0.3	0.3	0.9	0.8	2.2	1.8	4.8	0.0	0.3	49.7	2	12.8	62.8	570	176.5	17.0
GC5	40	7.58	121	12.92	8.7	0.2	0.2	0.8	2.3	0.7	1.2	4.2	0.3	0.6	31.1	2	8.9	40.9	510	109.5	14.0
GC6	50	7.51	120	12.00	8.3	0.1	0.1	0.6	3.1	0.9	1.0	5.0	0.0	6.4	39.6	3	6.8	52.8	480	84.0	9.0
GC7	60	7.47	121	11.33	8.2	0.1	0.1	0.5	3.6	1.4	1.1	6.1	0.0	8.3	40.7	2	8.2	57.2	510	78.5	7.5
GC8	70	7.48	120	10.99	8.2	0.1	0.1	0.3	4.2	0.8	0.9	5.9	0.0	15.7	38.3	2	6.5	60.5	490	96.0	7.0
GC9	80	7.39	121	10.88	8.2	0.2	0.2	0.3	3.8	0.2	0.8	4.8	0.1	15.7	36.2	1	4.3	56.3	480	72.5	7.5
GC10	90	7.21	121	10.82	8.3	0.0	0.1	0.1	5.6	1.4	0.9	7.9	0.2	23.8	38	2	5.6	67.6	480	64.0	7.0
GC11	100	7.31	121	10.78	8.0	0.0	0.1	0.1	5.7	1.3	0.8	7.8	0.2	23.6	53.2	2	5.0	82.0	460	78.5	7.0
GC12	110	7.32	121	10.76	7.8	0.1	0.1	0.1	5.7	1.3	0.8	7.8	0.0	25.9	47.1	2	5.6	78.6	470	43.5	6.0
GC13	120	7.33	121	10.76	7.7	0.1	0.1	<0.1	6.4	1.6	0.8	8.8	0.3	26.8	37.9	1	4.9	69.9	450	56.0	6.5
GC14	130	7.33	121	10.74	7.7	0.1	0.1	<0.1	6.1	0	0.8	6.8	0.3	26.7	57	1	4.4	88.4	470	43.5	5.5
GC15	140	7.34	121	10.74	7.6	0.1	0.1	<0.1	6.6	0.4	0.9	7.9	0.2	28.8	39	2	5.8	73.8	490	54.5	6.0
GC16	150	7.36	121	10.72	7.5	0.3	0.1	0.1	7.8	0.2	1.1	9.1	0.0	32.1	51.9	1	6.9	90.9	490	46.0	7.5

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database **2003-2004** Started 27 October 1994

Collection date 19 November 2003 Secchi depth = 16.0 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
EU1	1	7.84	119	13.96	9.9	<0.5	<0.5	0.8	1.7	2.3	2.3	6.3	8.0	0.8	42.2	1	14.8	65.8	476	90.5	10.5
EU2	10	7.84	120	13.79	9.9	<0.5	<0.5	0.9	1.6	1.4	2.5	5.5	0.3	0.3	52.4	1	14.4	67.4	461	147.5	15.0
EU3	20	7.83	120	13.78	9.8	<0.5	<0.5	0.7	1.8	1.2	3.4	6.4	0.4	0.1	46.5	1	19.4	66.4	466	151.0	20.5
EU4	30	7.84	120	13.70	9.5	<0.5	<0.5	0.9	1.8	2.2	3.8	7.8	0.4	0.3	42.3	1	26.3	69.3	450	133.0	18.5
EU5	40	7.69	120	12.30	9.3	<0.5	<0.5	1.5	2.6	1.4	3.3	7.3	0.7	0.2	35.1	1	20.6	56.6	437	133.0	17.0
EU6	50	7.63	121	11.35	9.0	<0.5	<0.5	1.2	2.8	1.2	1.9	5.9	0.4	0.5	37.1	1	11.9	49.9	470	92.5	11.0
EU7	60	7.58	121	11.28	8.9	<0.5	<0.5	0.7	3.3	0.7	1.5	5.5	1.0	3.2	27.8	2	9.6	41.6	503	69.5	8.0
EU8	70	7.59	121	11.23	8.7	<0.5	<0.5	0.6	3.5	0.5	1.1	5.1	3.4	4.8	25.8	1	6.2	40.2	465	47.0	<6
EU9	80	7.6	121	11.19	8.6	<0.5	<0.5	0.5	3.6	0.4	1.1	5.1	0.6	5.9	29.5	2	5.1	41.1	430	65.0	<6
EU10	90	7.57	121	11.16	8.6	<0.5	<0.5	0.5	3.9	0.1	1.2	5.2	1.0	7.0	27	3	6.4	41.4	391	39.5	<6
EU11	100	7.59	121	11.15	8.6	<0.5	0.7	0.4	4.1	0.9	1.2	6.2	0.8	7.8	33.4	2	4.0	46.0	405	46.5	<6
EU12	110	7.6	121	11.12	8.4	<0.5	<0.5	0.4	4.1	0.9	1.1	6.1	1.1	11.8	29.1	3	3.4	45.4	428	45.5	<6
EU13	120	7.57	120	11.11	8.4	<0.5	<0.5	0.4	4.6	0.4	1.2	6.2	0.7	13.6	32.7	2	3.0	50.0	439	37.0	<6
EU14	130	7.53	121	11.09	8.3	<0.5	<0.5	0.3	5.1	0.4	1.2	6.7	0.8	16.1	32.7	3	3.7	53.3	408	33.0	<6
EU15	140	7.57	121	11.09	8.2	<0.5	<0.5	0.3	5.3	0.7	1.2	7.2	0.4	18.1	32.5	3	5.1	56.1	440	54.5	<6
EU16	150	7.54	120	11.09	8.0	0.5	<0.5	0.5	5.6	1.4	1.5	8.5	2.4	20.7	32.9	4	6.4	62.4	481	44.0	<6

Collection date 31 March 2004 Secchi depth = 16.0 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
MB1	1	7.86	118	16.49	9.2	<0.5	<0.5	0.7	0.9	4.1	1.4	6.4	1	0	69	-	9.7	79.7	622	91.0	-
MB2	10	7.83	118	16.29	9.1	<0.5	<0.5	1.2	0.5	3.5	2.0	6.0	0	0	47	-	12.4	59.4	548	141.5	17.0
MB3	20	7.83	118	16.23	9.0	<0.5	<0.5	1.1	0.6	3.4	2.1	6.1	1	0.2	47.8	-	14.8	63.8	561	140.5	17.0
MB4	30	7.83	118	16.19	9.0	<0.5	<0.5	1.1	0.8	3.2	1.9	5.9	1	0.2	50.8	-	13.5	65.5	749	131.5	15.5
MB5	40	7.66	118	16.15	8.9	<0.5	<0.5	0.9	1.5	1.5	1.9	4.9	1	2.8	71.2	-	11.6	86.6	560	114.5	14.0
MB6	50	7.46	120	12.51	8.2	<0.5	<0.5	0.5	3.3	2.7	1.5	7.5	1	12.1	58.9	-	7.2	79.2	467	109.0	7.5
MB7	60	7.41	121	11.59	8.0	<0.5	<0.5	0.3	4.7	2.3	1.0	8.0	1	18.0	41	-	4.2	64.2	394	54.5	7.0
MB8	70	7.36	121	11.40	8.0	<0.5	<0.5	0.2	4.5	1.5	0.8	6.8	1	19.1	36.9	-	3.7	60.7	404	45.0	<4
MB9	80	7.42	121	11.34	8.0	<0.5	<0.5	0.2	5.0	1.0	0.8	6.8	1	20.2	31.8	-	5.3	58.3	464	41.0	<4
MB10	90	7.36	121	11.30	7.9	<0.5	<0.5	0.1	5.2	1.8	0.7	7.7	3	22.1	35.9	-	3.9	64.9	453	52.0	<4
MB11	100	7.31	122	11.27	7.8	<0.5	<0.5	0.1	5.6	2.4	0.8	8.8	2	23.9	38.1	-	3.0	67.0	477	36.5	<4
MB12	110	7.29	122	11.26	7.7	<0.5	<0.5	<0.1	5.8	2.2	1.0	9.0	1	25.0	30	-	6.2	62.2	392	36.5	5.5
MB13	120	7.31	121	11.24	7.6	<0.5	<0.5	0.1	5.9	3.1	0.8	9.8	1	25.0	59	-	3.6	88.6	373	53.5	<4
MB14	130	7.3	121	11.22	7.5	<0.5	<0.5	<0.1	6.3	2.7	0.9	9.9	0	27.0	35	-	3.3	65.3	393	61.0	<4
MB15	140	7.3	121	11.21	7.4	<0.5	<0.5	<0.1	6.6	3.4	0.8	10.8	0	27.8	46.2	-	3.3	77.3	356	35.0	<4
MB16	150	7.31	120	11.21	7.1	<0.5	<0.5	0.1	7.2	2.8	1.0	11.0	0	30.1	48.9	-	4.0	83.0	394	34.0	<4

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient **2002-2003** Started 27 October 1994

Collection date 13 November 2002 Secchi depth = 18.0 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
NZ1	1	7.87	122	12.58	10.2	0.6	<0.5	0.6	1.3	1.7	2.2	5.2	0.8	0.6	65.6	2	15.3	82.3	620	160.0	12.5
NZ2	10	7.86	120	12.58	10.3	0.5	<0.5	0.7	1.2	1.8	2.1	5.1	0.7	0.0	49.3	1	13.7	63.7	573	180.5	13.5
NZ3	20	7.93	120	12.49	10.2	1.0	<0.5	0.7	1.1	1.9	2.2	5.2	0.5	0.1	61.4	1	15.8	77.8	536	157.5	12.0
NZ4	30	7.85	121	12.38	10.2	<0.5	<0.5	0.8	0.9	3.1	2.6	6.6	0.7	0.5	74.8	2	17.7	93.7	657	242.0	14.0
NZ5	40	7.81	119	12.16	10.1	<0.5	<0.5	0.7	1.2	1.8	1.9	4.9	0.6	0.7	58.7	1	12.9	72.9	506	164.5	8.0
NZ6	50	7.83	120	12.00	10.1	<0.5	<0.5	0.7	1.6	1.4	1.7	4.7	1.6	0.0	55.4	1	11.5	68.5	505	170.0	9.5
NZ7	60	7.78	119	11.81	10.0	<0.5	<0.5	0.6	1.5	1.5	1.5	4.5	1.2	0.0	64.8	2	9.5	75.5	531	108.5	6.5
NZ8	70	7.72	120	11.51	9.9	<0.5	<0.5	0.6	2.8	1.2	1.3	5.3	3.4	2.2	42.4	7	7.1	55.1	514	53.5	5.0
NZ9	80	7.67	120	11.32	9.7	<0.5	<0.5	0.4	2.7	1.3	1.1	5.1	3.3	0.9	38.8	2	5.9	48.9	578	61.0	4.5
NZ10	90	7.77	121	11.13	9.6	<0.5	<0.5	0.4	2.8	1.2	1.0	5.0	3.7	0.4	44.9	4	6.6	55.6	487	41.0	<2
NZ11	100	7.53	122	11.08	9.4	<0.5	<0.5	0.2	3.0	2.0	0.8	5.8	4.2	3.7	65.1	5	6.1	79.1	525	31.0	<2
NZ12	110	7.64	121	11.05	9.4	<0.5	<0.5	0.1	3.3	1.7	0.7	5.7	3.4	5.4	57.2	4	4.4	70.4	472	38.0	<2
NZ13	120	7.55	122	11.01	9.3	<0.5	<0.5	0.2	3.6	0.4	1.0	5.0	3.0	7.0	51.0	6	5.9	66.9	473	64.5	4.0
NZ14	130	7.32	123	10.99	9.2	<0.5	<0.5	0.1	3.6	0.4	1.0	5.0	2.9	7.5	45.6	5	6.7	62.7	555	70.5	3.5
NZ15	140	7.47	121	10.97	9.1	0.5	<0.5	0.1	3.7	1.3	0.9	5.9	2.5	10.5	60.0	16	6.7	79.7	460	54.5	3.0
NZ16	150	7.46	121	10.96	9.0	<0.5	<0.5	0.2	4.3	1.7	1.0	7.0	0.5	12.9	58.6	4	6.4	78.4	461	52.5	3.0

Collection date 3 April 2003 Secchi depth = 13.5 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		mS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
UJ1	1	8.01	119	19.20	8.8	3.0	0.5	0.7	0.8	3.2	1.8	5.8	5	0.4	75.6	5	18.8	99.8	546	219.0	19.5
UJ2	10	8.07	146	18.71	8.8	0.7	1.0	1.4	0.9	4.1	2.5	7.5	<1	0.6	45.4	1	24.0	70.0	511	304.5	29.0
UJ3	20	8.15	120	18.60	8.6	1.0	0.7	1.3	0.6	3.4	2.3	6.3	<1	0.6	40.4	1	23.7	64.7	520	270.0	31.5
UJ4	30	7.93	119	16.93	8.3	<0.5	<0.5	1.5	0.8	3.2	1.8	5.8	<1	0.3	39.7	1	20.4	60.4	503	181.0	39.0
UJ5	40	7.66	118	13.31	8.0	<0.5	<0.5	1.3	1.7	3.3	1.7	6.7	<1	0.8	39.2	1	12.2	52.2	443	115.0	54.0
UJ6	50	7.61	122	12.39	7.9	<0.5	1.0	0.7	2.9	2.1	1.3	6.3	<1	4.8	35.2	3	8.6	48.6	410	92.5	5.5
UJ7	60	7.57	138	11.80	7.7	<0.5	<0.5	0.5	3.9	2.1	1.1	7.1	<1	10.7	32.3	1	5.9	48.9	366	86.5	4.5
UJ8	70	7.42	121	11.50	7.6	<0.5	<0.5	0.2	4.4	1.6	0.9	6.9	<1	16.3	27.7	1	6.1	50.1	404	109.5	4.0
UJ9	80	7.39	121	11.32	7.5	<0.5	<0.5	0.1	4.5	1.5	1.0	7.0	<1	19.3	41.7	1	6.2	67.2	365	37.0	4.0
UJ10	90	7.32	121	11.20	7.3	<0.5	<0.5	0.1	4.7	1.3	0.8	6.8	<1	21.9	24.1	2	4.5	50.5	360	40.0	<4
UJ11	100	7.29	121	11.19	7.3	<0.5	<0.5	<0.1	5.3	2.7	0.9	8.9	<1	23.9	27.1	2	4.6	55.6	387	92.5	<4
UJ12	110	7.26	120	11.12	7.2	<0.5	<0.5	<0.1	5.5	0.5	0.7	6.7	<1	25.2	30.8	1	2.9	58.9	366	28.5	<4
UJ13	120	7.33	122	11.11	7.0	<0.5	<0.5	<0.1	6.6	0.4	0.7	7.7	<1	28.8	36.2	5	2.5	67.5	409	40.0	<4
UJ14	130	7.27	123	11.09	6.9	<0.5	<0.5	<0.1	7.7	0.3	0.9	8.9	<1	30.9	29.1	3	3.2	63.2	382	15.5	<4
UJ15	140	7.28	122	11.10	6.8	<0.5	<0.5	<0.1	7.6	0.4	0.8	8.8	<1	30.4	47.6	4	4.3	82.3	384	47.5	<4
UJ16	150	7.29	122	11.09	6.5	<0.5	<0.5	<0.1	9.0	5.0	1.6	15.6	<1	36.4	30.6	2	6.5	73.5	371	38.5	<4

NH_4, NO_3, DON, Urea all as N

* = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given as a better indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N below nominal detection limit.

Lake Taupo biannual nutrient database **2001-2002** Started 27 October 1994

Collection date 12 November 2001 Secchi depth = 15.5 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH4-N	NO3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
XH1	1	7.85	122	14.23	9.5	0.5	<0.5	0.6	0.9	1.1	1.55	3.6	<1	<0.5	29	2	6	35	500	146.5	12.0
XH2	10	7.86	122	14.16	9.8	0.5	<0.5	0.7	1.1	0.9	4.3	6.3	<1	<0.5	32	2	16.5	49	520	212.0	31.3
XH3	20	7.82	119	13.37	9.4	<0.5	<0.5	1.0	1.1	<0.5	3.5	4.6	<1	<0.5	28	1	20	48	510	340.5	26.8
XH4	30	7.6	116	12.85	9.4	0.6	0.7	1.3	1.6	<0.5	3.1	4.7	<1	1.0	29	1	14.5	45	480	264.5	24.7
XH5	40	7.44	122	11.87	8.9	<0.5	<0.5	1.3	2.2	<0.5	2.8	5.0	1	2.5	25.5	2	11.5	41	470	200.5	21.7
XH6	50	7.46	121	11.57	9.0	<0.5	<0.5	0.9	2.6	<0.5	1.75	4.4	<1	7.2	26.8	2	6	40	470	136.5	12.6
XH7	60	7.41	121	11.24	8.7	1.3	1.2	0.7	2.6	<0.5	1.4	4.0	<1	8.0	24	2	<2	32	440	104.5	9.1
XH8	70	7.4	122	11.13	8.8	<0.5	<0.5	0.5	2.9	<0.5	1.15	4.1	<1	12.3	21.7	2	<2	34	450	142.0	7.2
XH9	80	7.38	122	11.03	8.6	<0.5	<0.5	0.4	3.2	<0.5	1.15	4.4	<1	13.6	29.4	4	<2	43	440	103.0	8.1
XH10	90	7.4	119	11.01	8.8	<0.5	<0.5	0.4	3.2	<0.5	1.05	4.3	<1	15.1	21.9	2	<2	37	420	79.0	6.2
XH11	100	7.35	120	10.99	8.6	<0.5	<0.5	0.3	3.8	<0.5	1.05	4.9	<1	17.8	25.2	2	4	47	460	98.0	6.6
XH12	110	7.36	122	10.97	8.6	<0.5	<0.5	0.3	4.0	<0.5	1.1	5.1	<1	19.5	24.5	2	<2	44	490	116.5	5.8
XH13	120	7.35	126	10.95	8.4	<0.5	<0.5	0.3	4.5	<0.5	1.3	5.8	<1	22.0	22	2	<2	44	490	93.5	5.6
XH14	130	7.38	127	10.94	8.4	<0.5	<0.5	0.3	4.4	<0.5	1.1	5.5	<1	21.1	21.9	2	<2	43	420	113.5	5.5
XH15	140	7.34	126	10.94	8.2	<0.5	<0.5	0.3	5.2	<0.5	1.3	6.5	<1	24.7	25.3	2	<2	50	440	93.5	7.3
XH16	150	7.38	127	10.94	8.1	1.3	0.6	0.3	5.3	<0.5	1.3	6.6	<1	25.2	26.8	3	<2	52	480	83.5	7.7

Collection date 4 April 2002 Secchi depth = 19.0 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH4-N	NO3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}
EJ1	1	7.91	119	17.45	8.8	<0.5	<0.5	0.72	0.5	0.5	1	2.0	1.1	0.3	44.6		7.85	53.9	0.5	187.0	10.0
EJ2	10	7.94	118	17.38	8.9	<0.5	<0.5	0.96	0.6	1.4	1.4	3.4	0.2	0.1	44.7		9.4	54.4	0.6	164.5	10.5
EJ3	20	7.88	119	17.18	8.8	<0.5	<0.5	1.02	0.5	1.5	1.35	3.4	0.3	0.0	38.7		9.45	48.5	0.8	154.5	11.0
EJ4	30	7.85	119	16.83	8.7	<0.5	<0.5	0.95	0.7	2.3	1.45	4.5	0.4	0.1	40.5		8.4	49.4	0.5	136.5	10.5
EJ5	40	7.65	121	12.9	8.3	<0.5	<0.5	0.89	1.4	0.6	1.2	3.2	0.4	0.8	32.8		7.95	42.0	0.4	100.0	8.0
EJ6	50	7.66	120	12.09	8.2	<0.5	<0.5	0.85	2.1	0.9	1.3	4.3	0.4	3.5	35.1		7.8	46.8	0.4	114.0	9.0
EJ7	60	7.60	123	11.51	8.1	<0.5	<0.5	0.50	3.9	2.1	1	7.0	0.9	12.3	30.8		5.7	49.7	0.4	75.0	6.0
EJ8	70	7.42	123	11.3	8.0	<0.5	<0.5	0.26	4.5	0.5	0.95	6.0	0.0	20.9	30.1		5.65	56.7	0.5	49.5	4.0
EJ9	80	7.46	121	11.24	7.9	<0.5	<0.5	0.24	4.6	0.4	1.1	6.1	0.2	24.8	29		7.55	61.6	0.3	50.0	5.0
EJ10	90	7.38	121	11.19	7.8	<0.5	<0.5	0.19	5.3	<0.5	0.75	6.1	0.3	28.1	23.6		4.45	56.5	0.4	48.0	4.0
EJ11	100	7.33	121	11.17	7.8	<0.5	<0.5	0.11	5.4	0.6	0.8	6.8	0.1	28.6	30.3		5.05	64.1	0.3	76.0	5.5
EJ12	110	7.37	122	11.14	7.7	<0.5	<0.5	0.10	6.0	<0.5	0.8	6.8	0.5	31.7	23.8		6.15	62.2	0.6	67.5	7.5
EJ13	120	7.36	122	11.14	7.7	<0.5	<0.5	0.10	6.3	<0.5	0.6	6.9	0.2	32.2	24.6		3.25	60.3	0.3	46.5	4.0
EJ14	130	7.32	122	11.13	7.6	<0.5	<0.5	0.09	6.5	<0.5	0.45	7.0	0.1	32.2	26.7		0.8	59.8	0.5	48.0	5.5
EJ15	140	7.34	122	11.13	7.1	<0.5	<0.5	0.07	7.0	<0.5	0.7	7.7	1.1	34.0	29.9		4.9	69.9	0.4	44.0	4.0
EJ16	150	7.44	122	11.13	7.0	<0.5	<0.5	0.09	8.7	<0.5	0.9	9.6	0.8	36.3	24.9		4.45	66.5	0.4	75.5	4.0

NH_4, NO_3, DON, Urea all as N * = PN by wet digestion method, ** = PN by combustion furnace method.

Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

New Analytical instrument (Flow Injection Analysis) from January 2002, gives greatly improved resolution at low levels.

FIA instrument results are given for Autumn as an indication of likely absolute low levels of DRP, NO_3-N, and NH_4-N.

Lake Taupo biannual nutrient database **2000-2001** Started 27 October 1994

Collection date 26 October 2000 Secchi depth = 11 m

Code	Depth	pH	EC @25°C	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH4-N	NO3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}
FX1	1	7.87	120	12.5	9.1	0.5	<0.5	0.4	<1	3	2	5.0	1	<1	25	4	9	35	0.5	104.5	4.0
FX2	10	7.85	120	11.5	8.7	0.8	0.5	1.1	1	4	3	8.0	<1	<1	33	2	23	56	0.5	196.0	12.0
FX3	20	7.79	120	11.4	8.7	<0.5	<0.5	1.3	<1	2	4	6.0	<1	<1	41	2	29	70	0.5	237.0	19.0
FX4	30	7.74	120	11.3	8.7	1.1	0.5	1.3	<1	2	3	5.0	<1	<1	36	1	24	60	0.5	183.0	11.0
FX5	40	7.69	119	11.3	9.1	0.9	0.5	1.5	<1	2	3	5.0	1	<1	38	2	18	57	0.5	90.5	7.0
FX6	50	7.63	120	11.3	9.1	0.8	<0.5	1.4	1	2	2	5.0	2	<1	64	2	14	80	0.4	79.5	6.0
FX7	60	7.54	120	11.3	8.7	0.9	<0.5	1.2	1	1	2	4.0	<1	<1	45	2	14	59	0.4	58.0	5.0
FX8	70	7.52	120	11.2	8.7	<0.5	<0.5	1.2	1	1	2	4.0	4	1	38	4	14	57	0.5	61.5	5.0
FX9	80	7.52	120	11.2	8.7	0.9	<0.5	1.1	2	2	2.5	6.5	5	2	44	2	13	64	0.5	44.5	<4
FX10	90	7.59	120	11.2	8.7	0.9	<0.5	1.1	2	2	2	6.0	6	3	37	2	14	60	0.5	58.5	5.5
FX11	100	7.47	120	11.1	8.7	<0.5	<0.5	1.4	1	1	3	5.0	3	4	39	4	16	62	0.4	48.5	6.0
FX12	110	7.41	121	11.1	8.7	0.9	<0.5	1.2	2	2	3	7.0	3	4	38	3	15	60	0.4	29.5	<4
FX13	120	7.40	121	11.0	8.2	0.5	<0.5	0.8	2	2	2	6.0	6	7	38	5	8	59	0.4	104.0	5.5
FX14	130	7.42	121	11.0	8.5	0.6	<0.5	0.2	2	2	2	6.0	6	7	41	4	11	65	0.4	71.0	6.5
FX15	140	7.36	121	11.0	8.6	0.8	<0.5	0.6	4	1	3	8.0	5	11	40	3	11	67	0.4	65.5	5.0
FX16	150	7.32	121	11.0	8.5	0.6	<0.5	1.4	4	2	4	10.0	8	13	47	9	18	86	0.4	110.5	8.0

Collection date 8 April 2001 Secchi depth = 13.5 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH4-N	NO3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}
NZ1	1	7.94	120	17.0	8.3	<0.5	<0.5	1.0	<1	2	2	4.0	2	1	40	7	20.0	63.0	0.6	201.0	15.5
NZ2	10	7.97	120	16.9	8.3	<0.5	<0.5	1.4	<1	1	2	3.0	<1	<1	29	1	19.0	48.0	0.6	189.0	13.0
NZ3	20	7.99	120	16.8	8.4	<0.5	<0.5	1.5	<1	1	2	3.0	<1	<1	36	1	19.0	55.0	0.6	208.5	14.5
NZ4	30	7.96	124	15.8	8.0	<0.5	<0.5	1.2	<1	2	2	4.0	1	<1	42	1	16.0	59.0	0.6	156.0	10.5
NZ5	40	7.76	120	13.1	7.8	<0.5	<0.5	1.2	<1	1	1.5	2.5	1	1	22	2	12.0	36.0	0.5	145.0	8.5
NZ6	50	7.69	119	12.4	7.5	<0.5	<0.5	1.0	2	0	1	3.0	1	2	22	2	10.0	35.0	0.5	100.0	5.5
NZ7	60	7.60	120	11.8	7.2	<0.5	<0.5	0.8	1	1	1	3.0	<1	9	16	2	7.0	32.0	0.5	82.0	<2
NZ8	70	7.57	120	11.7	7.1	<0.5	<0.5	0.4	3	0	<1	3.0	<1	19	25	2	5.5	49.5	0.4	80.5	<2
NZ9	80	7.44	121	11.5	6.9	<0.5	<0.5	0.3	3	0	<1	3.0	2	24	15	3	5.0	46.0	0.6	70.0	<2
NZ10	90	7.39	121	11.5	6.9	<0.5	<0.5	0.2	3	1	<1	4.0	2	26	14	4	4.0	46.0	0.5	57.5	<2
NZ11	100	7.38	122	11.4	6.8	<0.5	<0.5	0.2	4	0	<1	4.0	2	29	16	1	4.0	51.0	0.5	47.5	<2
NZ12	110	7.39	122	11.4	6.8	<0.5	<0.5	0.1	4	1	<1	4.0	2	31	18	4	3.5	54.5	0.5	42.5	<2
NZ13	120	7.41	121	11.3	6.7	<0.5	<0.5	0.1	5	0	<1	5.0	1	33	16	4	5.0	55.0	0.4	40.0	<2
NZ14	130	7.42	122	11.3	6.6	<0.5	<0.5	0.1	5	0	<1	5.0	1	33	20	4	5.0	59.0	0.5	42.5	<2
NZ15	140	7.34	123	11.3	6.4	<0.5	<0.5	0.1	6	1	<1	7.0	2	38	12	5	4.5	56.5	0.5	55.0	<2
NZ16	146	7.30	123	11.3	6.3	<0.5	<0.5	0.1	7	2	1	10.0	2	43	22	5	6.5	73.5	0.5	70.5	<2

NH_4, NO_3, DON, Urea all as N Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

* = PN by wet digestion method, ** = PN by combustion furnace method.

Lake Taupo biannual nutrient database **1999-2000** Started 27 October 1994

Collection date 18 October 1999 Secchi depth = 14.9 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a++	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	oC	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
PX1	1	7.71	119	12.8	8.9	0.5	<0.5	0.14	0.5	3	3.7	7.2	<1	<1	41	16	19.4	60.4	441	105.7	8.8
PX2	10	7.74	117	12.7	8.9	<0.5	<0.5	0.39	0.5	4	3.2	7.7	<1	<1	36	4	19.9	55.9	411	160.8	12.9
PX3	20	7.73	122	12.4	8.9	0.6	<0.5	0.80	1	2	5.5	8.5	<1	<1	34	1	37.8	71.8	437	254.7	37.3
PX4	30	7.76	120	11.6	8.9	<0.5	1.9	1.06	1	2	3.9	6.9	<1	<1	36	<1	26.7	62.7	413	198.3	24.2
PX5	40	7.57	117	11.4	8.8	<0.5	<0.5	3.14	2	2	2.4	6.4	5	<1	44	22	14.6	63.6	392	117.2	9.7
PX6	50	7.48	119	11.3	8.6	<0.5	<0.5	2.90	2.5	2	1.7	6.2	8	2	33	5	9.1	52.1	417	87.0	6.6
PX7	60	7.49	118	11.1	8.6	0.5	<0.5	1.45	3	1	1.5	5.5	7	9	36	5	12.6	64.6	449	95.0	11.1
PX8	70	7.41	117	11.1	8.6	<0.5	<0.5	0.65	3.5	1	1.5	6.0	4	15	27	9	5.6	51.6	421	49.9	4.9
PX9	80	7.39	117	11.0	8.5	<0.5	<0.5	0.75	3.5	2	1.4	6.9	4	17	31	7	5.7	57.7	398	42.7	5.7
PX10	90	7.36	118	11.0	8.6	<0.5	<0.5	0.54	4	2	1.3	7.3	3	17	29	2	5.8	54.8	393	51.2	5.7
PX11	100	7.36	118	11.0	8.6	<0.5	<0.5	0.63	4	1	1.6	6.6	4	18	30	2	7.3	59.3	492	56.1	5.8
PX12	110	7.35	118	11.0	8.6	0.5	<0.5	0.65	4	2	1.8	7.8	5	18	46	10	20.1	89.1	547	129.5	21.4
PX13	120	7.33	119	11.0	8.3	0.8	0.7	0.71	4	2	1.7	7.7	6	19	47	20	45.3	117.3	530	222.3	44.3
PX14	130	7.33	119	11.0	7.9	0.6	0.5	0.59	4	2	1.7	7.7	5	19	40	12	15.3	79.3	461	112.9	19.7
PX15	140	7.32	123	11.0	7.5	0.6	<0.5	0.90	4	1	2.3	7.3	4	19	53	12	16.5	92.5	514	84.5	9.7
PX16	150	7.29	119	11.0	7.5	1.6	<0.5	0.67	4.5	2	2.1	8.6	3	19	34	7	9.6	65.6	783	63.9	6.8

Collection date 12 April 2000 Secchi depth = 15 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH_4-N	NO_3-N	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	oC	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
YX1	1	7.86	118	17.4	9.2	0.6		1.3	<1	4	2	6.0	6	2	72	8	16	96.0	542	255.0	31.0
YX2	10	7.88	118	17.3	9.2	1.1		1.3	<1	3	2	5.0	3	1	57	1	21	82.0	472	198.5	16.5
YX3	20	7.88	118	17.2	9.2	1.0		1.4	<1	3	2	5.0	1	<1	59	3	15.5	75.5	599	166.5	12.0
YX4	30	7.79	118	16.7	9.0	1.1		1.3	<1	3	2	5.0	1	<1	59	2	17	77.0	608	154.0	17.5
YX5	40	7.29	119	12.6	8.3	0.6		1.1	2	2	1	5.0	2	2	57	6	9.5	70.5	396	72.0	6.0
YX6	50	7.17	120	11.7	8.0	1.0		0.8	3	2	1	6.0	2	7	42	7	8.5	59.5	403	94.5	7.5
YX7	60	7.18	119	11.4	8.0	0.5		1.0	4	1	<1	5.0	1	16	44	1	4	65.0	402	48.5	<4
YX8	70	7.1	120	11.3	8.0	0.6		<0.1	6	1	<1	7.0	6	29	35	1	6.5	76.5	418	41.0	4.0
YX9	80	7.14	120	11.2	7.9	1.0		<0.1	6	1	<1	7.0	2	32	46	1	12	92.0	451	105.5	8.0
YX10	90	7.11	120	11.2	7.9	0.7		<0.1	7	<1	<1	7.0	1	35	34	2	11	81.0	428	67.5	5.0
YX11	100	7.12	125	11.2	7.7	0.7		<0.1	7	2	<1	9.0	2	37	41	1	8.5	88.5	417	68.5	<4
YX12	110	7.12	120	11.2	7.7	0.9		<0.1	7	2	<1	9.0	2	37	50	3	11	100.0	439	65.0	5.5
YX13	120	7.06	120	11.1	7.7	0.6		<0.1	8	1	<1	9.0	3	39	47	1	6.5	95.5	431	40.5	0.0
YX14	130	7.12	120	11.1	7.5	1.2		<0.1	8	1	<1	9.0	2	40	47	3	9	98.0	453	57.0	5.0
YX15	140	7.08	120	11.1	7.5	1.2		<0.1	9	<1	<1	9.0	2	42	45	2	8	97.0	415	50.5	<4
YX16	146	7.04	120	11.1	7.2	1.7		0.1	10	3	1	14.0	4	43	42	2	10	99.0	429	92.0	4.0

NH_4, NO_3, DON, Urea all as N Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

* = PN by wet digestion method, ** = PN by combustion furnace method. ++ = from calibrated chlorophyll fluorescence profiler (filters damaged)

Lake Taupo biannual nutrient database **1998-1999** Started 27 October 1994

Collection date 1 November 1998 Secchi depth = 13.5 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH4-N	NO3-N	DON	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}
DM1	1	7.91	118	13.6	10.4	0.8	<0.5	0.8	0.7	1.5	2.0	4.2	3.4	<0.5	35	10.8	49.2		133.5	12.0
DM2	10	7.87	117	13.2	10.7	0.8	<0.5	1.0	0.6	1.3	2.6	4.5	2.4	<0.5	36	15.2	53.6		180.5	15.0
DM3	20	7.82	118	12.7	10.7	0.5	<0.5	1.4	0.6	1.4	2.9	4.9	1.9	1.1	37	18.0	58.0		215.0	23.3
DM4	30	7.80	118	12.4	10.6	<0.5	<0.5	1.1	0.5	1.3	2.3	4.1	1.9	<0.5	34	14.1	50.0		128.0	13.5
DM5	40	7.75	118	12.4	10.4	<0.5	<0.5	0.6	0.6	1.2	1.7	3.5	2.5	<0.5	34	9.2	45.7		118.0	10.4
DM6	50	7.70	118	12.2	10.2	<0.5	<0.5	0.6	0.6	1.2	1.7	3.5	2.6	0.6	31	8.1	42.3		114.5	7.9
DM7	60	7.46	119	11.7	10.0	<0.5	<0.5	0.4	2.1	1.0	1.4	4.5	1.6	9.5	32	6.0	49.1		73.0	6.0
DM8	70	7.30	120	11.2	9.6	<0.5	<0.5	0.3	3.3	0.9	1.0	5.2	2.7	16.0	32	3.8	54.5		56.0	2.7
DM9	80	7.15	121	11.1	9.1	<0.5	<0.5	0.2	3.9	0.8	0.9	5.6	1.5	20.5	29	5.0	56.0		64.5	2.7
DM10	90	7.07	122	11.1	8.8	<0.5	<0.5	0.2	4.9	0.5	0.9	6.3	2.6	24.8	32	5.0	64.4		45.0	2.9
DM11	100	7.16	121	11.0	8.5	<0.5	<0.5	0.2	5.0	0.5	0.9	6.4	3.3	26.2	34	3.6	67.1		42.5	2.0
DM12	110	7.16	122	11.0	8.3	<0.5	<0.5	0.1	6.2	0.4	0.8	7.4	2.0	29.2	30	4.0	65.2		54.0	2.9
DM13	120	7.11	122	11.0	8.0	<0.5	<0.5	0.1	6.4	0.3	0.8	7.5	2.2	30.6	29	3.3	65.1		63.0	1.8
DM14	130	7.08	122	11.0	7.8	<0.5	<0.5	0.1	7.0	0.2	0.8	8.0	2.2	31.4	28	3.1	64.7		48.5	2.0
DM15	140	7.07	123	10.9	7.6	<0.5	<0.5	0.1	7.9	0.0	0.9	8.8	2.0	33.8	32	5.0	72.8		54.0	2.0
DM16	150	7.10	123	10.9	7.6	2.5	<0.5	0.2	8.2	0.4	3.7	12.3	2.7	35.4	34	12.8	84.9		140.5	10.5

Collection date 14 April 1999 Secchi depth = 13 m

Code	Depth	pH	EC @25oC	Temp	DO	SS	VSS	Chlor_a	DRP	DOP	PP	TP	NH4-N	NO3-N	DON	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	°C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}
II1	1		119	18.3	8.9	<0.5	<0.5	1.2	0.6		1.8	2.4	3	<0.5	43	19.0	65.0	0.6	221.4	19.5
II2	10		118	18.3	8.8	<0.5	<0.5	1.2	0.5		1.8	2.3	1	<0.5	40	19.3	60.3	0.5	216.3	17.6
II3	20		118	18.3	8.8	<0.5	<0.5	1.2	0.5		1.7	2.2	1	2	41	19.0	63.0	0.5	132.3	8.9
II4	30		118	18.1	8.7	<0.5	<0.5	1.2	1.1		1.4	2.5	1	3	34	14.0	52.0	0.6	136.8	9.7
II5	40		118	12.9	8.4	<0.5	<0.5	0.7	2.3		0.9	3.2	1	6	31	8.9	46.9	0.7	91.2	6.5
II6	50		119	11.9	8.1	<0.5	<0.5	0.4	3.1		0.7	3.8	1	14	28	7.9	50.9	0.5	63.1	4.8
II7	60		121	11.6	8.0	<0.5	<0.5	0.3	4.3		0.7	5.0	1	19	33	7.3	60.3	0.6	42.3	5.0
II8	70		121	11.4	8.0	<0.5	<0.5	0.2	5.5		0.8	6.3	1	23	27	8.6	59.6	0.4	48.4	7.0
II9	80		122	11.3	7.8	<0.5	<0.5	0.1	5.9		0.8	6.7	2	28	29	8.3	67.3	0.5	51.5	6.1
II10	90		123	11.2	7.6	<0.5	<0.5	0.1	6.1		0.6	6.7	1	30	31	6.4	68.4	0.5	62.1	4.2
II11	100		122	11.2	7.4	<0.5	<0.5	0.1	6.1		0.5	6.6	2	27	28	6.1	63.1	0.6	33.1	1.5
II12	110		120	11.2	7.2	<0.5	<0.5	0.1	6.6		0.5	7.1	2	28	27	6.1	63.1	0.5	35.7	2.9
II13	120		122	11.2	7.1	<0.5	<0.5	0.1	6.4		0.5	6.9	2	24	26	5.2	57.2	0.6	34.1	2.2
II14	130		122	11.1	6.8	<0.5	<0.5	<0.1	7.5		0.5	8.0	2	28	31	6.3	67.3	0.6	46.9	5.5
II15	140		122	11.1	6.3	<0.5	<0.5	0.1	8.8		0.9	9.7	2	33	31	6.4	72.4	0.5	63.4	3.0
II16	150		116	11.1	5.9	<0.5	<0.5	<0.1	8.6		0.9	9.5	4	28	60	7.7	99.7	0.9	51.1	1.1

NH_4, NO_3, DON, Urea all as N Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

* = PN by wet digestion method, ** = PN by combustion furnace method.

Lake Taupo biannual nutrient database **1997-1998** Started 27 October 1994

Collection Date 30 October 1997 Secchi depth = 12.5 m

ID	Depth	pH	EC @25°C	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4	NO_3	DON	UREA	PN*	TN	DOC	PC	PN**	SO_4
	m		µS cm^{-1}	C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}
TT1	1	7.70	116.9	12.2	10.7	0.61	0.30	1.28	1.0	1.3	1.5	3.8	2.1	2.9	36	1.1	14.3	55.3	0.71	168.3	17.2	
TT2	10	7.71	117.8	12.0	10.2	0.54	0.29	1.49	0.7	1.9	1.9	4.5	1.3	7.3	32	1.1	18.7	59.7	0.82	160.7	18.8	
TT3	20	7.65	118.1	11.5	10.2	0.59	0.32	1.58	0.8	1.6	1.7	4.0	1.6	0.7	36	1.1	14.0	52.0	0.60	133.0	16.5	
TT4	30	7.64	118.2	11.5	10.0	0.52	0.25	1.19	0.4	1.5	1.9	3.8	1.5	1.3	31	0.9	15.8	49.8	0.60	146.9	16.0	
TT5	40	7.62	117.1	11.4	10.0	0.55	0.28	1.31	0.6	1.5	1.6	3.7	1.7	0.3	33	1.0	14.1	49.1	0.62	126.3	13.4	
TT6	50	7.63	116.9	11.1	9.9	0.37	0.20	1.10	0.4	1.5	1.4	3.2	2.2	0.3	32	0.8	12.3	46.3	0.51	112.1	12.1	
TT7	60	7.54	117.7	11.1	9.8	0.21	0.10	0.93	1.4	0.7	1.5	3.5	3.3	0.7	34	1.6	14.3	52.3	0.74	80.6	9.0	
TT8	70	7.45	117.8	10.8	9.8	0.41	0.12	0.79	1.1	1.1	1.1	3.2	8.2	1.3	31	1.5	7.9	47.9	0.65	58.4	4.8	
TT9	80	7.36	118.3	10.7	9.9	0.31	0.04	0.54	1.5	1.1	0.8	3.3	6.1	2.3	31	0.6	6.0	45.0	0.57	57.6	9.0	
TT10	90	7.48	117.8	10.6	9.3	0.44	0.27	0.74	1.1	1.2	1.2	3.5	7.9	4.8	33	0.7	12.4	58.4	0.52	69.3	12.2	
TT11	100	7.29	118.5	10.5	9.2	0.25	0.11	0.40	2.0	1.2	0.8	4.1	8.4	5.0	30	1.1	5.7	48.7	0.63	64.5	8.3	
TT12	110	6.97	119.3	10.4	9.0	0.21	0.06	0.29	2.3	1.0	1.1	4.3	10.8	5.6	29	2.5	6.7	51.7	0.59	53.0	5.5	
TT13	120	7.00	119.1	10.5	9.0	0.29	0.26	0.27	2.0	1.2	1.0	4.1	9.9	6.7	31	6.1	5.8	53.8	0.58	37.5	5.3	
TT14	130	6.80	119.8	10.5	8.8	0.28	0.26	0.28	2.2	1.2	1.3	4.7	10.6	7.1	32	1.5	8.2	58.2	0.56	49.0	6.4	
TT15	140	7.23	117.9	10.4	8.8	0.25	0.20	0.26	2.7	1.4	1.1	5.2	10.8	9.5	37	2.0	10.9	67.9	0.63	66.0	8.5	
TT16	150	7.29	118.9	10.4	8.8	0.50	0.27	0.32	2.5	1.1	1.0	4.5	11.6	9.6	37	3.0	7.6	65.6	0.54	69.0	9.2	

Collection Date:- 7 April 1998 Secchi depth = 13.5 m

ID	Depth	pH	EC @25°C	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4	NO_3	DON	UREA	PN*	TN	DOC	PC	PN**	SO_4
	m		µS cm^{-1}	C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}
YE1	1	8.00	118	17.7	9.1	0.40	0.10	0.67	0.8	1.4	1.3	3.5	2.9	4.6	53	3.7	9.9	70.4	0.83	156.5	14.4	7.7
YE2	10	7.99	119	17.7	9.1	0.49	0.12	1.04	0.9	1.4	1.8	4.1	1.9	2.5	52	4.6	13.7	70.1	0.78	179.5	16.0	8.1
YE3	20	8.00	119	17.7	9.1	0.32	0.32	1.07	0.7	1.5	1.7	3.9	2.4	1.5	48	3.7	12.6	64.5	0.71	162.5	15.2	8.5
YE4	30	7.99	120	17.5	9.1	0.30	0.20	1.06	0.7	1.7	1.6	4.0	2.0	1.2	48	3.7	12.7	63.9	0.78	138.5	14.5	8.0
YE5	40	7.60	120	13.7	9.3	0.13	0.13	1.18	1.2	1.0	1.2	3.4	2.0	3.1	39	4.2	8.2	52.3	0.69	112.5	8.2	7.7
YE6	50	7.50	120	11.5	9.3	0.34	0.00	0.75	2.4	0.9	0.9	4.2	2.5	4.5	52	3.2	6.5	65.5	0.65	88.0	6.7	7.8
YE7	60	7.38	120	11.0	9.3	0.11	0.00	0.49	3.0	0.7	0.8	4.5	1.5	11.7	32	3.2	5.3	50.5	0.72	74.5	5.8	7.7
YE8	70	7.32	121	10.8	9.2	0.20	0.00	0.33	3.1	0.9	0.6	4.6	1.0	17.7	38	3.7	4.0	60.7	0.78	57.5	4.1	7.9
YE9	80	7.23	120	10.6	9.1	0.24	0.24	0.24	3.5	0.6	0.8	4.9	1.4	23.1	43	6.9	5.7	73.2	0.69	49.5	4.5	7.9
YE10	90	7.27	121	10.6	9.1	0.31	0.21	0.17	4.4	0.6	0.7	5.7	1.3	24.1	41	6.5	5.6	72.0	0.68	47.5	4.9	7.9
YE11	100	7.29	121	10.6	9.0	0.32	0.11	0.16	4.5	0.7	0.8	6.0	1.0	24.5	39	3.7	6.8	71.3	0.57	58.0	7.4	7.8
YE12	110	7.29	121	10.5	8.9	0.35	0.35	0.12	4.8	0.7	0.5	6.0	1.3	25.1	40	5.5	6.5	72.9	0.63	52.5	2.6	7.8
YE13	120	7.35	121	10.5	8.9	0.24	0.08	0.37	3.4	0.6	1.2	5.2	1.0	18.9	35	4.6	4.1	59.0	0.75	63.5	3.8	7.7
YE14	130	7.24	122	10.5	8.8	0.32	0.16	0.11	5.7	0.6	0.7	7.0	1.0	27.0	39	6.0	3.5	70.5	0.63	52.0	3.9	7.9
YE15	140	7.21	122	10.5	8.6	0.45	0.05	0.15	6.4	0.6	1.0	8.0	4.2	29.1	65	10.6	6.7	105.0	0.74	60.5	5.9	7.8
YE16	150	7.49	121	10.5	8.4	0.80	0.15	0.62	3.3	1.1	1.6	6.0	2.5	13.0	62	9.7	14.2	91.7	0.70	135.5	13.6	7.9

NH_4, NO_3, DON, Urea all as N Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

* = PN by wet digestion method, ** = PN by combustion furnace method.

Lake Taupo biannual nutrient database **1996-1997** Started 27 October 1994

Collection Date 24 October 1996 Secchi depth = 12.6 m

ID	Depth	pH	EC @25°C	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4	NO_3	DON	UREA	PN*	TN	DOC	PC	PN**	SO4
	m		µS cm^{-1}	C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}
IG1	1			12.4	10.3	0.45	0.34	0.27	0.6	2.1	1.7	4.4	3.0	0.5	59.3	1.4	13.9	76.7	0.86	171	14.5	7.82
IG2	10			12.3	10.3	0.72	0.42	0.47	0.7	2.3	2.2	5.2	2.4	0.4	64.5	1.0	14.5	81.8	0.88	201	16.8	7.90
IG3	20			12.3	10.2	0.67	0.40	0.45	0.8	2.8	2.9	6.5	2.6	0.4	75.8	0.6	18.7	97.5	0.91	232	19.8	7.87
IG4	30			12.3	9.9	0.85	0.49	0.64	0.6	2.3	3.1	6.0	3.3	0.5	73.6	0.4	20.6	98.0	0.95	198	15.7	7.86
IG5	40			11.9	9.9	0.71	0.46	0.56	0.5	1.8	2.5	4.8	2.6	1.2	64.8	0.3	14.6	83.2	0.80	183	12.8	7.84
IG6	50			11.6	9.8	0.62	0.34	0.45	1.1	3.1	2.1	6.3	2.9	0.6	71.2	0.9	13.2	87.9	0.92	157	14.9	7.95
IG7	60			11.1	9.7	0.77	0.32	0.70	0.9	1.8	2.3	5.0	4.4	13.2	175.4	3.5	14.3	207.3	1.29	151	14.1	10.67
IG8	70			10.6	9.4	0.65	0.28	0.54	0.8	1.5	1.9	4.2	2.9	0.8	59.3	1.5	9.2	72.2	0.78	116	10.2	7.85
IG9	80			10.5	9.3	0.51	0.27	0.55	0.9	2.5	1.8	5.2	3.0	3.0	76.1	1.3	9.8	91.9	0.95	103	10.8	7.80
IG10	90			10.4	9.3	0.49	0.23	0.50	0.6	1.8	1.8	4.2	2.1	1.0	52.3	1.4	10.9	66.3	0.73	95	11.0	7.69
IG11	100			10.4	9.2	0.50	0.21	0.51	0.5	1.5	1.8	3.8	1.8	3.6	53.9	4.5	9.6	68.9	1.04	106	12.8	7.85
IG12	110			10.4	9.2	0.43	0.23	0.49	0.4	1.3	2.0	3.7	2.5	5.2	54.0	6.0	9.3	71.0	0.80	94	11.5	7.85
IG13	120			10.4	9.0	0.47	0.21	0.47	0.8	1.4	1.8	4.0	3.7	9.6	61.9	6.9	8.0	83.2	0.78	78	9.7	7.97
IG14	130			10.3	8.9	0.44	0.18	0.38	1.1	1.5	2.3	4.9	4.5	9.7	52.4	4.6	12.0	78.6	1.00	83	8.7	7.99
IG15	140			10.3	8.9	0.49	0.22	0.51	1.5	1.6	2.5	5.6	4.3	12.9	57.8	5.0	10.4	85.4	0.99	80	8.9	8.14
IG16	150			10.3	8.9	1.13	0.26	0.57	1.2	2.3	3.5	7.0	5.1	13.6	65.9	4.8	14.5	99.1	0.91	121	13.4	8.15

Collection Date:- 2 April 1997 Secchi depth = 16.0 m

ID	Depth	pH	EC @25°C	Temp	DO	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4	NO_3	DON	UREA	PN*	TN	DOC	PC	PN**	SO4
	m		µS cm^{-1}	C	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}
NA1	1	8.02	118.4	17.3	9.4	0.30	0.30	0.63	0.9	2.2	1.5	4.6	4.0	0.6	67.4	4.9	18.1	90.1	0.82	186.5	17.3	7.80
NA2	10	8.01	118.3	17.3	9.2	0.20	0.10	0.69	0.9	1.3	1.6	3.8	1.7	0.3	51.0	3.3	14.4	67.4	0.77	190.0	17.1	7.86
NA3	20	8.03	118.2	17.2	8.9	0.40	0.30	0.63	0.6	1.2	1.6	3.4	1.8	0.3	51.8	2.2	17.6	71.5	0.75	192.0	19.1	7.85
NA4	30	7.98	118.4	17.2	8.8	0.40	0.40	0.52	0.7	1.0	1.5	3.2	2.5	0.6	47.5	2.7	15.2	65.8	0.56	207.5	20.3	7.90
NA5	40	7.52	118.5	14.2	8.8	0.20	0.20	0.72	0.8	1.8	1.4	4.0	2.7	0.3	53.2	4.1	13.3	69.5	0.69	158.0	15.2	7.91
NA6	50	7.32	119.3	11.3	8.6	0.00	0.00	0.39	1.5	1.4	1.0	3.9	11.2	3.1	54.7	4.5	9.7	78.7	0.62	116.5	10.6	7.88
NA7	60	7.18	120.2	10.9	8.6	0.20	0.20	0.16	1.7	1.3	0.8	3.8	3.7	10.1	48.9	2.1	10.5	73.2	0.86	100.0	13.8	7.88
NA8	70	7.13	119.6	10.6	8.5	0.10	0.10	0.12	1.9	1.7	0.8	4.4	4.3	11.8	58.3	2.2	8.0	82.4	0.83	75.0	8.7	7.87
NA9	80	7.12	120.1	10.5	8.5	0.10	0.10	0.05	3.3	1.4	0.7	5.4	6.9	26.9	82.4	16.9	6.7	122.9	0.98	77.5	9.9	7.90
NA10	90	7.12	120.4	10.5	8.5	0.00	0.00	0.25	3.6	2.2	0.7	6.5	28.9	22.9	108.3	7.4	8.1	168.2	0.63	110.5	8.8	8.00
NA11	100	7.10	120.4	10.5	8.4	0.20	0.20	0.04	4.4	1.2	0.8	6.4	10.7	22.5	72.0	5.2	7.1	112.3	0.85	71.0	8.3	7.97
NA12	110	7.07	120.6	10.4	8.3	0.20	0.20	0.02	3.7	2.0	0.8	6.5	2.9	21.9	52.5	3.8	6.4	83.7	1.01	77.0	9.6	7.93
NA13	120	7.07	120.5	10.4	8.2	0.30	0.20	0.02	3.3	2.4	0.8	6.5	6.4	22.8	56.4	4.2	13.0	98.6	0.70	113.5	15.4	7.88
NA14	130	7.08	120.4	10.4	8.0	0.20	0.20	0.01	4.3	1.6	0.8	6.7	6.2	27.9	56.7	6.2	8.2	99.0	0.81	118.5	11.0	7.97
NA15	140	7.10	121.1	10.4	7.6	0.40	0.40	0.04	4.5	1.7	1.2	7.4	3.9	28.9	58.5	7.9	24.7	116.0	0.80	212.5	28.8	7.91
NA16	150	7.10	122.1	10.4	7.5	1.20	0.40	0.07	5.0	1.0	2.7	8.7	8.6	29.0	61.5	11.8	20.2	119.3	2.07	234.5	22.1	7.97

NH_4, NO_3, DON, Urea all as N Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

* = analysed by wet digestion method, ** = analysed by CHN combustion furnace method.

Lake Taupo biannual nutrient database **1995-1996**

Collection Date:- 30 October 1995 Secchi depth = 13.0 m

ID	Depth	pH	EC @25ºC	Temp	DO	BOD_5	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4	NO_3	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	C	g m^{-3}	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}
ZH1	1	7.40	115.1	13.7	10.3	0.80	0.60	0.38	0.45	<0.2	2.4	1.27	3.67	<0.2	<0.1	55.7	3	6.89	62.69	0.75	123	10.3
ZH2	10	7.59	116.1	11.9	10.5	0.40	0.95	0.53	0.96	<0.2	0.8	1.94	2.74	<0.2	<0.1	48.0	3	14.69	62.69	0.61	217	18.0
ZH3	20	7.39	117.8	11.4	10.6	-0.05	1.09	0.59	1.18	0.3	1.5	2.41	4.21	0.2	<0.1	51.5	4	19.47	71.17	0.58	285	22.3
ZH4	30	7.58	116.6	11.2	10.7	-0.15	1.15	0.58	1.26	0.2	0.7	2.21	3.11	<0.2	<0.1	44.6	2	17.83	62.43	0.45	242	19.4
ZH5	40	7.48	116.2	10.9	10.7	0.00	0.91	0.57	1.22	<0.2	1.1	1.88	2.98	<0.2	<0.1	41.9	2	13.00	54.90	0.44	183	15.8
ZH6	50	7.36	117.0	10.8	10.3	0.25	0.69	0.42	1.10	<0.2	0.8	1.71	2.51	<0.2	<0.1	41.7	3	8.55	50.25	0.43	116	10.3
ZH7	60	7.28	117.2	10.7	10.3	0.70	0.49	0.28	1.03	<0.2	0.8	1.55	2.35	<0.2	0.1	41.1	3	7.75	48.95	0.40	110	10.3
ZH8	70	7.25	117.8	10.5	10.2	0.50	0.64	0.43	1.03	<0.2	0.6	1.50	2.10	<0.2	0.2	40.4	2	7.27	47.87	0.38	108	9.9
ZH9	80	7.25	117.5	10.5	10.2	0.40	0.72	0.43	1.19	<0.2	0.8	1.58	2.38	<0.2	0.7	41.4	2	7.19	49.39	0.48	115	12.1
ZH10	90	7.30	118.0	10.5	10.1	0.00	0.72	0.40	1.27	0.3	0.6	1.59	2.49	<0.2	1.5	38.5	3	7.30	47.30	0.47	101	12.1
ZH11	100	7.25	117.5	10.5	10.0	0.15	0.71	0.39	1.30	<0.2	0.2	1.77	1.97	<0.2	2.4	36.4	3	10.67	49.47	0.49	107	12.5
ZH12	110	7.25	117.5	10.5	9.9	0.35	0.71	0.38	1.32	<0.2	0.9	1.69	2.59	0.5	4.6	44.3	3	10.26	59.66	0.52	93	13.1
ZH13	120	7.23	117.3	10.5	9.9	0.30	0.70	0.41	1.35	<0.2	1.3	1.55	2.85	0.5	5.6	51.3	9	7.99	65.39	0.51	99	12.9
ZH14	130	7.25	117.3	10.5	9.8	0.20	0.69	0.47	1.32	<0.2	0.4	1.89	2.29	1.3	6.6	49.7	7	13.42	71.02	0.55	112	18.5
ZH15	140	7.25	117.3	10.5	9.6	0.40	0.97	0.47	1.60	<0.2	0.2	2.54	2.74	5.7	11.7	60.6	9	11.77	89.77	0.57	113	15.8
ZH16	150	7.25	117.5	10.5	9.2	0.40	1.77	0.91	1.77	0.7	0.4	3.05	4.15	8.3	13.2	90.9	15	48.30	160.70	0.69	357	55.1

Collection Date:- 28 March 1996 Secchi depth = 14.6 m

ID	Depth	pH	EC @25ºC	Temp	DO	BOD_5	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4	NO_3	DON	UREA	PN*	TN	DOC	PC	PN**
	m		µS cm^{-1}	C	g m^{-3}	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}
DR1	1	8.02	117.4	16.8	8.7	0.15	0.31	0.18	0.48	1.3	1.8	0.93	4.03	<0.2	4.7	91.0	1.4	12.69	108.39	0.35	118	9.7
DR2	10	8.02	117.4	16.7	8.7	0.20	0.44	0.25	0.81	1.3	1.5	1.43	4.23	<0.2	7.4	111.0	6.2	12.60	131.00	0.42	149	12.3
DR3	20	7.95	117.6	16.6	8.8	0.25	0.34	0.23	0.76	1.0	1.8	1.30	4.10	0.6	<0.1	60.0	2.0	11.70	72.30	0.35	126	11.7
DR4	30	7.59	119.0	13.7	9.0	0.25	0.39	0.15	1.13	1.5	1.7	1.51	4.71	0.5	0.2	64.0	2.0	11.72	76.42	0.26	101	12.8
DR5	40	7.43	118.9	12.4	8.8	0.25	0.35	0.16	0.97	1.3	1.4	1.41	4.11	1.1	<0.1	51.0	2.2	11.77	63.87	0.22	68	8.6
DR6	50	7.34	119.5	11.6	8.6	0.10	0.32	0.14	0.71	1.8	1.5	1.17	4.47	0.8	5.0	68.0	3.5	8.76	82.56	0.18	60	6.4
DR7	60	7.32	119.4	11.4	8.5	0.25	0.27	0.10	0.48	2.2	1.0	1.06	4.26	1.8	5.9	59.0	1.8	8.32	75.02	0.17	46	5.7
FR8	70	7.29	120.4	11.6	8.5	0.25	0.23	0.13	0.28	2.3	1.5	0.80	4.60	<0.2	14.1	87.0	3.4	6.65	107.75	0.26	48	6.4
DR9	80	7.20	120.8	11.2	8.3	0.20	0.30	0.14	0.17	2.9	1.3	0.83	5.03	1.5	10.0	68.0	1.4	5.15	84.65	0.23	45	5.5
DR10	90	7.20	121.2	11.3	8.2	0.20	0.39	0.14	0.12	2.7	2.1	0.89	5.69	2.5	11.5	55.0	1.4	5.34	74.34	0.17	51	6.7
DR11	100	7.24	121.3	10.9	8.2	0.05	0.45	0.19	0.10	2.8	1.8	0.93	5.53	2.2	11.4	72.0	8.1	9.25	94.85	0.22	46	6.9
DR12	110	7.32	122.1	10.8	8.1	0.25	0.25	0.15	0.08	2.7	1.8	0.88	5.38	1.0	11.5	68.0	1.6	5.86	86.36	0.23	52	8.1
DR13	120	7.39	120.2	10.7	8.3	0.15	0.24	0.11	0.09	2.8	1.2	0.74	4.74	2.2	11.2	75.0	3.8	3.91	92.31	0.26	34	5.3
DR14	130	7.47	120.3	10.7	8.3	0.25	0.31	0.15	0.08	3.1	1.5	0.70	5.30	1.5	12.4	70.0	2.5	3.43	87.33	0.27	45	3.8
DR15	140	7.43	121.1	10.7	8.0	0.15	0.33	0.15	0.08	4.6	1.4	0.96	6.96	2.9	16.0	88.0	5.7	4.28	111.18	0.26	51	7.4
DR16	150	7.52	120.1	10.6	7.8	0.75	0.75	0.63	0.07	4.7	1.5	2.13	8.33	3.2	15.9	140.0	32.4	69.74	228.84	0.52	349	70.7

NH_4, NO_3, DON, UREA all as N Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

* = analysed by wet digest method, ** = analysed by CHN combustion furnace method.

Lake Taupo biannual nutrient database **1994-1995**

Collection date: - 27 October 1994 Secchi Depth = 11.7 m

ID	Depth	Temp	DO	BOD_5	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4	NO_3	DON	UREA	PN*	TN	DOC	PC	PN**	LEAD
	m	C	g m^{-3}	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
MM1	1	11.7	10.5	0.30	0.93	0.55	1.16	1.6	0.7	2.5	4.8	1.1	0.2	61	0.1	16.6	78.9	0.67	193.3	20.3	0.22
MM2	10	11.5	10.6	0.35	0.86	0.49	0.97	1.5	0.4	2.5	4.4	2.2	0.1	50	<0.1	15.2	67.5	0.42	203.8	19.0	
MM3	20	11.5	10.8	0.70	0.87	0.58	0.92	1.2	1.1	2.8	5.1	5.1	<0.1	49	0.2	17.4	71.5	0.40	254.5	19.6	
MM4	30	11.3	10.7	0.30	0.86	0.54	0.99	1.2	0.0	2.3	3.5	<0.4	2.5	88	8.3	13.7	104.2	0.64	199.1	18.9	
MM5	40	10.9	10.5	0.05	0.83	0.49	0.97	1.0	1.4	2.1	4.5	0.4	<0.1	49	1.6	12.4	61.8	0.55	193.7	17.5	
MM6	50	10.9	10.4	0.15	0.85	0.48	0.83	1.0	0.9	2.2	4.1	<0.4	1.1	70	6.4	14.9	86.0	0.37	182.0	16.6	
MM7	60	10.8	10.4	0.00	1.04	0.53	0.88	1.1	0.9	2.1	4.1	<0.4	<0.1	47	1.0	13.6	60.6	0.46	184.6	20.0	
MM8	70	10.7	10.4	0.10	1.23	0.54	1.18	1.1	1.2	2.3	4.6	2.6	0.4	57	1.6	14.7	74.7	0.96	198.7	23.0	
MM9	80	10.6	10.4	0.35	1.07	0.45	1.37	1.0	1.4	2.4	4.8	1.2	0.1	47	1.0	15.3	63.6	0.51	154.4	22.6	
MM10	90	10.5	10.4	0.10	1.24	0.48	1.79	1.0	1.1	1.9	4.0	1.5	<0.1	43	1.3	15.6	60.1	0.48	152.0	22.0	
MM11	100	10.5	10.2	0.10	1.22	0.49	1.76	1.2	1.0	2.5	4.7	1.5	0.4	58	1.8	17.9	77.8	1.21	183.7	33.9	
MM12	110	10.5	10.3	0.45	1.15	0.48	1.78	1.4	0.4	3.0	4.8	1.4	0.4	52	1.9	16.8	70.6	0.65	105.8	28.4	
MM13	120	10.4	10.2	0.00	0.96	0.41	1.94	1.1	0.7	2.8	4.6	<0.4	0.6	61	1.6	16.7	78.4	1.00	106.7	29.8	
MM14	130	10.4	9.8	0.00	1.07	0.41	2.37	1.0	1.2	2.6	4.8	6.8	0.9	73	5.5	20.8	101.5	0.53	157.6	23.7	
MM15	140	10.4	9.8	0.00	1.63	0.57	2.32	1.1	1.1	2.3	4.5	3.7	0.9	61	1.9	20.6	86.2	0.44	176.0	19.2	0.36
MM16	150	10.3	9.9	0.25	1.73	0.75	2.49	1.8	0.8	2.3	4.9	4.2	1.9	60	12.1	39.6	105.7	0.57	303.6	44.0	1.09
MM17	Tube				0.99	0.53	0.84	1.3	1.0	2.0	4.3	0.5	0.2	39	3.1	15.9	55.6	0.53			

Collection date: - 19 April 1995 Secchi Depth = 16.1 m

ID	Depth	Temp	DO	BOD_5	SS	VSS	Chlor_*a*	DRP	DOP	PP	TP	NH_4	NO_3	DON	UREA	PN*	TN	DOC	PC	PN**	LEAD
	m	C	g m^{-3}	g m^{-3}	g m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}	g m^{-3}	mg m^{-3}	mg m^{-3}	mg m^{-3}
SZ1	1	18.4	9.2	0.10	0.22	0.22	0.95	3.3	1.7	1.3	6.3	3.6	0.9	83	7.7	14.6	102.1	0.70	160.5	16.8	<0.5
SZ2	10	18.2	9.3	0.15	0.28	0.28	0.89	2.2	1.2	1.5	4.9	2.0	0.8	59	6.5	13.5	75.3	0.68	189.0	18.1	<0.5
SZ3	20	18.2	9.2	0.25	0.24	0.24	0.80	1.3	0.0	1.4	2.7	1.0	1.0	56	4.5	10.7	68.7	0.60	153.5	14.5	
SZ4	30	16.5	9.3	0.50	0.26	0.26	1.35	1.3	1.0	1.6	3.9	1.2	0.7	55	8.4	13.4	70.3	0.60	151.5	14.7	<0.5
SZ5	40	12.5	9.7	0.45	0.16	0.16	0.98	1.1	0.2	1.2	2.5	2.0	1.0	47	4.4	8.0	58.0	0.60	111.0	8.6	
SZ6	50	11.6	9.5	0.60	0.10	0.10	0.86	2.0	0.5	1.2	3.7	1.7	1.3	47	5.3	8.8	58.8	0.60	119.0	10.5	
SZ7	60	11.1	9.5	0.30	0.07	0.07	0.73	1.0	1.1	1.2	3.3	0.5	5.4	40	5.3	7.0	52.9	0.50	83.8	9.0	
SZ8	70	10.9	9.5	0.55	0.04	0.04	0.45	1.4	0.7	1.3	3.4	0.5	7.7	39	6.2	8.7	55.9	0.55	97.4	11.1	
SZ9	80	10.8	9.0	0.40	0.10	0.10	0.35	1.6	0.0	1.0	2.6	0.5	11.3	36	3.2	6.1	53.9	0.53	75.5	8.2	
SZ10	90	10.7	8.7	0.30	0.07	0.07	0.25	1.3	0.5	1.4	3.2	0.5	15.7	40	6.1	9.8	66.0	0.50	92.5	9.6	
SZ11	100	10.7	8.6	0.75	0.01	0.01	0.23	2.8	0.1	0.8	3.7	0.4	18.4	37	6.3	8.2	64.0	0.60	68.7	6.3	
SZ12	110	10.7	8.3	0.50	0.09	0.09	0.20	2.1	1.0	1.3	4.4	0.5	20.4	41	4.4	12.4	74.3	0.55	99.0	14.0	
SZ13	120	10.7	8.2	0.40	0.05	0.05	0.16	2.5	0.0	0.9	3.4	0.5	22.0	37	3.5	4.8	64.3	0.50	62.1	4.5	
SZ14	130	10.7	8.0	0.70	0.00	0.00	0.17	3.1	0.0	1.0	4.1	0.6	26.5	45	3.5	5.9	78.0	0.55	77.0	7.4	
SZ15	140	10.6	7.8	1.00	0.28	0.25	0.17	4.1	0.0	1.7	5.8	0.5	30.7	44	3.6	11.2	86.4	0.60	133.5	12.4	<0.5
SZ16	150	10.6	7.5	2.05	49.47	5.58	64.05	38.9	1.4	*	40.3	1.7	40.9	48	11.4	*	90.6	0.75	*	*	<0.5
Surficial sediment																					10.5

* = Sediment contamination, sample not filtered for analysis.

NH_4, NO_3, DON, UREA all as N Detection limits: DRP 0.5; NO_3-N 0.5; NH_4-N 1.0 mg m^{-3}

* = analysed by wet digestion method, ** = analysed by CHN combustion furnace method.

Appendix 4 - Phytoplankton data

In this report phytoplankton abundance is reported in cell counts per ml and as biovolume (cubic microns per ml). Units of biomass are listed as "μm^3" in the following tables. The units are actually $\mu m^3\ mL^{-1}$ (noting that 1 x 10^6 μm^3 mL-1 = 1 $mm^3\ L^{-1}$, the units used in the Ministry for the Environment's guidelines for cyanobacteria in recreational waters). In the reporting system used until 2007 algal dominance (rank 1 = dominant to rank 10 = rare) was calculated from algal biovolume.

Cell counts may be reported as "0" despite a large biovolume where the algal species is large or colonial, e.g., *Botryococcus braunii.* As of 31/1/2019 *Botryococcus braunii* counts changed from colonies to cells/mL.

Name changes: The genus of planktonic species of *Anabaena* has changed to *Dolichospermum* as of August 2009.

From August 2008 phytoplankton data have been provided from a depth of 50m, which generally coincides with the deep chlorophyll *a* maxima in the lake. These samples were collected by van Dorn bottle and are placed in a separate table from the 10-m tube samples.

Lake Taupo phytoplankton species composition and biovolume (μm^3) 2018-2019																												
From Site A (Mid Lake)																												
10m tube	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A
Sample code	LQ1	LQ1	LQ4	LQ4	QS1	QS1	TH1	TH1	UX1	UX1	UX4	UX4	YR1	YR1	AJ1	AJ1	CS1	CS1	ES1	ES1	JA1	JA1	LH1	LH1	QX1	QX1		
Sampling date	5/07/2018	5/07/2018	25/07/2018	25/07/2018	11/09/2018	11/09/2018	16/10/2018	16/10/2018	31/10/2018	31/10/2018	20/11/2018	20/11/2018	10/12/2018	10/12/2018	8/01/2019	8/01/2019	31/01/2019	31/01/2019	20/02/2019	20/02/2019	4/04/2019	4/04/2019	2/05/2019	2/05/2019	26/06/2019	26/06/2019		
	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume		
	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)	(per ml)	(µm3)		
Blue greens (Cyanophyceae)																												
Aphanizomenon sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	91.8	0.6	10.8	0.4	6.8		
Aphanocapsa sp.	1.6	14.4	5.1	45.9	15.5	139.5	22.6	203.4	13.2	118.8	3.8	34.2	0.0	0.0	17.1	153.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7	96.2		
Dolichospermum c.f lemmermannii (formerly Anabaena c.f lemmermannii)	0.0	0.0	1.7	200.7	0.0	0.0	1.5	172.8	0.0	0.0	2.6	302.8	0.0	0.0	0.0	0.0	0.3	36.0	0.0	0.0	2.3	268.0	0.1	8.1	1.5	169.4		
Dolichospermum circinale	0.6	129.8	0.8	160.7	0.2	33.0	0.0	0.0	0.0	0.0	0.5	96.8	0.0	0.0	0.1	16.5	0.1	12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Dolichospermum planctonicum	0.5	75.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	59.2	0.0	0.0	0.2	33.6	1.6	249.6	0.0	0.0	0.0	0.0	0.0	0.0		
Dolichospermum sp. (formerly Anabaena sp.)	0.4	159.6	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	179.6	0.3	131.7		
Microcystis sp.	0.00	0.00	1.40	29.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Phormidium sp.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	2.10	0.00	0.00		
Pseudanabaena sp.	0.82	15.58	0.25	4.75	0.00	0.00	0.00	0.00	0.38	7.22	0.00	0.00	0.20	3.80	0.00	0.00	0.16	3.04	0.12	2.28	0.07	1.33	0.00	0.00	0.00	0.00		
Woronichinia naegeliana	2.40	48.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Greens (Chlorophyceae)																												
Botryococcus braunii (colonies), cells/mL starting 31/1/2019	1.0	2385192	1.0	573002	0.0	0.0	0.6	1562402	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.4	2223.0	0.0	0.0	0.0	0.0	46.7	4437		
Crucigeniella sp	1.1	71.4	4.4	285.5	1.2	76.1	1.2	76.1	4.7	304	3.5	228.2	1.2	76.1	0.0	0.0	4.7	304.2	1.2	76.1	2.3	152.1	0.0	0.0	0.0	0.0		
Dictyosphaerium sp.	0.0	0.0	2.2	120.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Elakatothrix gelatinosa	1.1	115.3	0.0	0.0	2.9	307	2.3	246	2.3	246	2.3	245.7	2.9	307.1	0.0	0.0	9.4	982.8	3.5	368.6	0.0	0.0	0.0	0.0	0.9	98.1		
Chlamydocapsa planctonica	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	748.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Golenkinia sp.															0.0	0.0	2.3	386.1	0.0	0.0	0.0	0.0						
Lagerheimia sp.	4.9	642	5.5	714	3.5	456	4.7	608	12.9	1673	4.7	608.4	7.0	912.6	0.6	76.1	0.6	76.1	0.6	76.1	0.0	0.0	0.0	0.0	0.0	0.0		
Monoraphidium sp. / Ankistrodesmus falcatus	13.5	565	6.4	270.3	33.3	1400	24.6	1032	59.7	2506	41.0	1720	28.7	1204	7.0	295	17.6	737	23.4	982.8	25.7	1081.1	11.7	490.4	29.0	1216		
Nephrocytium lunatum	0.0	0.0	0.0	0.0	2.3	386	0.0	0.0	4.7	772	0.0	0.0	0.0	0.0	0.0	0.0	4.7	772.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Oocystis sp.	18.7	2651	11.0	1559	19.9	2824	17.6	2492	7.0	997	9.9	1412	10.5	1495	5.3	748	16.4	2326	0.0	0.0	0.6	83.1	0.0	0.0	0.0	0.0		
Scenedesmus sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	121.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sphaerocystis schroeteri	8.2	1647	4.4	878	0.0	0.0	7.0	1404	11.7	2340	9.4	1872.0	0.0	0.0	0.0	0.0	4.7	936.0	2.3	468.0	0.0	0.0	0.0	0.0	0.0	0.0		
Stichococcus contortus	4.7	84.2	19.3	347	74.9	1348	1.2	21.1	11.7	210.6	11.7	210.6	2.3	42.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.6	1252		
Tetraedron gracile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	514.8	0.0	0.0	7.6	836.6	1.2	128.7	0.6	64.4	0.0	0.0	0.0	0.0		
unidentified Colonial green	1.1	153.7	0.5	76.9	0.0	0.0	5.3	737.1	3.5	491	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	245.7	0.0	0.0	0.0	0.0	0.9	130.8		
Volvox aureus	0.0	0.0	11.0	660	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	140.4	8424.0	0.0	0.0	0.0	0.0		
Diatoms (Bacillariophyceae)																												
Asterionella formosa	188.9	52880	122.4	34280	252.1	70598	92.4	25880	95.9	26863	7.0	1966	4.7	1310	3.5	983	0.0	0.0	0.0	0.0	0.0	0.0	0.1	19.6	18.2	5100		
Aulacoseira granulata	82.9	25699	67.5	20933	121.7	37721	56.7	17591	25.7	7979	10.5	3264	0.0	0.0	4.7	1451	8.8	2720	0.0	0.0	0.0	0.0	0.0	0.0	39.2	12161		
Aulacoseira granulata var. angustissima	0.3	65.0	0.4	104	21.6	5628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	1335.6	6.5	1700		
Cocconeis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	306.0	0.6	306.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	488.5		
Cyclotella sp.	4.7	749	7.6	1217	8.2	1310	19.9	3182	7.0	1123	2.9	468.0	1.8	280.8	4.7	749	1.2	187.2	0.6	93.6	0.6	93.6	0.9	149.4	1.4	224.2		
Epithemia sp.			0.6	219.4	0.0	0.0	0.0	0.0	1.2	438.8	0.0	0.0	0.0	0.0	0.0	0.0	0.6	219.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Fragilaria crotonensis	55.6	19896	2.9	1047	7.0	2513	16.4	5864	22.2	7958	12.3	4398	0.0	0.0	1.2	419	7.0	2513	4.7	1675.4	0.0	0.0	0.6	200.5	0.0	0.0		
Fragilaria sp.	0.0	0.0	4.1	1466	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3	8694		
Lindavia sp.	0.0	0.0	0.0	0.0	3.5	1790	3.5	1790	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Nitzschia sp.	2.3	913	0.0	0.0	9.9	3879	5.9	2282	5.9	2282	6.4	2510	0.6	228	1.8	684	1.2	456	2.3	912.6	1.2	456.3	0.0	0.0	0.0	0.0		
Small unknown diatom sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	154.1		
Synedra sp.	0.0	0.0	0.6	230.5	1.8	691	1.2	461.0	1.2	461	0.0	0.0	1.2	461.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Desmids (Mesotaeniaceae, Desmidiaceae)																												
Closteriopsis sp.	2.9	1056	2.3	845	5.3	1901	3.5	1267	3.5	1267	1.2	422.4	0.6	211.2	0.6	211.2	0.0	0.0	0.6	211.2	0.0	0.0	0.0	0.0	0.0	0.0		
Chrysophtya (Chrysophyceae)																												
Dinobryon sp.	0.0	0	1.2	69	0.0	0.0	18.7	1104	42.1	2485	141.0	8318	61.4	3624	0.0	0.0	42.1	2485	0.0	0.0	5.3	310.6	0.0	0.0	0.0	0.0		
Dinoflagellates (Dinophyceae)																												
Ceratium sp.	0.0	0	0.0	560	0.0	0.0	0.6	16380	0.0	0	0.6	16380	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	16380	0.0	1120	1.9	52304		
Gymnodinium sp. 1	0.0	0.0	0.0	0.0	0.6	644	0.0	0.0	0.0	0.0	1.8	1931	2.9	3218	0.0	0.0	3.5	3861	0.6	643.5	0.0	0.0	0.0	0.0	0.0	0.0		
Peridinium sp.	0.6	2340	0.0	0	0.0	0.0	0.6	2340	0.6	2340	1.8	7020	4.1	16380	0.6	2340	16.4	65520	7.0	28080	1.8	7020	0.5	1868	0.0	0.0		
Flagellates 5µm																												
Cryptomonas sp.	0.0	0.0	1.8	252.7	0.0	0.0	0.6	84.2	0.6	84.2	0.0	0.0	0.0	0.0	0.6	84.2	0.6	84.2	0.0	0.0	0.6	84.2	0.9	134.5	0.5	67.2		
Flagellates < 5µm/unicells	29.1	2328	121.9	9750	55.6	4446	85.4	6833	97.1	7769	95.4	7628	72.5	5803	19.9	1591	105.9	8471	33.3	2667.6	58.5	4680	207.3	16588	239.1	19128		

Lake Taupo phytoplankton species composition and biovolume (μm^3) 2018-2019																								
From Site A (Mid Lake) 5/07/2018-26/06/2019	**LQ3**	**LQ3**	**LQ6**	**LQ6**	**QS3**	**QS3**	**TH3**	**TH3**	**UX3**	**UX3**	**UX6**	**UX6**	**YR3**	**YR3**	**AJ3**	**AJ3**	**CS3**	**CS3**	**JA2**	**JA2**	**LH3**	**LH3**	**QX3**	**QX3**
50m	**5/07/2018**	**5/07/2018**	**25/07/2018**	**25/07/2018**	**11/09/2018**	**11/09/2018**	**16/10/2018**	**16/10/2018**	**31/10/2018**	**31/10/2018**	**20/11/2018**	**20/11/2018**	**10/12/2018**	**10/12/2018**	**8/01/2019**	**8/01/2019**	**31/01/2019**	**31/01/2019**	**4/04/2019**	**4/04/2019**	**2/05/2019**	**2/05/2019**	**26/06/2019**	**26/06/2019**
	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)																								
Aphanizomenon sp.	0.0	0.0	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aphanocapsa sp.	0.0	0.0	2.0	18.0	0.0	0.0	6.3	56.7	6.6	59.4	10.8	97.2	24.1	216.9	0.0	0.0	1.0	9.0	1.1	9.9	0.0	0.0	1.2	10.8
olichospermum c.f lemmermannii (formerly Anabaena c.f lemmermannii)	3.1	353.8	4.8	552.2	0.0	0.0	0.0	0.0	0.0	0.0	3.0	349.2	5.6	650.8	3.3	386.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dolichospermum circinale	0.4	72.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	37.1	1.7	358.4	1.2	255.4	0.8	160.7	0.0	0.0	0.0	0.0	0.0	0.0
Dolichospermum planctonicum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	35.2	2.8	451.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Microcystis sp.	0.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pseudanabaena sp.	0.0	0.0	0.2	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.9
Greens (Chlorophyceae)																								
Botryococcus braunii	0.0	0.0	1.0	30350	0.0	0.0	0.6	3678746	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	175.5	16673	0.0	0.0	0.0	0.0	0.0	0.0
Crucigeniella sp	0.0	0.0	2.3	152.1	0.0	0.0	2.3	152.1	4.7	304.2	3.5	228.2	1.2	76.1	2.3	152.1	1.2	76.1	3.5	226.6	0.0	0.0	0.0	0.0
Dictyosphaerium sp.	18.7	1029.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Elakatothrix gelatinosa	0.0	0.0	3.5	368.6	0.0	0.0	1.2	122.9	0.0	0.0	0.0	0.0	0.0	0.0	4.1	430.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eudorina elegans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	2097	11.7	2995	0.0	0.0	11.7	2995	16.9	4335	0.0	0.0	0.3	87.0
Chlamydocapsa planctonica	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	748.8	2.3	187.2	0.0	0.0	0.0	0.0	0.0	0.0
Golenkinia sp.															2.9	482.6	0.0	0.0	0.0	0.0				
Lagerheimia sp.	3.3	428.0	6.6	855.9	0.0	0.0	4.7	608.4	3.5	456	0.0	0.0	1.8	228.2	0.6	76.1	0.6	76.1	1.5	194.2	0.0	0.0	0.0	0.0
Monoraphidium sp. / Ankistrodesmus falcatus	8.8	368.7	9.3	391.7	0.0	0.0	18.7	786.2	31.6	1327	14.6	614.3	19.3	810.8	22.8	958.2	19.3	810.8	10.0	418.3	7.0	294.2	0.0	1.3
Nephrocytium lunatum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	386.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oocystis sp.	3.8	545.4	7.1	1013	0.0	0.0	7.0	996.8	3.5	498.4	3.5	498	13.5	1911	10.5	1495	2.3	332	10.5	1485	0.0	0.0	0.0	0.0
Pandorina sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	1647.4	0.0	0.0	0.0	0.0	0.0	0.0
Sphaerocystis schroeteri	2.2	438.9	15.4	3072	0.0	0.0	11.7	2340.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	936.0	0.0	0.0	0.0	0.0	0.0	0.0
Stichococcus contortus	4.4	79.0	13.2	237.0	0.0	0.0	10.5	189.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tetraedron gracile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	707.9	0.6	64.4	0.5	54.8	0.0	0.0	0.0	0.0
unidentified Colonial green	1.1	153.6	1.6	230.4	0.0	0.0	0.6	81.9	2.3	327.6	0.0	0.0	0.0	0.0	0.0	0.0	1.8	245.7	1.0	139.4	0.5	65.4	0.1	8.4
Diatoms (Bacillariophyceae)																								
Asterionella formosa	5.8	1635.2	105.9	29649	0.0	0.0	16.4	4586	11.7	3276	2.9	819	5.9	1638	4.1	1147	14.0	3931	3.0	837	0.2	50.4	0.3	84.0
Aulacoseira granulata	88.9	27554	83.9	26023	0.0	0.0	56.7	17591	39.8	12332	11.1	3446	27.5	8523	0.0	0.0	9.9	3083	7.0	2161	0.0	0.0	1.2	360
Aulacoseira granulata var. angustissima	0.4	109.2	26.3	6847	0.0	0.0	0.0	0.0	0.0	0.0	8.2	2129	0.0	0.0	0.0	0.0	4.7	1217	0.0	0.0	0.0	0.0	0.0	0.0
Cocconeis	0.0	0.0	0.5	286.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	732.7	0.0	5.2
Cyclotella sp.	3.3	526.7	8.2	1317	0.0	0.0	13.5	2152.8	11.7	1872.0	10.5	1685	7.6	1217	0.0	0.0	0.6	94	3.0	478.1	2.8	448.3	0.0	6.4
Epithemia sp.			0.0	0.0	0.0	0.0	0.6	219.4	0.0	0.0	0.6	219.4	0.0	0.0	0.0	0.0	0.6	219.4	0.0	0.0	0.0	0.0	0.0	0.0
Fragilaria crotonensis	0.9	325.8	0.2	85.9	0.0	0.0	9.4	3351	3.5	1257	8.8	3141	18.1	6492	67.9	24294	4.7	1675	1.5	535	0.1	46.5	1.2	411.7
Fragilaria sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.7	6701.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	89.5
Lindavia sp.	0.5	109.7	0.0	0.0	0.0	0.0	1.8	895.0	3.5	1790	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nitzschia sp.	1.6	641.9	0.5	214.0	0.0	0.0	1.8	684.5	3.5	1369	1.8	684.5	2.3	912.6	1.2	456.3	1.2	456.3	1.0	388.4	0.0	0.0	0.0	3.9
Synedra sp.	0.0	0.0	1.1	432.3	0.0	0.0	0.0	0.0	0.0	0.0	1.2	461.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	196.2	0.0	0.0	0.0	0.0
Desmids (Mesotaeniaceae, Desmidiaceae)																								
Closteriopsis sp.	2.7	990.3	2.7	990.3	0.0	0.0	3.5	1267.1	2.3	844.7	4.1	1478	6.4	2323	0.0	0.0	1.8	634	2.0	719.1	4.2	1517	0.0	10.8
Staurastrum sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	806.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chrysophtya (Chrysophyceae)																								
Dinobryon sp.	0.1	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	690.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dinoflagellates (Dinophyceae)																								
Ceratium sp.	0.0	0.0	0.0	280	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	32760	0.0	0.0	0.0	0.0	0.0	280	0.0	0.0
Gymnodinium sp. 1	0.0	0.0	0.5	603.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	643.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gymnodinium sp. 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	93600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Peridinium sp.	0.5	2194.6	0.0	0.0	0.0	0.0	0.6	2340	2.3	9360	0.6	2340	0.6	2340	7.0	28080	0.0	0.0	1.0	3984	0.0	0.0	0.0	0.0
Flagellates 5µm																								
Cryptomonas sp.	0.0	0.0	0.5	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	84.2	1.2	168.5	0.6	84.2	1.0	143.4	0.0	0.0	0.0	1.4
Flagellates < 5µm/unicells	34.6	2765.2	74.6	5969	0.0	0.0	33.3	2668	37.4	2995	17.0	1357	13.5	1076	153.3	12262	30.4	2434	25.4	2032	130.3	10423	0.8	65.6

Lake Taupo phytoplankton species composition and biovolume (μm^3) 2017-2018																														
From Site A (Mid Lake)																														
10 m tube																														
	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A
Sample code	HJ1	HJ1	IR1	IR1	JW1	JW1	NB1	NB1	QA1	QA1	QA4	QA4	QA7	QA7	UX1	UX1	UX4	UX4	YK1	YK1	BZ1	BZ1	DD1	DD1	FP1	FP1	FP4	FP4	KE1	KE1
Sampling date	18/07/2017	18/07/2017	9/08/2017	9/08/2017	21/08/2017	21/08/2017	27/09/2017	27/09/2017	31/10/2017	31/10/2017	14/11/2017	14/11/2017	27/11/2017	27/11/2017	10/01/2018	10/01/2018	24/01/2018	24/01/2018	19/02/2018	19/02/2018	22/03/2018	22/03/2018	5/04/2018	5/04/2018	1/05/2018	1/05/2018	31/05/2018	31/05/2018	19/06/2018	19/06/2018
	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)																														
Aphanizomenon sp.	0.0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0.19	3.61	0.0	0	0.0	0	4.7	90	4.4	83	0.0	0	1.0	18	0.3	6
Aphanocapsa sp.	0.0	0	0	0	4.4	39.6	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0.1	1	0.0	0	0.5	5	0.4	3	5.3	48	7.3	65
Chroococcus sp.	0.0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.1	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum c.f lemmermannii (formerly Anabaena c.f lemmermannii)	0.8	95	1.68	194.88	1.62	187.92	2.5	292	15.86	1839.76	7.7	893.2	3.13	363.08	0	0	0.4	44	1.7	196	4.3	500	4.6	530	7.2	839	3.5	407	1.8	205
Dolichospermum circinale	0.0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0.98	201.88	0.4	91	0.2	45	0.7	134	0.7	152	1.8	367	0.4	72	1.0	202
Dolichospermum planctonicum	0.7	106	0	0	0	0	0.2	24	0	0	0.11	17.6	0.92	147.2	0.3	48	1.2	184	2.1	341	0.3	40	1.3	214	0.7	114	0.0	0	0.0	0
Microcystis sp.	0.0	0	0	0	0	0	0.0	0	0	0	2.35	427.7	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0.34	7.14	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0.37	7.03	0.4	7	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Snowella sp.	0.9	22	9.44	236	6.43	160.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Woronichinia naegeliana	3.8	76	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																														
Botryococcus braunii (colonies)	0	0	0.03	4290	0.02	2340	0.01	13979	0.01	2884.14	0	0	0	0	0	0	0	0	0.0	15863	0.01	4635	0	0	0.0	0	0	0	0.01	9712
Crucigeniella sp	0	0	3.51	228.15	0	0	5	304	1.17	76.05	0	0	0	0	0	0	2	152	0	0	0	0	4	228	0	0	0	0	4	228
Dictyosphaerium sp.	3	145	2.1	115.5	0	0	1	50	0	0	0	0	0	0	0.04	2.2	0	0	0	0	0	0	0	0	0	0	1	33	0	0
Elakatothrix gelatinosa	0	0	0	0	2.34	245.7	4	369	7.605	798.525	1.755	184.275	0	0	9.36	982.8	35	3624	1	123	2	246	1	123	1	61	2	184	2	184
Eudorina elegans	1	174	0.23	58.88	0.78	199.68	0	0	0	0	7.02	1797.12	9.36	2396.16	16.38	4193.28	0	0	33	8387	27	6889	8	2097	0	0	0	0	0	0
Lagerheimia sp.	1	76	0	0	1.17	152.1	0	0	1.17	152.1	4.68	608.4	0.585	76	2.925	380.25	1	76	1	152	2	228	2	304	1	76	3	380	4	456
Monoraphidium sp. / Ankistrodesmus falcatus	8	344	8.775	368.55	0	0	17	713	32.175	1351.35	9.945	417.69	13.455	565.11	7.02	294.84	1	49	0	0	2	74	2	98	11	442	35	1474	22	909
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	983	0	0	0	0
Nephrocytium lunatum	0	0	9.36	1544.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	772	2	386	0	0	0	0	0	0
Oocystis sp.	11	1495	15.795	2242.89	5.85	830.7	17	2409	34.515	4901.13	36.27	5150.34	19.89	2824.38	22.815	3239.73	12	1744	1	166	4	581	6	914	12	1744	13	1828	6	914
Gregiochloris lacustris	0	0	2.34	383.76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	4.68	243.36	0	0	0	0	4.68	243.36	0	0	0	0	0	0	0	0	1	61	0	0	0	0	0	0	0	0	5	243
Sphaerocystis schroeteri	0	0	0	0	0	0	25	5031	0	0	14.04	2808	4.68	1000	16.38	0	0	0	0	0	0	0	0	0	0	0	5	936	5	936
Stichococcus contortus	281	5065	279.63	5033.34	58.5	1053	2	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	126	0	0	0	0	14	253
Tetraedron gracile	1	129	11.115	1222.65	2.925	321.75	2	257	0	0	0.585	64.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unidentified Colonial green	0	0	3.51	491.4	0	0	0	0	0	0	0	0	0.585	43.875	0	0	0	0	3	410	0	0	0	0	0	0	0	0	1	44
Volvox aureus	0	0	0.88	52.8	0	0	0	0	0	0	0	0	0	0	0	0	6	360	0	0	2.0	120	15.0	900	193.1	11583	0.0	0	0.0	0
Westella botryoides	0	0	9.36	608.4	8.19	532.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	2434
Diatoms (Bacillariophyceae)																														
Asterionella formosa	25	7043	4.095	1146.6	33.93	9500.4	314	87797	104.715	29320.2	14.625	4095	16.965	4750.2	3.51	982.8	0	0	0	0	0	0	0	0	5	1310	61	17035	178	49959
Attheya sp.	4	1053	6.435	1930.5	15.21	4563	7	2106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aulacoseira granulata	7	2176	93.6	29016	86.58	26839.8	63	19404	40.95	12694.5	21.645	6709.95	7.605	2357.55	0	0	11	3446	0	0	0	0	0	0	7	2176	15	4534	50	15415
Aulacoseira granulata var. angustissima	22	5780	22.23	5779.8	25.74	6692.4	19	5019	15.795	4106.7	2.34	608.4	0	0	0.585	152.1	0	0	8	2129	2	456	0	0	0	0	3	761	0	0
Cocconeis	0	0	0	0	0	0	0	0	0	0	0.585	305.955	0.585	305.955	0.585	305.955	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclotella sp.																			1	187	2	374	2	374			11	1778	7	1123
Cyclotella stelligera	5	749	4.095	655.2	7.02	1123.2	1	187	2.925	468	1.755	280.8	0.585	93.6	4.095	655.2	1	187							6	936				
Fragilaria crotonensis	0	0	40.18	14384.44	2.25	805.5	1	251	0.67	239.86	21.06	7539.48	40.365	14450.67	57.33	20524.14	183	65552	297	106181	235	83981	132	47122	0	0	48	17173	0	0
Fragilaria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1257	0	0	0	0	0	0	0	0
Lindavia sp.																											1	187	1	187
Nitzschia sp.	7	2738	5.85	2281.5	0	0	2	913	4.68	1825.2	4.095	1597.05	3.51	1368.9	1.17	456.3	0	0	0	0	1	456	1	228	1	228	17	6616	2	913
Small unknown diatom sp.	1	64	0	0	0	0	0	0	0	0	0.585	64.35	0	0	0.585	64.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synedra sp.	47	18439	97.11	38261.34	277.875	109482.8	2	922	1.755	691.47	0	0	0.585	230.49	1.17	460.98	0	0	0	0	0	0	1	230	0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)																														
Closteriopsis sp.							5	1685					0	0			0	0					0	0			0	0	1	176
Closterium acutum var. variabile	3	1103	1.17	441.09	8.775	3308.175	0	0	0.585	220.545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	221	0	0
Staurastrum sp.	0	0	0	0	0	0	1	807	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Staurodesmus unicornis	0	0	0	0	0.02	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																														
Dinobryon sp.	1	32	0.58	34.22	1.69	99.71	0	0	2.61	153.99	60.84	3589.56	136.89	8076.51	0	0	23	1346	227	13392	48	2830	91	5384	62	3659	18	1070	0	0
Dinoflagellates (Dinophyceae)																														
Ceratium sp.	0	6720	0.05	1400	0.05	1400	0	10920	0	0	0	0	1.17	32760	0	0	1	32760	5	131040	2	49140	0	0			0	0	1	16380
Gonyaulax sp.	0	0	0	0	0.117	234	0	0	0	0	0.585	1170	0	0	0	0	0	0	3	5850	0	0	0	0	0	0	0	0	0	0
Gymnodinium sp. 1	0	0	0.585	643.5	0.585	643.5	0	0	0	0	0	0	0.585	643.5	0.585	643.5	0	0	2	1931	0	0	2	1931	1	1287	0	0	1	644
Gymnodinium sp. 2	0	0	0	0	0.01	400	0	0	0	0	0	0	0	0	0	0	0	0	2	70200	0	0	0	0	0	0	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	0	0	0.585	2340	0	0	0.585	2340	3.51	14040	12	49140	0	0	1	4680	1	4680	2	7020	1	4680	0	0
Flagellates 5µm																														
Cryptomonas sp.	1	168	0	0	0	0	1	84	0.585	84.24	0	0	0	0	0	0	0	0	0	0	1	168	2	337	1.2	168	0	0	1	168
Flagellates < 5µm/unicells	359	28735	312.975	25038	73.125	5850	64	5101	53.82	4305.6	31.005	2480.4	48.555	3884.4	50.895	4071.6	58	4633	137	10951	48	3838	45	3604	61	4867	70	5569	39	3089

Lake Taupo phytoplankton species composition and biovolume (50 m) 2017-2018																														
From Site A (Mid Lake) 18/07/2017-19/06/2018																														
	HJ3	HJ3	IR3	IR3	JW3	JW3	NB3	NB3	QA3	QA3	QA6	QA6	QA9	QA9	UX3	UX3	UX6	UX6	YK3	YK3	BZ3	BZ3	DD3	DD3	FP3	FP3	FP6	FP6	KE3	KE3
	18/07/2017	18/07/2017	9/08/2017	9/08/2017	21/08/2017	21/08/2017	27/09/2017	27/09/2017	31/10/2017	31/10/2017	14/11/2017	14/11/2017	27/11/2017	27/11/2017	10/01/2018	10/01/2018	24/01/2018	24/01/2018	19/02/2018	19/02/2018	22/03/2018	22/03/2018	5/04/2018	5/04/2018	1/05/2018	1/05/2018	31/05/2018	31/05/2018	19/06/2018	19/06/2018
	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)
Blue greens (Cyanophyceae)																														
Aphanizomenon sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	4	0	0
Aphanocapsa sp.	0	0	0	0	0	0	2	18	0	0	1.8	16.2	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	1	11	5	41
Dolichospermum c.f lemmermannii (formerly Anabaena c.f lemmermannii)	1	72	0	0	0	0	0	0	0	0	8.22	953.52	2.32	269.12	0	0	0	0	6	668	0	5	7	821	0	0	0	0	0	0
Dolichospermum circinale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	334	0	49	1	183	0.8	155	0	0	1	222
Dolichospermum planctonicum	1	99	0.38	60.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	1	85	0	0
Microcystis sp.	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Pseudanabaena sp.	0	0	0	0	0	0	0	0	0	0	0	0	0.27	5.13	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	7
Snowella sp.	3	83	10.22	255.5	9.55	238.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Woronichinia naegeliana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	7
Greens (Chlorophyceae)																														
Botryococcus braunii (colonies)	0	250	0	0	0.06	12285	0	7078	0	0	0	0	0	0	0.01	8093.25	0	0	0	2184	0	1251	0	5739	0	0	0	0	0	0
Crucigeniella sp	0	0	4.68	304.2	0	0	0	0	1.17	76.05	0	0	0	0	0	0	1	76	0	0	0	0	0	0	0	0	0	0	1	76
Dictyosphaerium sp.	5	253	102.96	5662.8	52.65	2895.75	66	3636	14.04	772.2	7.02	386.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakatothrix gelatinosa	1	123	0	0	0	0	0	0	5.85	614.25	1.17	122.85	2.34	245.7	1.755	184.275	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eudorina elegans	0	0	21.06	5391.36	77.22	19768.32	0	0	0	0	0	0	9.36	2396.16	11.7	2995.2	15	3894	0	0	0	0	0	0	1	225	0	0	0	0
Chlamydocapsa planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	374	0	0	0	0	0	0	0	0
Lagerheimia sp.	0	0	1.755	228.15	0	0	0	0	4.68	608.4	2.34	304.2	0.585	76	1.755	228.15	0	0	1	76	2	304	2	228	1	71	1	76	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	8	319	5.85	245.7	7.02	294.84	10	418	46.8	1965.6	14.625	614.25	12.285	515.97	21.645	909.09	35	1450	26	1106	59	2457	20	860	32	1360	6	270	5	197
Nephrocytium lunatum	2	386	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocystis sp.	7	997	10.53	1495.26	9.36	1329.12	23	3240	22.23	3156.66	12.285	1744.47	14.04	1993.68	11.7	1661.4	8	1163	2	332	2	332	5	665	3	390	3	415	3	415
Gregiochloris lacustris	0	0	1.17	191.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	2	122	14.04	730.08	0	0	0	0	0	0	1.755	91.26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	2	468	11.7	2340	0	0	4.68	1000	0	0	0	0	0	0	2	468	5	936	0	0	0	0	0	0
Stichococcus contortus	259	4654	269.685	4854.33	66.105	1189.89	0	0	2.34	42.12	10.53	189.54	2.34	42.12	2.34	42.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetraedron gracile	3	322	5.265	579.15	3.51	386.1	3	322	0.585	64.35	1.755	193.05	1.17	128.7	2.925	321.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unidentified Colonial green	4	263	0.44	61.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	6	366	0	0	0	0	0	0	0	0	6	360	4	240	0	0	9	510	0	0	7	390	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																														
Asterionella formosa	29	8190	29.25	8190	114.66	32104.8	262	73382	228.15	63882	36.27	10155.6	26.325	7371	5.265	1474.2	4	983	2	655	2	655	7	1966	0	123	9	2457	26	7371
Attheya sp.	6	1931	16.965	5089.5	5.85	1755	10	2984	0.585	175.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aulacoseira granulata	0	0	73.71	22850.1	59.085	18316.35	111	34457	98.28	30466.8	94.77	29378.7	117.585	36451.35	29.25	9067.5	10	3083	6	1995	9	2720	9	2902	0	0	5	1451	10	3083
Aulacoseira granulata var. angustissima	46	11864	0	0	62.01	16122.6	55	14297	43.29	11255.4	25.74	6692.4	18.135	4715.1	15.21	3954.6	16	4107	16	4107	3	761	0	0	3	676	0	0	2	608
Cyclotella sp.																			4	562	8	1217	9	1404			2	281	2	374
Cyclotella stelligera	6	936	10.53	1684.8	18.72	2995.2	11	1685	5.85	936	4.095	655.2	2.925	468	4.095	655.2	6	1030							3	527				
Fragilaria crotonensis	37	13210	164.58	58919.64	52.98	18966.84	1	430	1.28	458.24	20.475	7330.05	10.53	3769.74	0	0	21	7539	46	16545	8	2723	19	6702	3	945	0	0	9	3141
Fragilaria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	5026	0	0	0	0	0	0	2	652	0	0	0	0
Lindavia sp.																											1	94	1	94
Nitzschia sp.	6	2282	0	0	0	0	8	2966	3.51	1368.9	1.755	684.45	1.755	684.45	1.17	456.3	0	0	0	0	0	0	0	0	0	0	1	228	2	913
Small unknown diatom sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	64	0	0
Synedra sp.	32	12677	84.825	33421.05	235.755	92887.47	0	0	2.34	921.96	2.34	921.96	1.755	691.47	0.585	230.49	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)																														
Closteriopsis sp.							2	632					2.925	0.000			0	0	0				0	0			0	0	1	88
Closterium acutum var. variabile	2	662	2.925	1102.725	12.285	4631.445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	221	0	0	2	827	0	0	0	0
Staurodesmus unicornis	0	0	0.01	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																														
Dinobryon sp.	21	1243	0.28	16.52	0	0	0	0	0	0	7.605	448.695	0	0	0	0	0	0	0	0	0	0	1	69	1	50	0	0	0	0
Dinoflagellates (Dinophyceae)																														
Ceratium sp.	0	6160	0.23	6440	0.25	7000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0
Gonyaulax sp.	0	0	0	0	0.03	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gymnodinium sp. 1	0	0	0	0	0.585	643.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	604	0	0	0	0
Gymnodinium sp. 2	0	8800	0	0	0.01	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	0	0	1.17	4680	0.585	2340	1	2340	0	0	1	2340	0	0	0	0	0	0	0	0
Flagellates 5µm																														
Cryptomonas sp.	0	0	0	0	0	0	0	0	0	0	0.585	84.24	0	0	0.585	84.24	0	0	0	0	0	0	2	253	2	237	1	84	0	0
Flagellates < 5µm/unicells	739	59108	264.42	21153.6	202.41	16192.8	47	3791	30.42	2433.6	22.815	1825.2	50.895	4071.6	21.06	1684.8	32	2527	17	1357	30	2387	26	2059	53	4214	6	515	12	936

Lake Taupo phytoplankton species composition and biovolume (μm^3) 2016-2017
From Site A (Mid Lake)
10 m tube

	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A
Sample code	HJ1	HJ1	HJ4	HJ4	IV1	IV1	IV4	IV4	KM1	KM1	LU1	LU1	MK1	MK1	NR3	NR3	NR4	NR4	QJ3	QJ3
Sampling date	6/07/2016	6/07/2016	27/07/2016	27/07/2016	10/08/2016	10/08/2016	23/08/2016	23/08/2016	12/09/2016	12/09/2016	27/09/2016	27/09/2016	12/10/2016	12/10/2016	2/11/2016	2/11/2016	23/11/2016	23/11/2016	8/12/2016	8/12/2016
	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)																				
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	0.4	44	1.2	140	0.0	0	0.0	0	0.1	12	0.0	0	6.4	738	25.1	2909	49.7	5766	1.1	128
Dolichospermum planctonicum (formerly Anabaena planctonica)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum circinale (formerly Anabaena circinalis)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Planktolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Schizothrix sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	4.7	42	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcystis sp.	0.0	0	0.0	0	0.3	22	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.4	7	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.3	6	0.0	0	0.3	5	0.0	0	0.6	11	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gloeocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcoleus sp.																				
Greens (Chlorophyceae)																				
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / *Ankistrodesmus*	34	1414	37	1537	30	1276	16	661	13	538	10	430	9	369	4	154	30	1261	20	835
Stichococcus contortus	0	0	0	0	4	79	3	53	0	0	0	0	0	0	0	0	1	26	2	42
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0	0	0	44292	0	0	0	20233	0	0	0	20601	0	0	0	0	0	0	0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	1	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium sp.	0	0	7	362	0	0	10	544	25	1349	15	805	5	282	0	0	2	101	0	0
Gloeocystis planctonica	0	0	0	0	0	0	6	0	10	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	4	423	1	154	2	231	1	154	10	1076	5	538	3	307	2	231	7	769	1	123
Eudorina elegans	0	0	5	1312	0	0	9	2342	6	1499	4	1031	0	0	0	0	3	750	0	0
Pandorina sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	3	0	6	0	8	0	0	0	0	0	0	0	0	0
Oocystis sp.	15	2183	10	1351	6	884	10	1351	19	2703	14	1923	16	2339	20	2910	14	1923	20	2907
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	6	305	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	7	0	8	0	6	0	19	0	26	0	20	0	25	0	67	0	54	0	50	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	220	13176	0	0	0	0	0	0	183	10980	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unidentified Colonial green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																				
Asterionella formosa	69	19266	57	15884	98	27465	240	67124	103	28899	33	9326	15	4099	30	8506	23	6354	23	6388
Aulacoseira granulata	11	3290	13	3971	24	7488	35	10779	33	10098	17	5219	5	1588	4	1135	12	3858	0	0
Aulacoseira granulata var. *angustissima*	1	381	7	1903	5	1427	25	6376	21	5519	22	5710	13	3426	10	2569	0	0	0	0
Attheya sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	1	574	0	0	1	574	0	0	0	0	0	0	0	0	0	0	0	0
Cyclotella stelligera	13	2108	15	2342	11	1815	11	1815	11	1757	10	1581	12	1874	19	3045	10	1523	10	1591
Cyclotella sp.					14	5110														
Fragilaria crotonensis	36	12972	12	4193			12	4193	64	22799	33	11924	83	29743	124	44550	37	13103	63	22409
Fragilaria sp.	0	0	0	0	12	4455	0	0	10	3538	0	0	0	0	0	0	3	917	0	0
Nitzschia sp.	1	428	4	1427	6	2427	4	1713	1	571	3	999	2	714	0	0	3	1142	0	0
Synedra sp.	0	0	0	144	0	0	1	288	0	0	1	288	0	0	0	0	0	0	0	0
Amphora sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epithemia sp.																				
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	0	0	40	0	0	1	121	0	0	1	121	1	81	1	81	1	129
Desmids (Mesotaeniaceae, Desmidiaceae)																				
Closterium aciculare	0	219	0	0	0	0	0	0	1	438	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. *variable*	0	0	0	0	0	0	0	138	0	0	0	0	0	0	0	0	0	0	0	0
Closteriopsis sp.																				
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	505	0	0	0	0	0	0	0	0	0	0	0	505	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. *gracilis*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																				
Dinobryon sp.	38	2267	0	0	0	0	0	0	0	0	0	0	21	1231	128	7558	51	2980	23	1381
Cryptomonas sp.	1	105	0	53	0	0	0	0	0	0	0	0	0	0	0	53	1	105	0	0
Synura sp.	0	0	3	177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																				
Ceratium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10248	0	10248	1	32760
Ceratium hirundinella																				
Gymnodinium sp. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	805	0	0	0	0
Gymnodinium sp. 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	1	2928	0	1464	1	4392	0	0	1	2340
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm																				
Flagellates < 5µm/unicells	53	7214	18	2471	30	4101	32	4348	16	2223	26	3459	29	3903	36	4793	41	5534	29	3949

	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A	Site A
Sample code	SP1	SP1	UN1	UN2	WE1	WE1	XG3	XG3	YG1	YG1	ZS1	ZS1	BC1	BC1	CE1	CE1	DE1	DE1	EK1	EK1	GB1	GB1
Sampling date	26/01/2017	26/01/2017	16/02/2017	16/02/2017	1/03/2017	1/03/2017	16/03/2016	16/03/2016	28/03/2016	28/03/2016	19/04/2017	19/04/2017	3/05/2017	3/05/2017	16/05/2017	16/05/2017	29/05/2017	29/05/2017	15/06/2017	15/06/2017	28/06/2017	28/06/2017
	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)																						
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	9.1	1054	11.9	1376	0.2	19	10.7	1239	12.2	1420	2.0	231	7.8	901	5.1	595	0.5	55	0.9	106	1.4	166
Dolichospermum planctonicum (formerly Anabaena planctonica)	0.0	0	0.0	0	0.0	0	0.5	74	0.0	0	0.0	0	0.0	0	0.6	90	0.0	0	0.3	54	0.2	34
Dolichospermum circinale (formerly Anabaena circinalis)	0.0	0	0.0	0	0.0	0	2.0	406	0.6	115	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Planktolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena sp.	0.0	0	1.1	100	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Schizothrix sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	3.5	32	0.0	0	0.0	0	0.0	0
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	2.4	50	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.9	17	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gloeocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcoleus sp.																						
Greens (Chlorophyceae)																						
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / *Ankistrodesmus*	35	1464	2	69	7	277	16	663	7	295	5	209	6	246	16	663	21	878	22	941	23	983
Stichococcus contortus	8	143	0	0	0	0	12	211	0	0	15	269	9	168	44	800	67	1210	21	385	126	2277
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0	0	0	0	0	4160	0	0	0	4160	0	2781	0	0	0	0	0	0	0	3311	0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	2	129	0	0	0	0	0	0	0	0	0	0	0	0	2	152	0	0	5	324	0	0
Dictyosphaerium sp.	0	0	0	0	0	0	6	322	6	322	81	4437	64	3539	49	2703	49	2684	42	2301	67	3670
Gloeocystis planctonica	0	0	0.0	0	0.0	0	0	0	0	0	4	359	5	374	9	749	15	1235	0	0	3	239
Elakotothrix gelatinosa	0	0	2	231	4	461	9	921	5	491	13	1412	6	614	1	123	2	209	1	105	3	366
Eudorina elegans	10	2677	1	154	1	169	0	0	0	0	20	5100	10	2546	9	2396	0	0	13	3315	5	1275
Pandorina sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lagerheimia sp.	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocystis sp.	27	3819	12	1637	14	2027	23	3323	10	1412	42	6011	26	3655	18	2492	15	2121	35	4950	14	1980
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	48	0	0	0	0	0	15	0	12	0	0	0	0	0	2	0	0	0	17	0	0	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	2	219	5	515	6	644	2	274	9	986	3	383
Volvox aureus	0	0	0	0	0	0	176	10530	0	0	5.0	300	0	0	527	31590	6.0	360	0.0	0	0.0	0
Westella botryoides	0	0	0	0	0	0	0	0	0	0	8	518	0	0	27	1749	24	1554	0	0	0	0
unidentified Colonial green	0	0	4	329	15	1153	6	439	0	0	1	112	2	176	2	132	1	112	0	0	2	187
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0.0	0	3.3	280	6	497	9	796	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																						
Asterionella formosa	5	1394	0	0	0	56	3	819	0	0	8	2231	13	3604	2	655	9	2649	20	5578	14	4044
Aulacoseira granulata	7	2316	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2161	0	0	15	4786
Aulacoseira granulata var. *angustissima*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Attheya sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149	6	1793
Cocconeis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	260
Cyclotella stelligera	13	2072	16	2635	3	527	20	3276	17	2714	10	1673	6	1030	9	1498	7	1195	6	1036	3	478
Cyclotella sp.																						
Fragilaria crotonensis	57	20324	77	27516	86	30857	97	34556	88	31415	53	18898	87	30996	68	24503	62	22107	35	12658	44	15689
Fragilaria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitzschia sp.	0	194	1	428	3	1285	3	1141	2	684	3	1165	14	5476	20	7757	10	3884	16	6215	13	5244
Synedra sp.	0	0	2	649	0	0	1	230	0	0	2	981	6	2535	5	2074	6	2551	1	589	1	589
Amphora sp.	1	521	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	521	0	0
Epithemia sp.																						
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	0	0	0	0	0	0	0	1	110	1	64	0	0	1	110	0	0	0	55
Desmids (Mesotaeniaceae, Desmidiaceae)			0	0	0	0																
Closterium aciculare	0	0	0	0	0	0	0	0	1	350	0	0	1	350	0	0	0	0	0	0	0	0
Closterium acutum var. *variable*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closteriopsis sp.																					1	0
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	687	0	0	0	0	1	1613	1	1613	0	0	0	0	0	0	0	0	0	687	0	687
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. *gracilis*	0	0	0	3800	0	1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																						
Dinobryon sp.	12	705	8.2	486	142.7	8422	14	828	26	1553	5	323	11	621	29	1691	7	441	5	323	0	0
Cryptomonas sp.	0	0	1	158	0	0	0	0	0	0	0	72	1	84	1	84	0	72	1	143	0	0
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																						
Ceratium sp.	0	0					0	0	1	16380	0	0	2	65520	2	49140	1	27888	1	41832	0	13944
Ceratium hirundinella			0.3	7560	0.2	4760																
Gymnodinium sp. 1	2	2191	1	604	0	22	1	644	0	0	0	0	1	644	0	0	0	0	0	0	0	0
Gymnodinium sp. 2	0	0	0	14640	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peridinium sp.	0	1992	0	0	0	80	5	18720	1	4680	1	3984	1	2340	3	11700	1	5976	2	7968	1	3984
Gonyaulax sp.	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm																						
Flagellates < 5µm/unicells	29	2311	149	11946	160	12825	46	3697	54	4352	44	3546	30	2434	30	2387	53	4263	49	3904	33	2629

Lake Taupo phytoplankton enumeration (50 m van Dorn) 2016-17

Cell counts and biovolume

	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r	Van Dorn 50r
Sample code	HJ3	HJ3	HJ6	HJ6	IV3	IV3	IV6	IV6	KM3	KM3	LU3	LU3	MK3	MK3	NR2	NR2	NR6	NR6	QJ2	QJ2	SP3	SP3	UN1	UN2	WE3	WE3	XG1	XG1	YG2	YG2	ZS2	ZS2	BC3	BC3	CE3	CE3	DE3	DE3	EK3	EK3	GB3	GB3
Sampling date	6/07/2016	6/07/2016	27/07/2016	27/07/2016	10/08/2016	10/08/2016	23/08/2016	23/08/2016	12/09/2016	12/09/2016	27/09/2016	27/09/2016	12/10/2016	12/10/2016	2/11/2016	2/11/2016	23/11/2016	23/11/2016	8/12/2016	8/12/2016	26/01/2017	26/01/2017	16/02/2017	16/02/2017	1/03/2017	1/03/2017	16/03/2017	16/03/2017	28/03/2017	28/03/2017	19/04/2017	19/04/2017	3/05/2017	3/05/2017	16/05/2017	16/05/2017	29/05/2017	29/05/2017	15/06/2017	15/06/2017	28/06/2017	28/06/2017
SP.	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)
Blue greens (Cyanophyceae)																																										
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	0.0	0	0.2	23	0.0	0	0.0	0	0.6	73	0.0	0	0.0	0	0.0	0	16.8	1950	15.6	1814	0	0	1	70	3	355	0	20	0	8	2	281	0	8	0	0	0	0	1	154	1	111
Dolichospermum planctonicum (formerly Anabaena planctonica)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	1	101
Dolichospermum circinale (formerly Anabaena circinalis)																					0	0	0.0	0	0.0	0	1	192	1	305	0	0	1	305	0	0	0	0	0	35	0	0
Planktolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dolichospermum sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Anabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Schizothrix sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phormidium sp.	0.1	3	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.5	10	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanizomenon sp.	0.3	5	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pseudanabaena sp.	0.2	4	0.0	0	0.0	0	0.0	0	0.2	4	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gloeocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microcoleus sp.																																										
Greens (Chlorophyceae)																																										
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / *Ankistrodesmus falcatus*	33	1368	23	984	38	1583	20	830	38	1599	15	615	29	1199	35	1476	19	815	8	344	12	523	2	92	5	208	58	2432	53	2236	21	899	53	2236	12	516	8	335	34	1422	24	1004
Stichococcus contortus	1	26	4	79	0	0	0	0	10	184	7	119	0	0	3	53	0	0	0	0	0	0	2	30	0	0	0	0	0	0	4	72	0	0	0	0	10	179	32	574	95	1703
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0	0	0	0	0	5413	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	750	0	150	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	1	95	1	48	4	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	129	1	65
Dictyosphaerium sp.	0	0	7	403	0	0	2	121	15	805	0	0	9	483	0	0	8	463	0	0	0	0	0	0	0	0	0	0	0	0	2	110	0	0	5	257	0	0	35	1917	23	1287
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	80	0	0	0	0
Elakotothrix gelatinosa	1	115	2	192	0	0	1	154	3	269	1	115	1	115	0	0	1	115	0	0	0	0	1	115	0	0	1	123	0	0	1	157	0	0	0	0	0	0	0	52	1	105
Eudorina elegans	0	0	3	750	3	750	0	0	5	1312	0	0	0	0	6	1499	5	1312	14	3594	12	3060	2	417	3	801	7	1797	0	0	0	0	0	0	0	0	10	2677	12	3060	3	765
Pandorina sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	1	0	0	0	1	0	0	0	6	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Oocystis sp.	22	3170	14	2027	7	987	4	624	9	1247	9	1299	14	1975	11	1507	13	1871	5	665	9	1344	7	1013	4	546	4	581	4	498	16	2334	4	498	6	831	5	778	24	3394	20	2829
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	3	152	6	305	0	0	20	1047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	207	4	207
Sphaerocystis schroeteri	13	0	4	0	9	0	6	0	1	0	4	0	21	0	13	0	6	0	16	0	4	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	4	0	0	0	5	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	493	14	1589
Volvox aureus	0	0	0	0	0	0	146	8784	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149	8964	0	0	9	540
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	259	0	0	0	0	0	0	12	777	0	0
unidentified Colonial green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	549	0	0	0	0	1	75	0	0	0	0	0	0	0	0	2	187
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																																										
Asterionella formosa	103	28797	78	21828	85	23673	161	45194	32	8916	8	2152	10	2664	16	4407	30	8403	19	5405	4	1255	4	1230	11	3074	18	4914	0	0	0	0	0	0	9	2621	7	1952	10	2789	10	2789
Aulacoseira granulata	9	2723	30	9304	20	6127	16	4879	45	14069	34	10552	15	4765	17	5333	20	6354	15	4715	9	2933	0	0	0	0	0	0	0	0	0	0	0	0	2	544	3	926	4	1235	19	6021
Aulacoseira granulata var. *angustissima*	3	761	2	476	8	2189	7	1903	17	4377	8	2094	6	1523	12	3045	2	476	4	913	4	1036	7	1713	9	2284	0	0	0	0	0	0	0	0	0	0	0	0	4	1165	0	0
Attheya sp.	0	0	0	0	0	0	0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1046	3	1046
Cocconeis	0	0	1	574	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclotella stelligera	15	2342	19	3104	9	1464	10	1640	14	2284	7	1171	7	1113	8	1230	7	1113	6	936	3	478	10	1581	13	2108	15	2434	7	1123	6	956	7	1123	2	374	13	2072	8	1275	6	956
Cyclotella sp.																																										
Fragilaria crotonensis	56	19916	8	3014	15	5503	23	8255	36	12972	8	2752	19	6813	18	6551	17	6027	29	10472	57	20324	27	9827	22	7862	90	32252	37	13404	31	11054	37	13404	55	19686	61	21751	71	25316	43	15332
Fragilaria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1572	0	0	0	0	0	0	0	0	5	1747	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2496
Nitzschia sp.	1	571	5	1998	5	2141	2	856	7	2855	4	1427	4	1427	3	1142	1	285	1	456	0	194	1	214	1	214	3	1141	2	684	1	583	2	684	15	5704	28	11071	11	4467	24	9517
Synedra sp.	0	144	2	865	1	433	1	288	0	144	0	0	1	433	0	144	0	144	1	230	0	0	0	0	0	0	1	230	0	0	1	589	0	0	2	691	3	1373	3	1177	1	392
Amphora sp.	0	191	0	0	0	0	0	0	0	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	306	0	0	0	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epithemia sp.																																										
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	1	161	0	0	1	121	0	0	0	0	0	0	0	0	1	121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)																							0	0	0	0																
Closterium aciculare	0	0	0	0	0	0	0	0	1	658	0	0	0	0	0	0	0	219	1	350	1	597	0	18	0	0	0	0	1	350	0	0	1	350	1	350	0	0	0	0	0	0
Closterium acutum var. *variable*	1	414	0	0	1	276	0	0	0	0	0	0	0	138	0	138	0	0	0	0	0	0	1	207	1	414	0	0	0	0	0	188	0	0	0	0	0	0	0	0	0	0
Closteriopsis sp.																																										
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	505	0	0	0	505	0	0	0	0	0	41	0	0	0	0	1	1613	0	0	1	1613	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. *gracilis*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	73200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																																										
Dinobryon sp.	15	907	1	86	0	0	0	0	0	0	0	0	0	0	7	410	12	734	0	0	2	118	0	0	0	0	0	0	0	0	1	59	0	0	0	0	6	382	0	0	1	88
Cryptomonas sp.	0	53	1	158	1	105	1	105	0	0	0	0	0	0	0	0	0	53	0	0	0	0	1	158	0	0	1	84	1	84	0	0	1	84	0	0	2	287	0	72	0	0
Synura sp.	0	0	0	0	0	0	2	126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																																										
Ceratium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13944					0	0	1	16380	0	0	1	16380	1	16380	1	27888	2	55776	1	27888
Ceratium hirundinella																							4	107604	0	1680																
Gymnodinium sp. 1	0	403	0	0	0	0	0	0	0	0	0	403	0	0	0	403	0	0	0	0	0	0	0	33	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gymnodinium sp. 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	0	0	1	4392	3	11712	1	5856	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1992	1	3984	0	0
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm																																										
Flagellates < 5µm/unicells	25	3360	45	6127	57	7708	28	3755	21	2866	11	1482	23	3113	33	4496	31	4249	16	2211	10	797	51	4085	15	1186	21	1685	13	1076	10	797	13	1076	8	655	10	837	42	3347	26	2112

Lake Taupo phytoplankton species composition and biovolume (mm^3) 2015-2016																																									
From Site A (Mid Lake) 2/07/2015-02/06/2016																																									
10 m tube																																									
Sample code	NX1		NX1		NX4		NX4		QK1		QK1		QK4		QK4		SN1		SN1		TD1		TD1		TD4		TD4		UI1		UI1		UI4		UI4		VW1		VW1		XJ1		XJ1	
Sampling date	2/07/2015		2/07/2015		30/07/2015		30/07/2015		13/08/2015		13/08/2015		27/08/2015		27/08/2015		17/09/2015		17/09/2015		1/10/2015		1/10/2015		15/10/2015		15/10/2015		2/11/2015		2/11/2015		19/11/2015		19/11/2015		1/12/2015		1/12/2015		7/01/2016		7/01/2016	
	Cell		Biovolume		Cell		Biovolume		Cell		Biovolume		Cell		Biovolume		Cell		Biovolume		Cell		Biovolume		Cell		Biovolume		Cell		Biovolume		Cell		Biovolume		Cell		Biovolume		Cell		Biovolume	
Species composition by class	(per ml)		(μm^3)		(per ml)		(μm^3)		(per ml)		(μm^3)		(per ml)		(μm^3)		(per ml)		(μm^3)		(per ml)		(μm^3)		(per ml)		(μm^3)		(per ml)		(μm^3)		(per ml)		(μm^3)		(per ml)		(μm^3)		(per ml)		(μm^3)	
Blue greens (Cyanophyceae)	8	470	1	29	0	0	4	88	2	294	0	15	2	140	4	433	22	2544	13	1227	5	574	2	205	17	1952	25	3175	31	3541	2	229	1	145	7	407	2	169	2	32		
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	1	164	0	0	0	0	0	0	2	198	0	0	0	0	4	433	22	2538	10	1172	4	516	2	205	17	1940	25	2851	30	3537	2	227	1	145	3	328	1	155	0	0		
Dolichospermum planctonicum (formally; Anabaena planctonica)	1	205	0	0	0	0	0	59	1	96	0	0	1	122	0	0	0	0	0	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Planktolyngbya sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Dolichospermum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Anabaena flos-aquae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Anabaena sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Schizothrix sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Anabaena circinalis	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Chroococcus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aphanocapsa sp.	4	32	0	0	0	0	3	29	0	0	0	0	1	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Microcystis sp.	1	52	1	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Snowella sp.	1	18	0	6	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Phormidium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aphanothece sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aphanizomenon sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pseudanabaena sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Gloeocapsa sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Microcoleus sp.																																										
Greens (Chlorophyceae)	46	3138	176	7647	23	1776	160	9791	110	5680	111	4190	166	7937	52	3150	37	23700	78	5891	106	21774	85	37263	100	11679	40	4834	69	6014	61	6994	212	15333	261	17465	526	34226	66	12915		
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Monoraphidium sp. / Ankistrodesmus falcatus	29	1204	69	2886	14	591	89	3725	79	3297	55	2318	136	5703	38	1591	6	273	32	1363	10	432	5	231	21	876	0	0	0	0	0	0	0	0	0	0	6	246	10	430		
Stichococcus contortus	3	58	50	906	4	78	27	487	15	267	0	0	3	58	2	39	0	0	2	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Botryococcus braunii (colonies)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	19828	0	0	0	0	8640	0	27000	0	0	0	0	0	0	0	0	0	0	0	0	0	0		5549
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Crucigeniella sp	0	0	4	281	0	0	4	281	0	0	1	70	0	0	2	141	2	141	0	0	6	422	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4		238
Dictyosphaerium sp.	0	0	11	625	0	0	0	0	0	0	9	476	0	0	0	0	4	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	322	4	242	0	0	0	0		
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	1	40	0	0	0	0	0	0	0	0	0	0	0	0		
Elakatothrix gelatinosa	2	227	0	0	0	0	0	0	0	0	0	0	2	227	2	227	4	454	3	341	5	568	4	461	5	576	0	0	19	1960	0	0	0	0	4	384	3	346	4	461		
Eudorina elegans	5	1157	0	100	4	1108	11	2769	1	358	0	36	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1312	6	1499	0	0	0	0	0	0		
Pandorina sp.	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0		
Oocystis sp.	0	0	19	2766	0	0	16	2304	8	1169	4	615	12	1767	8	1152	19	2766	29	4148	81	11523	61	8653	72	10212	28	3985	29	4054	37	5301	41	5769	47	6652	49	7016	44	6237		
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quadrigula lacustris	0	0	0	0	0	0	0	0	2	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Scenedesmus sp.	0	0	2	84	0	0	4	225	4	228	13	675	3	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	381	1	57	6	305	5	266	0	0		
Sphaerocystis schroeteri	0	0	19	0	0	0	9	0	0	0	26	0	10	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	21	0	10	0	29	0	32	0	23	0	3	0		
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Volvox aureus	7	414	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128	7686	165	9882	439	26352	0	0		
Westella botryoides	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	571	0	0	0	0	0	0	0	0	0	0	0		
unidentified Colonial green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	906	0	0	0	3	220	0	0	0	0	0	0	0	0	0	0	0		
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	184	0	12	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0		
Diatoms (Bacillariophyceae)	182	58990	234	71574	18	5678	120	35996	147	47557	128	39875	98	30753	45	12975	45	11774	39	9783	12	2829	20	4971	5	1824	191	65398	18	5183	18	3862	46	14443	60	18853	51	15907	49	15276		
Asterionella formosa	55	15299	76	21207	4	1060	16	4543	12	3382	21	5756	36	9998	6	1818	17	4847	11	3030	6	1666	8	2306	2	461	0	0	0	0	0	3	820	4	1230	7	2050	7	2050		
Aulacoseira granulata	0	0	78	24318	11	3353	61	18944	104	32336	48	14926	23	7044	25	7882	9	2851	12	3857	0	0	1	340	0	0	0	0	9	2893	0	0	10	3063	0	0	3	908	3	908		
Aulacoseira granulata var. angustissima	21	5345	24	6189	0	0	14	3515	0	0	10	2673	0	0	0	0	8	2110	2	563	0	0	3	856	1	285	26	6661	0	0	0	0	0	0	0	0	0	0	0	0		
Attheya sp.	0	0	0	0	0	0	0	0	1	165	0	0	0	0	1	162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Cocconeis	0	0	1	283	0	0	0	0	0	0	0	0	1	283	0	0	0	0	1	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	191	0	191		
Cyclotella stelligera	1	87	3	433	1	87	6	1038	0	18	6	952	4	692	7	1125	9	1472	12	1991	6	952	5	878	0	0	2	390	5	791	7	1054	7	1113	11	1757	8	1288	8	1288		
Cyclotella sp.									0	50																																
Fragilaria crotonensis	103	36992	42	15107	3	968	22	7744	0	143	41	14720	31	11040	1	387	0	0	0	0	0	0	2	590	0	0	162	57871	0	0	5	1834	26	9303	44	15723	30	10613	27	9565		
Fragilaria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Nitzschia sp.	3	1266	3	1266	1	211	1	211	0	0	1	422	2	844	3	1055	1	211	0	0	0	211	0	0	1	428	1	476	4	1499	1	571	0	0	0	143	2	856	2	714		
Synedra sp.	0	0	7	2771	0	0	0	0	29	11464	1	426	2	853	1	426	0	0	0	0	0	0	0	0	2	649	0	0	0	0	0	0	0	144	0	0	0	0	1	288		
Amphora sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	191		
Epithemia sp.									0	0																																
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0		
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Small unknown diatom sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	119	0	0	1	60	0	0	0	0	0	0	0	0	0	0	4	403	0	0	0	0	0	0	1	81		
Desmids (Mesotaeniaceae, Desmidiaceae)	0	315	3	1620	0	0	2	612	0	29	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Closterium aciculare	0	0	3	1620	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Closterium acutum var. variable	0	94	0	0	0	0	2	612	0	23	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Staurastrum tangaroaii	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Staurodesmus unicorns var. gracilis	0	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Chrysophtya (Chrysophyceae)	0	22	0	0	0	0	0	0	0	0	0	20	0	0	2	89	3	188	1	30	1	63	12	680	9	518	0	11	20	1198	5	281	4	238	0	0	6	367	0	0		
Dinobryon sp.	0	22	0	0	0	0	0	0	0	0	0	20	0	0	2	89	3	188	1	30	1	63	12	680	9	518	0	11	20	1198	5	281	4	238	0	0	6	367	0	0		
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Dinoflagellates (Dinophyceae)	1	1195	0	80	1	595	1	2163	0	2520	0	200	0	160	0	0	0	280	0	640	0	4480	3	14916	1	11848	1	6890	0	600	1	20496	0	1464	0	1464	1	13176	0	0		
Ceratium sp.											0	0	0	0	0	0	0	280	0	560											1	20496	0	0	0	0	0	10248	0	0		
Ceratium hirundinella	0	560							0	1680											0	4480	0	9240	0	10640	0	2450														
Gymnodinium sp. 1	0	0	0	0	1	595	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1190	1	1208	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Gymnodinium sp. 2	1	595	0	0	0	0	0	0	0	800	0	0	0	0	0	0	0	0	0	0	0	0	0	1200	0	0	0	2000	0	0	0	0	0	0	0	0	0	0	0	0		
Peridinium sp.	0	40	0	80	0	0	1	2163	0	40	0	200	0	160	0	0	0	0	0	80	0	0	0	40	0	0	0	0	0	40	0	0	0	1464	0	1464	1	2928	0	0		
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3246	0	0	1	2440	0	0	0	0	0	0	0	0	0	0	0	0		
Flagellates	128	17309	52	7016	20	2701	49	6649	141	19048	31	4236	62	8399	44	5916	20	2707	36	4893	162	21837	391	52844	131	17639	93	12600	22	2965	15	1976	38	5142	28	3755	27	3607	20	2774		
Cryptomonas sp.	0	0	1	78	0	0	1	78	0	0	0	0	0	0	0	0	1	78	0	0	0	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0	0	0	1	105		
Flagellates < 5µm/unicells	128	17309	51	6938	20	2701	49	6571	141	19048	31	4236	62	8399	44	5916	19	2629	36	4893	162	21837	391	52844	131	17639	93	12600	22	2965	15	1976	38	5089	28	3755	27	3607	20	2668		

Lake Taupo phytoplankton enumeration (50 m van Dorn) 2015-16
Cell counts and biovolume

Sample code	NX2	NX2	NX6	NX6	QK3	QK3	QK6	QK6	SN3	SN3	TD3	TD3	TD6	TD6	UI3	UI3	UI6	UI6
Sampling date	2/07/2015	2/07/2015	30/07/2015	30/07/2015	13/08/2015	13/08/2015	27/08/2015	27/08/2015	17/09/2015	17/09/2015	1/10/2015	1/10/2015	15/10/2015	15/10/2015	2/11/2015	2/11/2015	19/11/2015	19/11/2015
	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
Species composition by class	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)
Blue greens (Cyanophyceae)	1	107	1	127	2	132	0	6	0	0	0	0	0	12	0	0	0	0
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	1	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dolichospermum planctonicum (formally; Anabaena planctonica)	0	0	1	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Planktolyngbya sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dolichospermum sp.	0	0	0	0	0	112	0	0	0	0	0	0	0	0	0	0	0	0
Anabaena flos-aquae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Anabaena sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Schizothrix sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Anabaena circinalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chroococcus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanocapsa sp.	0	0	0	0	2	20	0	0	0	0	0	0	0	0	0	0	0	0
Microcystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Snowella sp.	0	0	0	6	0	0	0	0	0	0	0	0	0	12	0	0	0	0
Phormidium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanothece sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanizomenon sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pseudanabaena sp.	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0
Gloeocapsa sp.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greens (Chlorophyceae)	52	4623	106	4247	177	7609	196	10042	108	5881	102	4978	130	8992	88	4647	64	3166
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	28	1159	54	2272	81	3408	89	3749	54	2283	61	2568	103	4317	54	2272	35	1477
Stichococcus contortus	6	0	15	0	50	896	39	701	0	0	2	0	15	273	2	0	5	0
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0	0	0	0	0	0	0	0	0	22	0	0	0	2163	0	0	0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	0	0	2	141	2	141	1	70	0	0	3	211	1	70	3	211	8	492
Dictyosphaerium sp.	0	0	0	0	0	0	25	1369	7	362	0	0	0	0	11	625	9	506
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
Elakotothrix gelatinosa	2	227	1	114	2	227	5	568	0	0	1	114	0	0	0	0	0	0
Eudorina elegans	10	2458	1	184	1	159	1	369	4	983	1	189	5	1246	1	189	0	0
Pandorina sp	0	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocystis sp.	2	230	11	1536	17	2381	19	2766	4	546	9	1306	6	922	8	1152	5	691
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	2	355	0	0	0	0	0	0	1	180	0	0	0	0	0	0	0	0
Scenedesmus sp.	2	113	0	0	6	338	9	450	13	685	11	591	0	0	4	197	0	0
Sphaerocystis schroeteri	0	0	22	0	17	0	6	0	12	0	9	0	0	0	4	0	0	0
Tetraedon gracile	0	0	0	0	1	60	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	0	13	821	0	0	0	0	0	0	0	0
unidentified Colonial green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)	373	123982	366	113437	180	53742	149	46900	301	73517	248	81239	155	49100	111	32410	220	66469
Asterionella formosa	43	11967	95	26509	50	13936	16	4544	14	3843	19	5453	24	6817	25	6968	9	2575
Aulacoseira granulata	25	7715	80	24653	53	16436	72	22473	105	32676	51	15765	42	12914	42	12914	91	28175
Aulacoseira granulata var. angustissima	49	12659	47	12097	28	7314	12	3095	23	5995	18	4782	18	4642	21	5345	58	15191
Attheya sp.	1	162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclotella stelligera	2	346	10	1558	7	1125	3	519	4	703	10	1645	4	606	7	1125	7	1125
Cyclotella sp.									131	20906								
Fragilaria crotonensis	251	89867	123	44159	41	14720	40	14332	0	93	145	51906	64	22854	15	5423	53	18980
Fragilaria sp.	0	0	0	0	0	0	5	1937	0	0	0	0	0	0	0	0	0	0
Nitzschia sp.	3	1266	4	1477	1	211	0	0	0	0	4	1688	3	1055	1	422	1	422
Synedra sp.	0	0	8	2984	0	0	0	0	24	9301	0	0	1	213	1	213	0	0
Amphora sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eunotia sp.	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0
Epithemia sp.									0									
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)	1	408	3	1620	4	2268	4	1428	2	621	7	1154	2	1154	1	746	3	1620
Closterium aciculare	0	0	3	1620	4	2268	0	0	0	0	0	0	0	0	0	0	3	1620
Closterium acutum var. variable	1	408	0	0	0	0	4	1428	2	621	1	408	1	408	0	0	0	0
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	1	746	1	746	1	746	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. gracilis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophyta (Chrysophyceae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	575	1	64
Dinobryon sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	575	1	64
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)	0	2600	1	595	1	1190	3	10820	5	11551	1	2164	1	17312	1	595	0	0
Ceratium sp.			0	0	0	0	0	0			0	0	1	15148	0	0	0	0
Ceratium hirundinella	0	1400							0	1120								
Gymnodinium sp. 1	0	0	1	595	1	1190	0	0	4	4831	0	0	0	0	1	595	0	0
Gymnodinium sp. 2	0	1200	0	0	0	0	0	0	0	5600	0	0	0	0	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	3	10820	0	0	1	2164	1	2164	0	0	0	0
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates	236	31916	56	7596	53	7162	51	6943	93	12525	29	3944	32	4387	34	4601	17	2337
Cryptomonas sp.	0	0	0	0	1	78	1	78	0	0	0	0	1	78	0	0	0	0
Flagellates < 5µm/unicells	236	31916	56	7596	52	7084	51	6865	93	12525	29	3944	32	4309	34	4601	17	2337

Sample code	VW3	VW3	XJ3	XJ3	XJ6	XJ6	YJ3	YJ3	YJ6	YJ6	AG3	AG3	AG6	AG6	BS3	BS3	BS6	BS6	DK3	DK3	FI3	FI3
Sampling date	1/12/2015	1/12/2015	7/01/2016	7/01/2016	21/01/2016	21/01/2016	3/02/2016	3/02/2016	16/02/2016	16/02/2016	9/03/2016	9/03/2016	22/03/2016	22/03/2016	8/04/2016	8/04/2016	20/04/2016	20/04/2016	6/05/2016	6/05/2016	2/06/2016	2/06/2016
	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
Species composition by class	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)
Blue greens (Cyanophyceae)	0	5	41	4777	0	51	19	2173	6	715	5	531	5	637	1	85	0	0	1	59	2	162
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	0	0	41	4777	0	51	19	2169	6	715	5	531	5	637	1	85	0	0	1	59	1	138
Dolichospermum planctonicum (formally; Anabaena planctonica)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Planktolyngbya sp.	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dolichospermum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Anabaena flos-aquae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Anabaena sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Schizothrix sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Anabaena circinalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chroococcus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanocapsa sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microcystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Snowella sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phormidium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanothece sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanizomenon sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	25
Pseudanabaena sp.	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gloeocapsa sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greens (Chlorophyceae)	95	5014	32	87914	28	9449	36	2790	11	4153	41	8683	51	5140	19	1131	253	18811	49	3978	201	55299
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	49	2045	6	273	2	92	18	738	0	0	29	1199	22	907	12	507	9	369	27	1153	11	461
Stichococcus contortus	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	53
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0	0	0	84700	0	6930	0	0	0	2950	0	5630	0	0	0	0	0	0	0	0	0	14616
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	2	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	95
Dictyosphaerium sp.	25	1369	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	443	0	0
Gloeocystis planctonica	0	0	0	0	9	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	0	0	2	227	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	384
Eudorina elegans	0	0	0	0	1	166	0	123	0	0	0	61	7	1687	0	0	16	4123	4	1031	138	35417
Pandorina sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Oocystis sp.	10	1460	15	2151	16	2261	12	1715	6	866	13	1793	18	2547	4	624	8	1143	10	1351	29	4158
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	114
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	4	0	3	0	0	0	0	0	10	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	0	0	3	153	0	0	0	0	0	0	220	13176	0	0	0	0
Westella botryoides	0	0	9	563	0	0	3	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unidentified Colonial green	0	0	0	0	0	0	0	0	2	183	0	0	0	0	0	0	0	0	0	0	0	0
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)	140	41545	64	16607	61	15128	57	14667	26	6002	55	15833	70	21945	44	14399	64	20506	33	10398	59	17873
Asterionella formosa	15	4090	2	454	0	0	3	922	1	180	8	2306	14	3894	1	410	15	4099	2	512	17	4714
Aulacoseira granulata	82	25492	0	0	2	681	0	0	0	0	39	12083	18	5560	12	3744	12	3631	4	1362	2	681
Aulacoseira granulata var. angustissima	24	6189	55	14347	48	12561	47	12133	17	4443	0	0	0	0	0	0	0	0	0	0	4	952
Attheya sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	1	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	383
Cyclotella stelligera	5	866	4	606	9	1493	5	791	7	1171	8	1230	6	937	3	468	3	527	4	586	7	1171
Cyclotella sp.																						
Fragilaria crotonensis	11	3874	2	775	1	393	1	393	1	207	0	0	28	10089	21	7469	33	11924	21	7469	22	7993
Fragilaria sp.	0	0	0	0	0	0	0	0	0	0	0	0	3	1179	6	2227	0	0	0	0	0	0
Nitzschia sp.	2	633	1	211	0	0	1	428	0	0	1	214	1	285	0	0	1	285	1	285	4	1570
Synedra sp.	0	0	1	213	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144	1	288
Amphora sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epithemia sp.																						
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	1	119	0	0	0	0	0	0	0	0	0	0	0	0	1	81	0	40	0	40	1	121
Desmids (Mesotaeniaceae, Desmidiaceae)	1	408	0	0	1	936	3	2892	0	24	1	414	1	276	0	0	1	276	0	505	0	0
Closterium aciculare	0	0	0	0	1	329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. variable	1	408	0	0	1	207	2	621	0	8	1	414	1	276	0	0	1	276	0	0	0	0
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	2	2271	0	15	0	0	0	0	0	0	0	0	0	505	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. gracilis	0	0	0	0	0	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophyta (Chrysophyceae)	29	1724	0	0	0	0	2	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinobryon sp.	29	1724	0	0	0	0	2	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)	1	2164	1	7564	0	10680	0	3200	0	1778	0	0	0	0	0	0	0	0	0	0	1	5856
Ceratium sp.	0	0									0	0	0	0	0	0	0	0	0	0	0	0
Ceratium hirundinella			0	0	0	280	0	0	0	0												
Gymnodinium sp. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gymnodinium sp. 2	0	0	0	5400	0	10400	0	3200	0	1778	0	0	0	0	0	0	0	0	0	0	0	0
Peridinium sp.	1	2164	1	2164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5856
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates	32	4309	105	14174	167	22531	100	13489	49	6670	16	2233	13	1729	11	1538	11	1482	15	2079	20	2675
Cryptomonas sp.	0	0	1	78	0	0	0	0	0	0	1	158	0	0	1	105	0	0	0	53	1	105
Flagellates < 5µm/unicells	32	4309	104	14096	167	22531	100	13489	49	6670	15	2075	13	1729	11	1433	11	1482	15	2026	19	2569

Lake Taupo phytoplankton species composition and biovolume (10 m tube) 2014-2015

From Site A (Mid Lake) 1/07/2014-18/06/2015

Sample code	WO1	WO1	WO4	WO4	XZ1	XZ1	XZ4	XZ4	ZJ1	ZJ1	AP1	AP1	AP4	AP4	BY1	BY1	BY4	BY4	DY1	DY1
Sampling date	1/07/2014	1/07/2014	21/07/2014	21/07/2014	11/08/2014	11/08/2014	27/08/2014	27/08/2014	9/09/2014	9/09/2014	8/10/2014	8/10/2014	20/10/2014	20/10/2014	5/11/2014	5/11/2014	25/11/2014	25/11/2014	18/12/2014	18/12/2014
	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
Species composition by class	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)
Blue greens (Cyanophyceae)																				
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	5.8	668	3.4	397	1.5	176	0.9	102	0.8	96	1.4	162	8.7	1007	10.1	1168	10.1	1176	2.1	241
Dolichospermum planctonicum (formerly Anabaena planctonica)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Planktolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Schizothrix sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum circinale	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.2	2	0.0	0	0.2	3	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.0	0	0.0	0	6.0	54	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.4	8	0.0	0	0.8	16
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	2.4	22	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gloeocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																				
Actinastrum hantzschii	0	0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	33	1386	32	1363	105	4431	88	3681	47	1977	36	1522	14	591	19	818	14	568	41	1704
Stichococcus contortus	6	117	38	682	90	1626	56	1003	43	779	9	156	4	78	31	565	13	234	2	39
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0	3178	0	2943	0	0	0	4790	0	0	0	0	0	6814	0	0	0	0	0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	1	70	0	0	0	0	4	281	2	141	2	141	3	211	0	0	0	0	5	352
Dictyosphaerium sp.	67	3690	23	1279	0	0	42	2291	0	0	0	0	11	595	16	893	0	0	0	0
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakatothrix gelatinosa	1	114	1	114	6	682	0	0	2	227	0	0	1	114	0	0	5	568	0	0
Eudorina elegans	0	56	0	61	0	41	0	46	0	0	0	0	0	0	0	0	0	0	0	0
Pandorina sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocystis sp.	3	461	7	999	0	0	4	538	15	2151	8	1076	5	691	3	461	8	1076	11	1536
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	2	0	0	0	6	0	15	0	19	0	25	0
Tetraedon gracile	0	0	0	0	0	0	1	60	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unidentified Colonial green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																				
Asterionella formosa	25	6968	40	11210	69	19389	39	11058	54	15148	10	2878	9	2424	9	2575	6	1818	5	1515
Aulacoseira granulata	15	4528	16	5031	39	12243	27	8386	148	45953	70	21802	47	14423	10	3019	20	6205	3	839
Aulacoseira granulata var. angustissima	21	5486	4	985	34	8721	11	2813	40	10409	27	7033	25	6470	12	3095	9	2391	0	0
Attheya sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	2	849	1	566	0	0	0	0	1	566	1	283	1	283	0	0	1	566	0	0
Cyclotella stelligera	10	1558	9	1472	10	1558	6	1039	10	1645	8	1212	8	1212	8	1298	8	1298	3	519
Fragilaria crotonensis	62	22273	53	18980	57	20530	40	14332	20	7166	3	1162	20	7166	12	4261	41	14526	22	7941
Fragilaria sp.	0	0	0	0	0	0	18	6585	0	0	0	0	0	0	0	0	0	0	0	0
Nitzschia sp.	1	211	7	2743	2	844	6	2321	4	1477	2	633	0	0	1	422	3	1055	3	1055
Synedra sp.	1	213	0	0	1	213	4	1705	2	639	2	639	2	639	1	426	2	639	2	639
Amphora sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epithemia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	2	238	3	298	2	179	1	119	1	119	0	0	1	119	1	119	3	357	2	179
Desmids (Mesotaeniaceae, Desmidiaceae)																				
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	0	0	1	324	0	0	0	0	0	0
Closterium acutum var. variable	4	1428	2	612	2	612	0	0	2	612	0	0	0	0	1	408	0	0	1	408
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. gracilis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																				
Dinobryon sp.	21	1213	0	0	0	0	11	670	0	0	8	479	47	2745	110	6480	227	13406	23	1341
Cryptomonas sp.	0	0	0	0	0	0	2	234	0	0	0	0	0	0	1	78	1	78	0	0
Synura sp.	0	0	0	0	0	0	3	187	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																				
Ceratium hirundinella	0	2100	0	0	0	0	0	0	0	0	0	0	0	0	0	2100	0	2100	0	2100
Gymnodinium sp. 1	1	595	0	0	1	1190	1	595	0	0	0	0	1	595	0	0	0	0	0	0
Gymnodinium sp. 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peridinium sp.	0	0	0	0	1	4328	0	0	0	0	1	2164	0	0	4	15148	0	0	1	4328
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5μm																				
Flagellates < 5μm/unicells	32	1117	48	1666	25	890	56	1950	28	985	22	757	133	4639	35	1231	40	1401	21	738

Sample code	FE1	FE1	FE4	FE4	GN1	GN1	HE1	HE1	HN1	HN1	JA1	JA1	JA4	JA4	KS1	KS1	KS4	KS4	MW1	MW1
Sampling date	15/01/2015	15/01/2015	29/01/2015	29/01/2015	12/02/2015	12/02/2015	26/02/2015	26/02/2015	9/03/2015	9/03/2015	9/04/2015	9/04/2015	22/04/2015	22/04/2015	11/05/2015	11/05/2015	27/05/2015	27/05/2015	18/06/2015	18/06/2015
	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
Species composition by class	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)
Blue greens (Cyanophyceae)																				
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	0.0	0	3.3	383	7.5	871	4.6	529	22.0	2547	25.6	2966	12.3	1421	19.2	2221	8.0	922	0.9	99
Dolichospermum planctonicum (formerly Anabaena planctonica)	0.0	0	1.7	266	2.1	338	0.2	32	1.1	431	0.9	141	0.0	0	1.0	160	0.3	40	0.4	59
Planktolyngbya sp.	0.0	0	0.6	6	0.0	0	0.0	0	0.0	0	3.7	41	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Schizothrix sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum circinale	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	25.4	229	3.4	31
Microcystis sp.	0.0	0	0.0	0	3.2	256	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Snowella sp.	3.6	90	0.0	0	0.4	11	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.8	16	0.0	0	0.0	0	0.0	0
Gloeocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																				
Actinastrum hantzschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	154	6456	2	69	0	0	0	0	1	46	6	254	5	208	10	438	178	7494	28	1176
Stichococcus contortus	0	0	0	0	0	0	0	0	0	0	0	0	4	79	8	148	103	1858	37	662
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0	0	0	0	0	0	0	0	0	0	0	124000	0	0	0	0	0	7882	0	38976
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	115	0	0
Crucigeniella sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	71	1	71
Dictyosphaerium sp.	9	483	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	6	332
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
Elakatothrix gelatinosa	1	115	0	0	0	0	1	115	2	231	2	231	2	231	3	346	5	519	3	346
Eudorina elegans	0	41	0	0	0	0	0	82	0	82	1	179	0	0	0	0	0	64	1	151
Pandorina sp.	0	0	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	26	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
Oocystis sp.	25	3586	14	1949	10	1481	6	858	10	1481	5	702	6	858	8	1091	9	1325	6	858
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	10	0	20	0	26	0	25	0
Tetraedon gracile	0	0	0	0	1	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	0	0	18	1056	4	264	0	0	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unidentified Colonial green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	206	0	0
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	7	0	0	0	5	0	0	0	0	0	19	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																				
Asterionella formosa	4	1230	1	307	3	769	2	615	1	190	0	39	0	6	0	36	0	90	0	78
Aulacoseira granulata	0	0	0	0	2	511	0	0	0	31	0	0	0	0	6	1872	4	1191	14	4255
Aulacoseira granulata var. angustissima	2	571	0	62	0	99	0	71	1	146	0	44	0	0	0	0	0	0	0	0
Attheya sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	0	0	0	0	0	0	0	0	1	287	0	0	0	0	0	0
Cyclotella stelligera	2	351	2	264	2	264	1	176	0	0	0	0	1	176	1	176	2	351	4	615
Fragilaria crotonensis	30	10810	14	5066	2	595	5	1693	4	1504	4	1271	0	0	0	136	0	0	1	279
Fragilaria sp.	0	0	0	0	0	0	0	0	0	0	0	0	4	1376	0	0	4	1376	0	0
Nitzschia sp.	1	428	0	0	1	214	1	214	0	0	1	428	5	1927	10	3854	17	6637	7	2783
Synedra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1514	5	1947
Amphora sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epithemia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	121	2	242	1	121
Desmids (Mesotaeniaceae, Desmidiaceae)											0	0								
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. variable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	414	1	207
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. gracilis	1	10980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																				
Dinobryon sp.	54	3207	2	142	36	2105	15	907	26	1522	12	713	0	0	18	1037	12	680	0	0
Cryptomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	1	79	0	0	1	79	2	237
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																				
Ceratium hirundinella	2	35700	0	3360	0	1960	0	840	0	1470	0	1680	0	0	0	0	0	0	0	0
Gymnodinium sp. 1	1	550	0	0	1	604	0	0	0	0	0	11	0	33	0	0	0	44	0	0
Gymnodinium sp. 2	0	6000	0	0	2	43920	0	0	0	0	0	400	0	0	0	0	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	1	2196	1	4328	0	0	0	80	0	160	0	200	0	120
Gonyaulax sp.	4	8784	1	1098	9	18666	5	9882	14	28548	4	7686	0	0	0	0	0	0	0	0
Flagellates 5μm																				
Flagellates < 5μm/unicells	38	1345	58	2018	181	6322	63	2210	153	5361	15	2001	36	4817	26	3483	35	4743	27	3706

Lake Taupo phytoplankton enumeration (50 m van Dorn) 2014-15

Cell counts and biovolume

Sample code	WO3	WO3	WO6	WO6	XZ3	XZ3	XZ6	XZ6	ZJ3	ZJ3	AP3	AP3	AP6	AP6	BY3	BY3	BY6	BY6	DY3	DY3
Sampling date	1/07/2014	1/07/2014	21/07/2014	21/07/2014	11/08/2014	11/08/2014	27/08/2014	27/08/2014	9/09/2014	9/09/2014	8/10/2014	8/10/2014	20/10/2014	20/10/2014	5/11/2014	5/11/2014	25/11/2014	25/11/2014	18/12/2014	18/12/2014
Species composition by class	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})
Blue greens (Cyanophyceae)																				
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	10.9	1260	0.2	17	1.3	154	1.0	115	1.1	122	2.2	252	0.3	29	10.5	1215	4.8	557	3.6	421
Dolichospermum planctonicum (formerly Anabaena planctonica)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Planktolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Schizothrix sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.1	2	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.0	20	0.0	0	0.0	0
Aphanothece sp.	0.0	0	2.5	23	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gloeocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																				
Actinastrum hantzschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	22	934	40	1695	72	3022	90	3784	53	2211	19	811	35	1450	9	369	32	1351	75	3145
Stichococcus contortus	23	421	16	295	93	1674	74	1327	77	1390	7	126	16	295	9	168	21	379	27	484
Kirchneriella contorta	0	0	0	0	5	154	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0	0	0	0	0	0	0	0	0	0	0	1563	0	0	0	4635	0	0	0	5879
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	1	76	0	0	8	494	0	0	4	228	2	152	4	228	2	152	2	152	2	152
Dictyosphaerium sp.	26	1448	25	1351	0	0	0	0	0	0	0	0	16	869	0	0	0	0	6	354
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakatothrix gelatinosa	2	246	8	799	2	246	8	799	0	0	0	0	1	123	0	0	0	0	2	246
Eudorina elegans	0	0	0	0	0	0	0	9	0	32	0	4	0	0	0	0	0	4	0	0
Pandorina sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0
Oocystis sp.	9	1246	9	1329	6	914	12	1661	7	997	18	2575	9	1329	4	498	5	748	8	1080
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	5	243	0	0	0	0	0	0	5	243	0	0	0	0	2	122
Sphaerocystis schroeteri	7	0	0	0	12	0	14	0	7	0	12	0	18	0	35	0	9	0	2	0
Tetraedon gracile	0	0	0	0	0	0	1	64	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unidentified Colonial green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apiocystis sp.	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																				
Asterionella formosa	23	6552	43	12121	85	23751	104	29156	50	14087	15	4095	12	3276	24	6716	2	655	9	2457
Aulacoseira granulata	12	3627	7	2176	40	12513	144	44793	130	40441	80	24845	104	32280	68	21218	23	7073	5	1632
Aulacoseira granulata var. angustissima	0	0	6	1673	41	10647	30	7757	39	10191	17	4411	40	10343	5	1369	11	2738	0	0
Attheya sp.	1	351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	0	0	1	612	0	0	0	0	0	0	0	0	1	306	0	0
Cyclotella stelligera	11	1778	7	1123	11	1778	15	2340	13	2059	8	1217	9	1404	4	655	5	749	9	1498
Fragilaria crotonensis	33	11938	25	8796	61	21781	63	22618	26	9215	2	838	8	2932	18	6492	36	12985	64	22828
Fragilaria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitzschia sp.	1	456	2	913	11	4107	2	913	1	456	1	228	0	0	0	0	1	228	4	1597
Synedra sp.	0	0	1	461	4	1383	1	461	2	691	2	691	1	461	3	1152	1	461	6	2535
Amphora sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epithemia sp.			0	0	1	306	0	0	0	0	0	0	0	0	1	612	0	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	1	129	2	193	2	193	1	129	1	129	2	257	2	193	1	129	1	129	3	322
Desmids (Mesotaeniaceae, Desmidiaceae)																				
Closterium aciculare	0	0	0	0	1	701	2	1402	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. variable	5	1764	2	882	0	0	0	0	1	441	1	441	0	0	0	0	0	0	2	882
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. gracilis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																				
Dinobryon sp.	4	207	0	0	0	0	0	0	0	0	19	1104	2	138	36	2140	19	1139	0	0
Cryptomonas sp.	1	84	1	84	0	0	0	0	1	84	0	0	0	0	0	0	0	0	0	0
Synura sp.	0	0	2	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																				
Ceratium hirundinella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	420
Gymnodinium sp. 1	0	0	1	644	1	644	0	0	0	0	0	0	1	1287	0	0	0	0	0	0
Gymnodinium sp. 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2340	0	0
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	1	1170	0	0	0	0	0	0	0	0
Flagellates 5μm																				
Flagellates < 5μm/unicells	33	1167	43	1495	49	1699	32	1126	32	1106	23	819	29	1024	35	1208	23	819	20	696

Sample code	FE3	FE3	FE6	FE6	GN3	GN3	HE3	HE3	HN3	HN3	HN6	HN6	JA3	JA3	JA6	JA6	KS3	KS3	KS6	KS6	MW3	MW3
Sampling date	15/01/2015	15/01/2015	29/01/2015	29/01/2015	12/02/2015	12/02/2015	26/02/2015	26/02/2015	9/03/2015	9/03/2015	23/03/2015	23/03/2015	9/04/2015	9/04/2015	22/04/2015	22/04/2015	11/05/2015	11/05/2015	27/05/2015	27/05/2015	18/06/2015	18/06/2015
Species composition by class	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})	Cell (per ml)	Biovolume (μm^{3})
Blue greens (Cyanophyceae)																						
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	0.0	0	0.0	0	1.7	195	0.1	9	1.8	203	99.6	11554	0.7	79	0.2	19	4.2	492	3.6	421	6.4	738
Dolichospermum planctonicum (formerly Anabaena planctonica)	0.0	0	0.0	0	1.4	222	0.2	32	0.0	0	0.3	48	0.0	0	0.3	42	0.0	0	0.4	69	0.4	69
Planktolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.5	184
Schizothrix sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	3.3	30	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	13.0	117	10.0	90
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.4	112	0.0	0
Snowella sp.	0.3	7	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.7	14	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gloeocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																						
Actinastrum hantzschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	93	3920	2	92	5	231	3	115	20	853	0	0	11	461	142	5972	111	4681	158	6618	39	1637
Stichococcus contortus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0	104	1868	1	0
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	0	0	50	0	34200	0	0	0	13775	0	5200	0	10400	0	0	0.0	0	0	0	0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	0	0	0	0	0	0	0	0	0	16	2	143	2	143	4	250	4	285	2	143	2	143
Dictyosphaerium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Elakatothrix gelatinosa	2	231	0	0	0	0	0	0	0	0	9	922	0	0	0	0	0	0	3	288	2	231
Eudorina elegans	0	37	1	159	0	61	1	364	0	81	1	264	6	1608	0	87	2	384	20	5200	1	358
Pandorina sp	0	0	0	0	0	0	0	0	0	8	0	102	0	0	0	41	0	0	0	0	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocystis sp.	9	1247	3	468	3	468	4	624	7	1013	13	1871	8	1169	10	1403	4	546	13	1793	6	858
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	7	0	50	0	33	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	30	1800	34	2016	0	0	0	0	165	9882	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unidentified Colonial green	0	0	0	0	0	0	4	351	4	0	0	0	0	33	0	0	0	0	0	0	0	2
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																						
Asterionella formosa	0	0	14	3997	44	12298	21	5995	21	5841	8	2306	24	6610	25	6917	19	5380	10	2767	34	9531
Aulacoseira granulata	3	1021	0	0	0	0	0	0	7	2042	0	0	0	0	0	0	5	1702	12	3744	13	3914
Aulacoseira granulata var. angustissima	0	83	0	120	6	1622	4	1144	3	796	1	169	2	390	0	0	0	0	0	0	0	0
Attheya sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	287	0	0
Cyclotella stelligera	4	615	2	264	2	351	1	176	3	527	1	176	1	176	1	176	2	351	1	176	4	615
Fragilaria crotonensis	21	7469	5	1905	0	0	37	13168	10	3666	7	2391	6	2048	0	0	0	86	7	2359	2	558
Fragilaria sp.	0	0	0	0	0	0	1	393	0	0	0	0	1	430	0	0	0	0	0	0	0	0
Nitzschia sp.	5	1927	1	428	2	642	1	214	0	0	0	0	1	428	2	642	3	1071	13	4925	10	3854
Synedra sp.	0	0	0	0	0	0	0	0	0	0	0	0	3	1298	5	1947	2	649	2	865	10	3894
Amphora sp.	1	287	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	287	0	0
Epithemia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	1	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	60	1	121
Desmids (Mesotaeniaceae, Desmidiaceae)					0	0							0	0								
Closterium aciculare	0	0	0	6	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0
Closterium acutum var. variable	1	245	1	219	0	60	0	90	1	309	0	3	1	517	2	828	1	414	0	0	0	0
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0
Staurastrum tangaroaii	3	6917	1	1153	2	4612	0	0	1	2306	0	21	0	63	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. gracilis	0	0	0	200	0	0	0	0	0	0	0	0	0	600	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																						
Dinobryon sp.	0	0	0	0	1	32	0	0	2	130	2	140	0	0	0	0	0	0	16	939	0	4
Cryptomonas sp.	1	158	0	0	0	0	0	0	0	0	1	79	0	0	1	158	0	0	0	0	1	79
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																						
Ceratium hirundinella	0	630	0	280	0	1120	0	2520	0	0	0	1960	0	1120	0	0	0	280	1	15372	0	0
Gymnodinium sp. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	604	0	0
Gymnodinium sp. 2	0	2000	0	0	0	200	0	1800	0	1200	0	1200	0	0	0	0	0	0	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2196	2	8784
Gonyaulax sp.	0	0	0	0	1	1098	0	0	0	0	0	40	0	40	0	0	0	0	0	0	0	0
Flagellates 5μm																						
Flagellates < 5μm/unicells	60	2114	53	1845	62	2171	48	1691	58	2037	10	365	30	4076	13	1779	27	3632	33	4521	41	5485

Lake Taupo phytoplankton enumeration (10-m tube) 2013-14																																						
Cell counts and biovolume	6/08/2013		6/08/2013		21/08/2013		21/08/2013		3/09/2013		3/09/2013		18/09/2013		18/09/2013		2/10/2013		2/10/2013		21/10/2013		21/10/2013		7/11/2013		7/11/2013		20/11/2013		20/11/2013		2/12/2013		2/12/2013		8/01/2014		8/01/2014	
Cells per ml numbers may be affected by rounding																																						
Sample code	GA1		GA1		GA4		GA4		GH1		GH1		HG4		HG4		U1		I J1		I J4		I J4		JV1		JV1		JV4		JV4		LB1		LB1		MM1		MM1	
Sampling date	6/08/2013		6/08/2013		21/08/2013		21/08/2013		3/09/2013		3/09/2013		18/09/2013		18/09/2013		2/10/2013		2/10/2013		21/10/2013		21/10/2013		7/11/2013		7/11/2013		20/11/2013		20/11/2013		2/12/2013		2/12/2013		8/01/2014		8/01/2014	
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)
Blue greens (Cyanophyceae)																																						
Dolichospermum c.f. lemmermannii																																						
(formally, Anabaena c.f. lemmermannii)	5.9	682	10.9	1260	17.8	2062	7.3	843	6.5	754	17.0	1970	15.5	1800	0.5	59	18.2	2110	9.9	1148	34.3	3975	26.3	3055	15.1	1756	11.0	1276	26.5	3071	12.5	1450	11.9	1384	10.8	1247	5.8	668	3.4	397
***Leptolyngbya* sp.**	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.9	10	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum																																						
planctonicum	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.4	144	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Anabaena* sp./ *Dolichospermum* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Chroococcus* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanocapsa* sp.**	0.0	0	4.6	41	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Heteroleibleinia* sp-cf**					0.0	0																																		
***Microcystis* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Snowella* sp.**	0.0	0	1.0	25	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Phormidium* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	3.5	73	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanothece* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanizomenon* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Pseudanabaena* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Gloeocapsa* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																																						
Actinastrum hantzschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
Monoraphidium* sp. / *Ankistrodesmus falcatus	53	2227	104	4363	34	1409	56	2363	7	295	12	523	13	545	3	136	17	704	52	2181	77	3227	3	136	1	45	3	136	2	68	2	68	18	773	32	1341	33	1386	32	1363
Stichococcus contortus	6	117	9	156	15	263	30	536	17	302	0	0	0	0	0	0	2	39	6	117	5	88	4	68	2	39	0	0	0	0	0	0	0	0	6	117	6	117	38	682
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6261	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11772	0.0	5973	0.0	3245	0.0	3178	0.0	2943
***Chlamydomonas* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Cruciqueniella* sp**	0	0	0	0	0	0	0	0	1	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	141	1	70	0	0
Dictyosphaerium	2	119	0	0	0	0	0	0	0	0	21	1131	12	684	0	0	0	0	0	0	3	179	0	0	6	327	47	2559	7	387	0	0	8	446	34	1875	67	3690	23	1279
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakatothrix gelatinosa	1	114	0	0	1	114	0	0	0	0	9	966	0	0	1	114	5	511	1	114	10	1022	0	0	0	0	1	114	0	0	2	170	2	170	2	227	1	114	1	114
Eudorina elegans	0	0	1	225	0	0	0	0	0	0	0	0	0	64	0	0	0	0	0	0	0	0	0	0	41	0	28	0	0	0	0	0	0	0	0	0	0	56	0	61
***Lagerheimia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Oocystis* sp.**	1	77	6	922	0	0	8	1152	2	230	8	1076	8	1076	12	1767	21	2919	9	1229	9	1229	10	1383	16	2228	8	1076	6	922	8	1152	6	922	14	1921	3	461	7	999
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadriqula lacustris	0	0	0	0	2	355	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Scenedesmus* sp.**	0	0	0	0	2	113	4	225	0	0	0	0	0	0	2	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	4	0	0	0	19	0	6	0	18	0	23	0	9	0	36	0	52	0	41	0	14	0	11	0	0	0	4	0	9	0	18	0	0	0	0	0	0	0
Tetraedon gracile	0	0	0	0	0	0	2	179	0	0	0	0	0	0	2	179	2	238	5	595	2	179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	19	1122	28	1680	0	0	0	0	0	0	0	0	6	360	0	0	4	210	0	0	4	240	0	0	0	0	3	180	3	150	0	0	0	0	0	0	0	0	0	0
Westella botryoides	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unidentified Colonial green	6	0	3	0	19	0	4	0	0	0	0	0	19	0	0	0	0	0	0	0	3	0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
***Apiocystis* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Paulschulzia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																																						
Asterionella formosa	27	7423	189	52867	186	52109	78	21813	11	3030	10	2727	28	7725	19	5453	5	1515	4	1212	0	0	2	454	6	1666	6	1818	3	909	0	0	12	3484	114	31962	25	6968	40	11210
Aulacoseira granulata	6	1845	4	1342	10	3019	47	14423	17	5199	31	9727	31	9559	9	2851	11	3354	0	0	0	0	0	0	0	0	10	3186	0	0	0	0	0	0	5	1509	15	4528	16	5031
Aulacoseira granulata* var. *angustissima	1	281	44	11534	36	9424	25	6470	22	5767	14	3517	9	2251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	5345	21	5486	4	985
***Attheya* sp.**	0	0	2	487	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	325	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	0	0	0	0	1	283	0	0	0	0	0	0	0	0	0	0	0	0	1	566	2	849	2	1132	0	0	0	0	2	1132	0	0	2	849	1	566
Cyclotella stelligera	3	433	12	1991	1	173	21	3376	3	519	11	1818	9	1472	3	433	2	346	2	346	0	0	2	260	3	519	5	866	5	866	4	692	13	2077	24	3809	10	1558	9	1472
Fragilaria crotonensis	43	15494	96	34475	97	34862	30	10846	10	3680	5	1937	58	20724	28	9878	55	19755	18	6391	32	11427	43	15301	64	22854	60	21498	139	49775	173	61977	11	4067	85	30407	62	22273	53	18980
***Fragilaria* sp.**	0	0	0	0	6	2324	0	0	0	0	9	3099	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Nitzschia* sp.**	5	2110	27	10339	20	7807	0	0	1	211	2	633	9	3376	1	211	2	633	1	211	1	422	2	633	0	0	0	0	0	0	0	0	4	1688	6	2321	1	211	7	2743
***Synedra* sp.**	0	0	0	0	0	0	3	1279	0	0	1	213	2	639	2	853	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	213	0	0
***Amphora* sp.**	0	0	1	566	0	0	0	0	1	283	0	0	0	0	0	0	3	1415	0	0	0	0	0	0	0	0	0	0	1	283	0	0	0	0	1	283	0	0	0	0
***Eunotia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	0	0	0	2	179	0	0	3	298	3	357	0	0	0	0	2	179	0	0	1	60	0	0	0	0	1	60	0	0	3	298	3	298	2	238	3	298
Desmids (Mesotaeniaceae, Desmidiaceae)																																						
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3241	0	0	0	0
Closterium acutum* var. *variable	1	204	1	204	2	612	2	612	1	204	2	816	3	1224	0	0	1	408	1	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1428	2	612
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Mougeotia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Spirogyra* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Staurastrum* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns* var. *gracilis	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)					0	0															0	0																		
***Dinobryon* sp.**	0	0	1	32	0	0	0	0	0	0	12	734	50	2968	142	8363	6	383	72	4245	124	7341	15	894	27	1564	0	0	9	511	0	0	8	447	2	96	21	1213	0	0
***Cryptomonas* sp.**	0	0	0	0	1	78	2	234	1	78	0	0	2	234	0	0	1	156	0	0	0	0	0	0	1	78	0	0	1	156	0	0	1	78	3	467	0	0	0	0
***Synura* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																					0	0																		
Ceratium hirundinella	0.20	4200	4.10	86100	4.80	100800	0	6300	0	0	0	2100	0	0	0	2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2100	0	0
***Gymnodinium* sp. 1**	0	0	1	1190	1	1190	0	0	0	0	0	0	0	0	1	595	1	1190	0	0	1	595	0	0	0	0	0	0	1	1190	2	1785	1	1190	0	0	1	595	0	0
***Gymnodinium* sp. 2**	0.10	2000	0.54	10820	2.10	42000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Peridinium* sp.**	0	0	0	0	0	0	1	4328	1	2164	10	41116	4	15148	8	30296	3	12984	6	25968	2	8656	0	0	1	4328	1	2164	1	4328	2	6492	2	8656	0	0	0	0	0	0
***Gonyaulax* sp.**	0	0	1	1082	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm																					0	0																		
Flagellates < 5µm/unicells	15	530	51	1780	179	6249	62	2178	10	360	36	1269	42	1477	25	871	47	1647	49	1723	51	1799	17	606	22	757	24	833	22	757	28	985	46	1609	54	1875	32	1117	48	1666

Lake Taupo phytoplankton enumeration (50 m van Dorne) 2013-14																																				
Cell counts and biovolume																																				
Cells per ml numbers may be affected by rounding																																				
Sample code	GA3	GA3	GA6	GA6	GH3	GH3	HG6	HG6	IJ3	IJ3	IJ6	IJ6	JV3	JV3	JV6	JV6	LB3	LB3	MM3	MM3	MM6	MM6	OK3	OK3	OK6	OK6	OC3	OC3	OC6	OC6	RP3	RP3	TB6	TB6	UY3	UY3	WO3	WO3	WO6	WO6
Sampling date	6/08/2013	6/08/2013	21/08/2013	21/08/2013	3/09/2013	3/09/2013	18/09/2013	18/09/2013	2/10/2013	2/10/2013	21/10/2013	21/10/2013	7/11/2013	7/11/2013	20/11/2013	20/11/2013	2/12/2013	2/12/2013	8/01/2014	8/01/2014	28/01/2014	28/01/2014	12/02/2014	12/02/2014	25/02/2014	25/02/2014	12/03/2014	12/03/2014	27/03/2014	27/03/2014	9/04/2014	9/04/2014	20/05/2014	20/05/2014	5/06/2014	5/06/2014	1/07/2014	1/07/2014	21/07/2014	21/07/2014
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)	(per ml)	(um^3)
Blue greens (Cyanophyceae)																																						
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	0.1	9	6.4	744	12.8	1487	1.7	196	0.8	87	2.2	254	0.1	8	1.5	177	5.2	600	13.9	1614	10.2	1177	11.4	1318	1.2	140	10.6	1234	4.0	461	0.6	72	0.0	0	0.2	26	10.9	1260	0.2	17
***Leptolyngbya* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.5	192	0.0	0	0.0	0	0.0	0	0.4	148	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Anabaena* sp./ *Dolichospermum* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Chroococcus* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanocapsa* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Heteroleibleinia* sp.cf**					0.0	0																																		
***Microcystis* sp.**	0.0	0	0.0	0	0.0	0	0.3	7	0.4	8	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.4	7	0.0	0	0.0	0	0.0	0	0.0	0
***Snowella* sp.**	0.0	0	0.0	0	0.9	22	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Phormidium* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanothece* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	2.5	23
***Aphanizomenon* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Pseudanabaena* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.6	11	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Gloeocapsa* sp.**	0.0	0			0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0			0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																					0	0																		
Actinastrum hantzschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium* sp. / *Ankistrodesmus falcatus	56	2334	133	5602	27	1155	52	2187	9	393	8	344	9	393	4	172	17	713	23	983	6	270	20	860	9	393	22	934	16	663	19	811	7	295	11	467	22	934	40	1695
Sichococcus contortus	0	0	32	579	19	347	25	442	11	190	5	95	2	42	5	84	7	126	5	84	0	0	5	84	2	42	0	0	2	42	0	0	0	0	9	168	23	421	16	295
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4415	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Chlamydomonas* sp.**	0	0	0	0	0	0	2	491	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Crucigeniella* sp**	0	0	0	0	0	0	1	76	0	0	0	0	0	0	0	0	0	0	4	228	6	380	0	0	4	228	0	0	0	0	1	76	0	0	1	76	1	76	0	0
***Dictyosphaerium* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	547	5	257	19	1030	38	2091	0	0	0	0	0	0	12	676	26	1448	25	1351
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakatothrix gelatinosa	0	0	0	0	0	0	0	0	0	0	4	369	0	0	0	0	0	0	2	246	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	246	2	246	8	799
Eudorina elegans	0	28	0	0	0	7	0	4	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	4	0	5	0	0	0	0
***Lagerheimia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Oocystis* sp.**	1	166	2	332	5	665	15	2077	4	498	5	748	5	665	3	415	11	1495	5	665	4	581	6	914	4	498	5	665	4	581	9	1329	2	332	8	1080	9	1246	9	1329
Planktosphaeria gelatinosa	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustras	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Scenedesmus* sp.**	0	0	0	0	0	0	5	243	5	243	1	61	0	0	1	61	0	0	0	0	0	0	0	0	0	0	4	213	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	14	0	27	0	7	0	7	0	5	0	2	0	7	0	5	0	5	0	2	0	0	0	0	0	0	0	0	0	16	0	7	0	0	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	1	129	1	64	0	0	0	0	1	64	1	64	1	129	1	64	1	64	1	64	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	11	672	5	270	0	0	0	0	4	210	0	0	0	0	0	0	0	0	0	0	0	0	5	300	0	0	3	180	0	0	0	0	6	360	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unidentified Colonial green	6	0	0	0	30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	0	0
***Apiocystis* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0
***Paulschulzia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																					0	0																		
Asterionella formosa	18	4914	128	35708	267	74857	70	19656	11	3112	16	4423	6	1638	10	2785	27	7699	5	1474	9	2621	5	1474	9	2457	15	4259	12	3276	11	2948	6	1638	42	11630	23	6552	43	12121
Aulacoseira granulata	10	3083	20	6166	42	12876	53	16322	50	15596	52	16140	49	15052	36	11244	26	7979	2	725	16	5078	9	2902	14	4352	1	363	4	1088	2	725	4	1269	7	2176	12	3627	7	2176
Aulacoseira granulata var. angustissima	5	1369	20	5171	53	13841	39	10191	21	5476	7	1825	52	13537	0	0	0	0	6	1521	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	8213	0	0	6	1673
***Attheya* sp.**	1	351	1	351	2	527	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	351	0	0
Cocconeis	0	0	0	0	0	0	0	0	1	612	0	0	1	612	0	0	0	0	0	0	0	0	0	0	1	306	0	0	0	0	1	306	1	612	0	0	0	0	0	0
Cyclotella stelligera	3	468	30	4774	15	2434	24	3838	8	1310	10	1591	8	1217	4	562	1	94	2	281	4	562	3	468	1	187	4	562	4	655	7	1123	4	562	15	2434	11	1778	7	1123
Fragilaria crotonensis	0	0	32	11519	45	16126	9	3351	14	5026	18	6492	2	838	15	5236	29	10262	25	9005	16	5655	11	3770	35	12356	97	34765	27	9843	82	29320	3	1047	27	9843	33	11938	25	8796
***Fragilaria* sp.**	0	0	0	0	2	628	0	0	0	0	0	0	0	0	0	0	8	2723	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	3560	0	0	0	0	0	0
***Nitzschia* sp.**	2	684	13	5019	21	8213	0	0	0	0	0	0	0	0	0	0	1	228	2	684	0	0	3	1141	0	0	0	0	0	0	0	0	0	0	6	2510	1	456	2	913
***Synedra* sp.**	1	230	0	0	0	0	4	1383	0	0	2	691	1	230	1	230	1	461	0	0	1	461	0	0	1	230	1	230	1	461	1	461	1	230	1	230	0	0	1	461
***Amphora* sp.**	0	0	0	0	0	0	1	306	1	306	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	306	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Eunotia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	1	129	0	0	0	0	4	386	1	64	1	129	0	0	1	64	1	129	1	64	0	0	1	64	0	0	1	129	0	0	0	0	3	322	2	193	1	129	2	193
Desmids (Mesotaeniaceae, Desmidiaceae)																					0	0																		
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	350	4	2453	0	0	0	0
Closterium acutum var. variable	0	0	1	221	1	441	5	1764	2	662	1	441	2	662	1	221	1	221	2	662	3	1103	1	441	2	662	1	221	3	1103	3	1103	0	0	0	0	5	1764	2	882
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Mougeotia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Spirogyra* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Staurastrum* sp.**	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. gracilis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																					0	0																		
***Dinobryon* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	173	12	725	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	207	0	0
***Cryptomonas* sp.**	0	0	0	0	1	168	1	84	0	0	0	0	2	337	1	168	1	84	0	0	0	0	0	0	1	168	0	0	0	0	1	84	0	0	1	168	1	84	1	84
***Synura* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	161
Dinoflagellates (Dinophyceae)																					0	0																		
Ceratium hirundinella	0.10	2100	0.13	2730	0	9870	0	630	0	420	0	210	0	0	0	210	0	420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Gymnodinium* sp. 1**	0	0	2	2574	1	1287	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1287	0	0	0	0	1	644
***Gymnodinium* sp. 2**	0.03	600	0.00	0	0	3000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Peridinium* sp.**	0	0	0	0	0	0	1	2340	0	0	1	4680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Gonyaulax* sp.**	0	0	1	1170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm																					0	0																		
Flagellates < 5µm/unicells	7	246	177	6204	171	5979	67	2334	14	491	20	696	19	676	15	532	16	573	16	553	15	532	12	430	15	532	16	553	18	614	12	410	20	717	20	717	33	1167	43	1495

Lake Taupo phytoplankton enumeration (10-m tube) 2012-13

Cell counts and biovolume

Cells per ml numbers may be affected by rounding

Sample code	NA1	NA1	NA4	NA4	OH1	OH1	PQ1	PQ1	QL1	QL1	RW1	RW1	RW4	RW4	SY1	SY1	SY4	SY4
Sampling date	1/08/2012	1/08/2012	17/08/2012	17/08/2012	29/08/2012	29/08/2012	20/09/2012	20/09/2012	4/10/2012	4/10/2012	8/11/2012	8/11/2012	22/11/2012	22/11/2012	6/12/2012	6/12/2012	19/12/2012	19/12/2012
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)
Blue greens (Cyanophyceae)																		
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	0.0	0	0.0	0	10.2	1183	1.8	206	21.2	2463	31.9	3698	66.2	7679	34.9	4044	2.1	238
Leptolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena sp./ *Dolichospermum* sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.0	0	0.0	0	0.2	3	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Heteroleibleinia sp.cf	4.4	40	4.2	38	4.4	40	0.0	0	0.0	0					0.0	0	0.0	0
Microcystis sp.	6.5	137	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.4	7	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gloeocapsa sp.						0	0.0	0	0.0	0	0.0	0	0.2	15	0.0	0	0.0	0
Greens (Chlorophyceae)																		
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / *Ankistrodesmus falcatus*	88	3681	22	909	120	5022	114	4794	0	0	0	0	6	273	12	500	12	491
Stichococcus contortus	30	536	6	117	0	0	18	331	0	0	0	0	0	0	0	0	0	0
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	29295	0.0	6376	0.0	0	0.0	0	0.0	0
Chlamydomonas sp.	1	227	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium	5	268	0	0	0	0	32	1785	0	0	0	0	0	0	0	0	6	354
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	0	0	3	341	0	0	2	227	0	0	0	0	0	0	1	114	4	430
Eudorina elegans	0	0	0	4	0	10	0	20	0	72	0	26	0	0	0	0	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocytsis sp.	6	922	13	1844	0	0	3	461	2	307	3	461	9	1229	8	1152	8	1080
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	384
Scenedesmus sp.	2	84	0	0	0	0	4	225	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	4	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0
Tetraedon gracile	0	0	0	0	0	0	1	60	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	1	32	4	252	0	25	0	0	0	0	51	3089
Westella botryoides	0	10	0	0	0	0	0	0	0	0	0	5	13	0	0	0	0	0
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	199
Diatoms (Bacillariophyceae)																		
Asterionella formosa	65	18329	133	37264	50	13936	162	45293	178	49837	34	9543	23	6514	21	5756	12	3276
Aulacoseira granulata	17	5367	4	1342	2	503	49	15262	18	5534	12	3857	10	3186	0	0	0	0
Aulacoseira granulata var. *angustissima*	2	563	27	7033	45	11675	24	6330	148	38541	36	9424	16	4220	10	2532	0	0
Aulacoseria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	0	0	1	283	0	0	0	0	0	0	0	0	0	0
Cyclotella stelligera	4	692	2	346	2	260	6	952	4	692	3	519	2	346	1	173	1	94
Fragilaria crotonensis	62	22273	9	3293	0	0	0	0	0	0	0	0	2	775	3	1162	0	0
Fragilaria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitzschia sp.	3	1055	0	0	1	211	2	633	0	0	0	0	2	633	1	422	1	228
Synedra sp.	0	0	0	0	0	0	1	426	0	0	0	0	0	0	0	0	0	0
Amphora sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	2	238	0	0	0	0	4	476	0	0	0	0	0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)									0	0							0	0
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. *variable*	1	204	1	469	0	0	0	0	0	0	0	0	1	204	0	0	0	0
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. *gracilis*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																		
Dinobryon sp.	0	0	1	64	0	0	22	1309	19	1117	27	1596	1	32	12	702	39	2278
Cryptomonas sp.	0	0	0	0	0	0	0	0	0	0	1	78	0	0	0	0	0	0
Synura sp.	0	0	1	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																		
Ceratium hirundinella	0	0	0	0	0	420	0	0	0	840	0	1260	0	420	0	0	0	630
Gymnodinium sp. 1	1	595	0	0	0	0	0	0	0	0	0	0	1	595	1	595	0	0
Gymnodinium sp. 2	0	0	0	200	0	0	0	0	0	3000	0	0	0	400	0	0	0	600
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1170
Flagellates 5µm																		
Flagellates < 5µm/unicells	17	606	161	5643	287	10054	76	2670	221	7744	132	4620	133	4639	106	3711	77	2682

Sample code	VK1	VK1	WD1	WD1	WD4	WD4	XL1	XL1	XL4	XL4	ZB1	ZB1	ZB4	ZB4	BC1	BC1	BC4	BC4	DF1	DF1	DF4	DF4	FK1	FK1
Sampling date	23/01/2013	23/01/2013	7/02/2013	7/02/2013	21/02/2013	21/02/2013	6/03/2013	6/03/2013	20/03/2013	20/03/2013	4/04/2013	4/04/2013	22/04/2013	22/04/2013	7/05/2013	7/05/2013	23/05/2013	23/05/2013	6/06/2013	6/06/2013	19/06/2013	19/06/2013	22/07/2013	22/07/2013
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)
Blue greens (Cyanophyceae)																								
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	1.5	177	90.8	10528	7.1	824	4.7	539	23.7	2752	535.0	62060	20.3	2359	58.0	6733	16.6	1928	8.0	933	15.5	1800	3.4	392
Leptolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	0.0	0	0.2	80	0.4	176	0.0	0	0.0	0	0.0	0	0.9	343	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena sp./ *Dolichospermum* sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.6	14	1.6	15
Heteroleibleinia sp.cf	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	2.8	59	0.0	0	1.5	32	0.0	0	0.4	8	0.0	0	8.6	181	1.2	25
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.2	5	0.7	14	0.0	0	1.4	30	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.4	7	0.0	0	0.6	12	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gloeocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																								
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / *Ankistrodesmus falcatus*	15	639	0	0	0	0	3	123	0	0	2	98	6	246	20	841	18	762	27	1155	43	1795	17	704
Stichococcus contortus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	21	0	0	0	0	11	195
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	5775	0.0	0	0.0	4620	0.0	0	0.0	0	0.0	0	0.0	0	0.0	74865	0.1	48825	0.0	7324	0.0	0	0.0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	4	369	0	0	2	246	1	123	7	737	15	1597	5	553	2	227	3	307	0	0	7	738	2	170
Eudorina elegans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	20
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocytsis sp.	13	1828	26	3655	23	3240	6	914	2	249	5	665	5	665	9	1229	8	1080	15	2077	7	999	4	538
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	60	0	0
Volvox aureus	146	8775	0	0	0	0	0	0	205	12285	0	0	0	0	59	3540	2	111	0	0	14	864	4	240
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apiocystis sp.	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	4	298	15	1243	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																								
Asterionella formosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	303	4	983	37	10483	25	7120	6	1818
Aulacoseira granulata	0	0	0	0	4	1269	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5031	0	0
Aulacoseira granulata var. *angustissima*	0	0	11	2738	0	0	0	0	5	1217	0	0	0	0	2	563	1	152	15	3955	0	0	23	6048
Aulacoseria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	283	0	0	0	0	2	849	0	0
Cyclotella stelligera	0	0	0	0	6	936	1	94	0	0	0	0	0	0	4	692	2	374	7	1123	3	433	4	606
Fragilaria crotonensis	0	0	26	9424	0	0	0	0	0	0	0	0	0	0	56	19949	105	37697	573	205241	103	36992	0	0
Fragilaria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1162	0	0	0	0	0	0	0	0
Nitzschia sp.	0	0	1	228	0	0	1	456	0	0	0	0	1	456	12	4642	5	2053	2	684	4	1688	2	633
Synedra sp.	0	0	0	0	0	0	0	0	0	0	0	0	4	1383	0	0	0	0	0	0	5	2132	1	213
Amphora sp.	0	0	0	0	0	0	0	0	0	0	0	0	1	306	0	0	0	0	0	0	0	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	0	0	0	2	193	2	193	0	0	1	129	0	0	1	64	0	0	2	179	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)					0	0									0	0								
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. *variable*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	408	1	204
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. *gracilis*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)											0	0												
Dinobryon sp.	53	3106	20	1208	44	2623	0	0	1	69	0	0	106	6282	6	351	4	207	0	0	5	287	0	0
Cryptomonas sp.	0	0	0	0	0	0	1	84	1	168	0	0	1	168	0	0	1	84	2	253	1	156	2	234
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																								
Ceratium hirundinella	0	0	0	0	0	210	0	210	0	0	0	42	0	21	0	1050	0	420	0	42	0	210	0	0
Gymnodinium sp. 1	0	0	0	0	4	3861	0	0	1	644	3	3218	0	0	0	0	1	1287	0	0	1	595	1	595
Gymnodinium sp. 2	0	0	0	600	0	1400	0	0	0	0	1	11700	0	0	0	800	0	200	0	120	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	1	4680	11	42120	0	0	3	11700	0	0	0	0	0	0	2	8656	0	0
Gonyaulax sp.	0	0	1	1170	6	11700	0	0	0	0	13	25740	0	0	2	3246	2	3510	2	4680	0	0	0	0
Flagellates 5µm																								
Flagellates < 5µm/unicells	184	6429	77	2703	142	4975	34	1188	41	1433	166	5815	30	1065	141	4942	252	8825	159	5569	24	833	15	530

Lake Taupo phytoplankton enumeration (50 m van Dorne) 2012-13

Cell counts and biovolume

Cells per ml numbers may be affected by rounding

Sample code	NA3	NA3	NA6	NA6	OH3	OH3	PQ3	PQ3	QL3	QL3	RW3	RW3	RW6	RW6
Sampling date	1/08/2012	1/08/2012	17/08/2012	17/08/2012	29/08/2012	29/08/2012	20/09/2012	20/09/2012	4/10/2012	4/10/2012	8/11/2012	8/11/2012	22/11/2012	22/11/2012
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)
Blue greens (Cyanophyceae)														
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	6.2	713	0.0	0
Leptolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.2	2	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	0.0	0	0.3	128	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena sp./ *Dolichospermum* sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Heteroleibleinia sp.cf	0.9	8	11.9	107	0.0	0	0.0	0	0.0	0				
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.7	6	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	6	0.0	0
Gloeocapsa sp.						0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)														
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / *Ankistrodesmus falcatus*	71	2973	66	2776	42	1769	87	3661	33	1400	1	49	11	442
Stichococcus contortus	52	937	26	463	29	516	14	253	24	432	6	116	0	0
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	0	0.0	0	0.0	12751	0.0	0	0.0	0	0.0	0	0.0	0
Chlamydomonas sp.	1	246	0	0	0	0	0	0	1	123	1	123	0	0
Crucigeniella sp	5	304	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium	42	2317	0	0	2	97	27	1480	0	0	0	0	0	0
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	2	246	0	0	0	0	0	0	0	0	0	0	7	737
Eudorina elegans	0	0	0	0	1	300	20	5242	9	2396	0	0	13	3444
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocytsis sp.	5	748	9	1329	2	249	0	0	2	249	0	0	3	415
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	5	768	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	2	122	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	0	0	0	0	0	0	12	720
Westella botryoides	0	0	0	0	0	0	0	0	12	799	0	0	11	0
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)														
Asterionella formosa	111	30958	99	27846	68	19165	67	18673	144	40459	40	11138	24	6716
Aulacoseira granulata	19	5803	0	0	2	544	80	24845	81	25208	100	31011	32	10011
Aulacoseira granulata var. *angustissima*	0	0	13	3498	35	9126	18	4563	165	42892	12	3042	5	1369
Aulacoseria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclotella stelligera	2	374	10	1591	4	655	8	1310	8	1310	13	2059	9	1404
Fragilaria crotonensis	37	13404	0	0	0	0	0	0	0	0	0	0	2	628
Fragilaria sp.	2	838	0	0	0	0	0	0	0	0	0	0	0	0
Nitzschia sp.	2	684	5	1825	1	228	1	456	2	913	0	0	2	684
Synedra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amphora sp.	4	1836	0	0	0	0	1	612	0	0	0	0	0	0
Eunotia sp.	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	3	322	2	193	0	0	4	450	0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)														
Closterium aciculare	0	0	0	0	0	0	0	0	1	350	0	0	0	0
Closterium acutum var. *variable*	1	221	1	441	1	221	1	221	0	0	1	441	0	0
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. *gracilis*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)														
Dinobryon sp.	19	1139	1	69	0	0	8	449	0	0	2	138	0	0
Cryptomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)														
Ceratium hirundinella	0	0	0	210	0	420	0	0	0	0	0	0	0	0
Gymnodinium sp. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gymnodinium sp. 2	0	0	0	0	0	800	0	0	0	200	0	0	0	1400
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm														
Flagellates < 5µm/unicells	67	2334	195	6839	215	7514	52	1822	197	6880	130	4545	125	4382

Sample code	SY3	SY3	SY6	SY6	VK3	VK3	WD3	WD3	WD6	WD6	XL3	XL3	XL6	XL6
Sampling date	6/12/2012	6/12/2012	19/12/2012	19/12/2012	23/01/2013	23/01/2013	7/02/2013	7/02/2013	21/02/2013	21/02/2013	6/03/2013	6/03/2013	20/03/2013	20/03/2013
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)
Blue greens (Cyanophyceae)														
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	15.4	1784	22.8	2647	26.7	3094	114.6	13294	77.4	8983	12.6	1464	13.6	1578
Leptolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena sp./ *Dolichospermum* sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.0	0	1.4	12	0.0	0	0.4	4	0.0	0	0.0	0
Heteroleibleinia sp.cf	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	1.3	25	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gloeocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0
Greens (Chlorophyceae)														
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / *Ankistrodesmus falcatus*	12	491	16	688	37	1572	1	49	5	197	8	344	2	74
Stichococcus contortus	3	53	0	0	2	42	0	0	0	0	0	0	0	0
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	1	123	0	0	0	0	1	123	0	0	1	61	6	676
Eudorina elegans	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocytsis sp.	2	332	4	498	6	914	8	1163	20	2907	6	831	3	415
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	11	660	3	168	296	17760	0	0	0	0	2	132	0	0
Westella botryoides	4	228	0	0	0	0	7	0	0	0	0	0	0	0
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	4	298	2	199	0	0	0	0	0	0
Diatoms (Bacillariophyceae)														
Asterionella formosa	13	3604	2	655	15	4259	4	1147	1	164	5	1474	0	0
Aulacoseira granulata	20	6166	19	5985	9	2720	29	9068	13	4171	0	0	0	0
Aulacoseira granulata var. *angustissima*	11	2738	2	608	0	0	0	0	1	304	16	4259	5	1369
Aulacoseria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	0	0	0	0	0	0	1	306	0	0
Cyclotella stelligera	6	1030	2	281	1	187	2	281	5	749	5	749	0	0
Fragilaria crotonensis	0	0	0	0	0	0	0	0	11	3770	9	3351	0	0
Fragilaria sp.	1	419	2	628	0	0	0	0	0	0	0	0	0	0
Nitzschia sp.	1	228	2	684	2	684	1	228	0	0	1	456	1	228
Synedra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amphora sp.	0	0	0	0	0	0	0	0	1	306	0	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)			0	0					0	0				
Closterium aciculare	0	0	2	1051	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. *variable*	2	662	0	0	1	221	1	221	1	221	1	221	0	0
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. *gracilis*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)														
Dinobryon sp.	0	0	0	0	0	0	0	0	0	0	2	138	15	897
Cryptomonas sp.	0	0	0	0	1	84	1	84	0	0	0	0	0	0
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)														
Ceratium hirundinella	0	0	0	0	0	0	0	0	0	420	0	210	0	210
Gymnodinium sp. 1	0	0	0	0	0	0	0	0	0	0	0	0	1	1287
Gymnodinium sp. 2	0	1000	0	800	0	1200	0	1600	0	2000	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	0	0	9	35100
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm														
Flagellates < 5µm/unicells	125	4361	194	6798	227	7944	84	2948	120	4197	20	717	33	1147

Sample code	ZB3	ZB3	ZB6	ZB6	BC3	BC3	BC6	BC6	DF3	DF3	DF6	DF6	FK3	FK3
Sampling date	4/04/2013	4/04/2013	22/04/2013	22/04/2013	7/05/2013	7/05/2013	23/05/2013	23/05/2013	6/06/2013	6/06/2013	19/06/2013	19/06/2013	22/07/2013	22/07/2013
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)	(per ml)	(µm³)
Blue greens (Cyanophyceae)														
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	1.3	151	6.2	717	1.0	111	1.4	167	0.0	0	3.9	451	0.0	0
Leptolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	0.0	0	1.2	471	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena sp./ *Dolichospermum* sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	2.0	18
Heteroleibleinia sp.cf	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcystis sp.	0.0	0	0.3	7	0.0	0	0.0	0	0.0	0	0.8	16	0.4	7
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.2	5	0.0	0	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.0	0	0.7	14	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gloeocapsa sp.	0.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)														
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / *Ankistrodesmus falcatus*	10	418	9	393	11	442	9	369	5	221	60	2531	18	762
Stichococcus contortus	0	0	0	0	0	0	0	0	0	0	5	95	7	126
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	0	0.0	0	0.0	12751	0.0	0	0.0	0	0.0	0	0.0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	6	1229	0	0
Crucigeniella sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	0	0	0	0	0	0	0	0	1	123	1	123	0	0
Eudorina elegans	0	0	0	0	0	0	0	0	0	0	6	1647	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocytsis sp.	8	1163	8	1080	1	166	4	498	1	123	2	332	6	914
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	23	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	12	720	0	0	0	0	7	420	6	360
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	2	149	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)														
Asterionella formosa	0	0	2	491	1	164	1	164	0	0	48	13432	12	3276
Aulacoseira granulata	5	1451	0	0	1	363	4	1269	0	0	15	4534	5	1451
Aulacoseira granulata var. *angustissima*	7	1825	0	0	3	761	0	0	7	1825	8	1977	22	5780
Aulacoseria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	1	306	0	0	0	0	2	918	0	0
Cyclotella stelligera	1	187	1	187	2	281	35	5616	2	281	3	468	1	94
Fragilaria crotonensis	53	19058	4	1466	0	0	0	0	67	24084	69	24713	13	4607
Fragilaria sp.	5	1675	8	2723	0	0	12	4189	15	5445	0	0	0	0
Nitzschia sp.	0	0	0	0	0	0	1	456	2	913	4	1369	1	456
Synedra sp.	0	0	1	461	0	0	0	0	0	0	4	1613	1	230
Amphora sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eunotia sp.	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)					0	0								
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. *variable*	1	221	2	662	1	441	1	221	0	0	1	441	1	221
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. *gracilis*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)	0	0												
Dinobryon sp.	0	0	0	0	0	0	0	0	0	0	17	1001	0	0
Cryptomonas sp.	0	0	1	168	0	0	0	0	0	0	1	168	1	168
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)														
Ceratium hirundinella	0	630	0	0	0	840	0	840	0	1050	0	210	0	210
Gymnodinium sp. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gymnodinium sp. 2	0	800	0	0	0	0	0	400	0	120	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	2	7020	0	0
Gonyaulax sp.	0	0	0	0	0	234	0	0	0	0	0	0	0	0
Flagellates 5µm														
Flagellates < 5µm/unicells	66	2293	15	532	7	246	71	2498	22	778	27	962	9	328

Lake Taupo phytoplankton enumeration (10-m tube) 2011-12

Cell counts and biovolume

Cells per ml numbers may be affected by rounding

Sample code	XK1	XK1	XY1	XY1	XY4	XY4	ZG1	ZG1	ZY1	ZY1	ZY4	ZY4	BC1	BC1	BC4	BC4	CL1	CL1
Sampling date	24/08/2011	24/08/2011	7/09/2011	7/09/2011	28/09/2011	28/09/2011	25/10/2011	25/10/2011	8/11/2011	8/11/2011	22/11/2011	22/11/2011	8/12/2011	8/12/2011	22/12/2011	22/12/2011	12/01/2012	12/01/2012
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)
Blue greens (Cyanophyceae)																		
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	0.0	0	0.0	0	0.6	74	2.1	238	0.9	99	0.8	97	5.2	606	3.1	361	10.0	1158
Leptolyngbya sp.	0.0	0	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.4	567
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena sp./ *Dolichospermum* sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.8	278	0.0	0	1.8	278	0.0	0
Chroococcus sp.	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.7	6	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Heteroleibleinia sp.cf	0.0	0			0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcystis sp.	0.0	0	2.2	46	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Snowella sp.	0.0	0	1.0	24	0.0	0	0.0	0	0.0	0	1.7	42	0.0	0	1.7	42	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)							0.0	0	0.0	0			0.0	0				
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / *Ankistrodesmus falcatus*	20	841	12	500	13	545	10	418	16	688	0	0	2	74	0	0	5	221
Stichococcus contortus	4	78	0	0	6	117	0	0	0	0	0	0	0	0	0	0	0	0
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	0	0.0	0	0.0	0	0	0	0.0	2861	0.0	0	0	0	0.0	47554	0.0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crucigeniella sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium	0	0	0	0	34	1845	10	547	0	0	14	774	6	322	8	446	0	0
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	5	568	3	341	3	341	1	123	4	369	2	227	0	0	2	227	0	0
Eudorina elegans	28	7063	0	0	19	4847	1	300	0	0	0	0	0	0	0	31	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocytsis sp.	9	1229	12	1767	6	845	1	166	0	0	2	307	2	332	14	1997	1	166
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	1	177	0	0	0	0	0	0	4	710	0	0	4	710	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)							0	0	0	0			0	0				
Asterionella formosa	365	102098	148	41506	37	10452	27	7535	4	983	12	3333	9	2621	9	2424	1	410
Aulacoseira granulata	0	0	31	9559	32	9895	4	1088	2	544	0	0	7	2176	0	0	0	0
Aulacoseira granulata var. *angustissima*	47	12237	49	12659	86	22365	60	15514	0	0	4	1125	0	0	1	281	0	0
Aulacoseria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	0	0	0	0	1	566	0	0	0	0	0	0	0	0	0	0	0	0
Cyclotella stelligera	6	952	5	779	11	1818	5	842	4	562	8	1298	4	562	8	1212	2	281
Fragilaria crotonensis	120	42803	26	9297	6	2130	62	22200	49	17592	182	65076	127	45446	117	42028	57	20315
Fragilaria sp.											0	0			0	0		
Nitzschia sp.	3	1266	4	1688	3	1266	1	456	4	1597	0	0	4	1369	0	0	2	913
Synedra sp.	1	213	4	1492	1	213	0	0	0	0	0	0	0	0	0	0	0	0
Amphora sp.	1	566	0	0	1	283	0	0	0	0	0	0	0	0	0	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum											0	0			0	0		
Small unknown diatom sp.	3	298	0	0	3	357	0	0	0	0	0	0	0	0	1	119	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)							0	0	0	0			0	0				
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	1	324	0	0	1	324	0	0
Closterium acutum var. *variable*	2	612	2	816	1	408	0	0	0	0	0	0	0	0	0	0	0	0
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	0	0	1	80	0	0	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns var. *gracilis*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)							0	0	0	0			0	0				
Dinobryon sp.	4	255	0	0	0	0	143	8422	17	1001	2	128	171	10113	88	5203	2	138
Cryptomonas sp.	0	0	0	0	1	156	0	0	0	0	0	0	0	0	0	0	0	0
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	523	0	0
Dinoflagellates (Dinophyceae)			0	0			0	0	0	0	0	0	0	0				
Ceratium hirundinella	0	0	0	0	1	11361	1	12285	1	12285	0	4620	1	24570	0	5250	0	0
Gymnodinium sp. 1	0	0	0	0	0	0	4	3861	4	3861	0	0	12	13514	1	595	7	7722
Gymnodinium sp. 2	0	0	0	0	0	0	1	11700	0	0	0	1600	1	23400	0	2200	3	58500
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gonyaulax sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm							0	0	0	0			0	0				
Flagellates < 5µm/unicells	18	625	121	4241	17	587	162	5672	121	4218	103	3598	76	2662	159	5567	77	2682

Sample code	CL4	CL4	ED1	ED1	FH1	FH1	HD1	HD1	JA1	JA1	JA4	JA4	KW1	KW1	LT1	LT1	LT4	LT4	LT6	LT6	NA1	NA1
Sampling date	26/01/2012	26/01/2012	16/02/2012	16/02/2012	7/03/2012	7/03/2012	10/04/2012	10/04/2012	7/05/2012	7/05/2012	31/05/2012	31/05/2012	14/06/2012	14/06/2012	3/07/2012	3/07/2012	18/07/2012	18/07/2012	18/07/2012	18/07/2012	1/08/2012	1/08/2012
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)	(per ml)	(µm^3)
Blue greens (Cyanophyceae)																						
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	3.0	347	17.5	2032	5.5	643	25.2	2923	45.9	5329	6.1	703	10.4	1211	0.9	100	0.0	0	0.0	0	0.0	0
Leptolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	1.8	698	0.4	168	0.1	44	0.0	0	9.0	3575	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena sp./ *Dolichospermum* sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Heteroleibleinia sp.cf	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	4.4	40
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	6.5	137
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.6	13	0.0	0	0.0	0	0.0	0	0.0	0	10.2	213	0.0	0	0.0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	3	0.3	3	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.4	7
Greens (Chlorophyceae)			0.0	0																		
Actinastrum hantschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium sp. / *Ankistrodesmus falcatus*	61	2555	44	1867	50	2090	12	500	32	1341	134	5612	34	1431	65	2727	19	818	30	1278	88	3681
Stichococcus contortus	18	316	0	0	0	0	0	0	0	0	22	390	5	97	0	0	0	0	0	0	30	536
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	2	71	0	0	4	143	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	0	0	0	0.0	0	0.0	340310	0.0	14648	0.0	0	0.0	0	0.0	2788	0.0	0	0.0	2142	0.0	0
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	227
Crucigeniella sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium	11	579	35	1931	17	952	14	774	57	3154	19	1071	6	357	12	655	3	179	6	354	5	268
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	3	307	0	31	0	0	0	0	0	0	1	114	0	0	3	341	1	114	1	61	0	0
Eudorina elegans	0	0	0	0	0	10	0	0	0	0	0	61	0	0	0	49	0	0	2	449	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocytsis sp.	1	208	0	0	5	691	4	615	2	307	2	307	6	845	6	845	8	1076	16	2243	6	922
Planktosphaeria gelatinosa	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	0	0	0	0	0	0	2	113	0	0	0	0	1	28	0	0	2	84
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	0	0	3	0	0	0	7	0	0	0	0	1	76	0	10
Apiocystis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)			0	0																		
Asterionella formosa	0	0	3	819	23	6514	4	1060	4	1212	23	6514	8	2121	30	8331	32	9089	35	9664	65	18329
Aulacoseira granulata	0	0	2	635	1	335	0	0	0	0	0	0	4	1174	9	2851	0	0	6	1814	17	5367
Aulacoseira granulata var. *angustissima*	0	0	0	0	2	422	12	3095	1	141	7	1829	2	563	6	1688	9	2251	8	2129	2	563
Aulacoseria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	2	1224	0	0	0	0	0	0	0	0	2	849	0	0	1	566	0	0	0	0	0	0
Cyclotella stelligera	2	281	1	140	0	0	2	260	1	173	1	87	1	173	2	346	0	0	0	0	4	692
Fragilaria crotonensis	171	61363	129	46075	78	27890	129	46095	64	23048	22	7941	59	21111	30	10652	23	8134	82	29530	62	22273
Fragilaria sp.					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitzschia sp.	1	456	5	1825	8	2954	5	2110	7	2743	7	2743	1	422	3	1266	1	211	1	456	3	1055
Synedra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amphora sp.	2	1224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	283	0	0	0	0
Eunotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	6	708	0	0	3	298	0	0	0	0	4	417	0	0	1	60	1	60	0	0	2	238
Desmids (Mesotaeniaceae, Desmidiaceae)			0	0	0	0																
Closterium aciculare	0	0	0	0	0	0	1	324	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. *variable*	0	0	0	0	1	204	0	0	0	102	1	204	1	204	2	816	2	612	1	441	1	204
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurastrum sp.	1	160	0	40	0	0	0	0	0	6	0	3	0	0	0	3	0	11	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0
Staurodesmus unicorns var. *gracilis*	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	20	0	2000	0	0
Chrysophtya (Chrysophyceae)			0	0																		
Dinobryon sp.	28	1657	5	293	10	606	2	96	14	798	30	1756	2	128	7	415	0	0	0	0	0	0
Cryptomonas sp.	0	0	0	0	0	0	0	0	3	390	1	156	0	0	0	0	0	0	0	0	0	0
Synura sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)			0	0																		
Ceratium hirundinella	0	0	0	0	0	630	0	63	0	0	0	0	0	630	0	0	0	420	0	210	0	0
Gymnodinium sp. 1	0	0	32	34749	1	1190	1	595	1	595	0	0	1	595	1	1190	0	0	0	0	1	595
Gymnodinium sp. 2	0	0	1	23400	0	400	0	0	0	2400	0	0	0	1000	0	0	0	0	0	0	0	0
Peridinium sp.	2	9360	2	9360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gonyaulax sp.	0	0	0	0	4	8656	4	8656	4	7574	0	0	1	2164	0	0	0	0	0	0	0	0
Flagellates 5µm			0	0																		
Flagellates < 5µm/unicells	94	3296	90	3153	85	2973	78	2746	45	1591	30	1060	127	4431	52	1818	162	5662	163	5692	17	606

Lake Taupo phytoplankton enumeration (50 m van Dorne) 2011-12																																				
Cell counts and biovolume																																				
Cells per ml numbers may be affected by rounding																																				
Sample code	XK3	XK3	XY3	XY3	XY6	XY6	ZG3	ZG3	ZY3	ZY3	ZY6	ZY6	BC3	BC3	BC6	BC6	CL3	CL3	CL6	CL6	ED3	ED3	FH3	FH3	HD3	HD3	JA3	JA3	JA6	JA6	KW3	KW3	LT3	LT3	LT6	LT6	NA3	NA3
Sampling date	24/08/2011	24/08/2011	7/09/2011	7/09/2011	28/09/2011	28/09/2011	25/10/2011	25/10/2011	8/11/2011	8/11/2011	22/11/2011	22/11/2011	8/12/2011	8/12/2011	22/12/2011	22/12/2011	12/01/2012	12/01/2012	26/01/2012	26/01/2012	16/02/2012	16/02/2012	7/03/2012	7/03/2012	10/04/2012	10/04/2012	7/05/2012	7/05/2012	31/05/2012	31/05/2012	14/06/2012	14/06/2012	3/07/2012	3/07/2012	18/07/2012	18/07/2012	1/08/2012	1/08/2012
Species composition by class	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)																																				
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	0.2	24	0.0	0	0.0	0	0.0	0	10.4	1204	0.1	12	0.0	0	0.0	0	6.1	709	13.5	1569	2.1	247	14.2	1645	2.7	318	0.0	0	0.4	49	0.4	42	0.0	0	0.0	0	0.0	0
***Leptolyngbya* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.9	363	2.3	906	0.0	0	0.0	0	1.3	527	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Anabaena* sp./ *Dolichospermum* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.2	22	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.2	50	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Chroococcus* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanocapsa* sp.**	0.6	5	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	4.0	36	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Heteroleibleinia* sp.cf**	0.0	0			0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.9	8
***Microcystis* sp.**	0.8	16	1.7	35	1.0	20	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Snowella* sp.**	0.0	0	0.8	21	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	2.6	65	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.2	6	0.0	0	0.0	0	0.0	0
***Phormidium* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanothece* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	3	0.0	0
***Aphanizomenon* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Pseudanabaena* sp.**	0.0	0	0.0	0	0.2	3	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	5	0.3	5	0.0	0	0.0	0	0.2	5	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)							0	0	0	0					0	0																						
Actinastrum hantzschii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium* sp. / *Ankistrodesmus falcatus	70	2948	2	98	110	4619	34	1425	26	1081	11	442	9	393	3	123	16	688	102	4300	41	1720	42	1769	11	467	32	1351	16	663	74	3096	70	2948	30	1278	71	2973
Stichococcus contortus	19	337	0	0	44	790	38	684	16	295	0	0	11	190	0	0	32	569	88	1580	60	1074	0	0	0	0	11	190	16	284	1	21	0	0	0	0	52	937
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	77	0	0	0	0	0	0	0	0	0	0	0	0	22	734	0	0	0	0
Botryococcus braunii (colonies)	0.0	433	0.0	0	0.0	0	0	0	0	0	0.0	0	0.0	19668	0.0	13471	0.0	63155	0.0	0	0	0	0.0	0	0.0	41063	0.0	0	0.0	0	0.0	1352426	0.0	0	0.0	2142	0.0	0
***Chlamydomonas* sp.**	0	0	0	0	2	491	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	246
***Crucigeniella* sp**	0	0	2	152	0	0	0	0	0	0	2	114	0	0	0	0	4	228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	304
***Dictyosphaerium* sp.**	29	1577	0	0	7	386	58	3185	5	257	0	27	26	1416	0	18	0	0	22	1223	168	9266	0	0	7	386	0	0	13	740	31	1705	26	1448	6	354	42	2317
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakatothrix gelatinosa	11	1106	0	0	0	0	2	246	0	0	1	123	0	0	0	0	1	123	6	676	0	0	1	123	4	369	1	123	0	0	8	799	0	0	1	61	2	246
Eudorina elegans	21	5391	0	0	11	2845	18	4493	0	0	9	2246	0	0	0	0	0	0	16	4193	7	1797	0	0	0	0	0	0	0	0	7	1797	15	3894	2	449	0	0
***Lagerheimia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Oocystis* sp.**	6	831	6	831	3	415	0	0	0	0	10	1412	2	332	9	1246	0	0	13	1828	9	1329	1	83	4	498	4	581	0	0	22	3157	5	748	16	2243	5	748
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadriqula lacustrus	0	0	2	384	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Scenedesmus* sp.**	2	122	0	0	0	0	0	0	0	0	7	365	0	0	0	0	0	0	0	0	9	487	0	0	0	0	0	0	1	61	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	386	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westella botryoides	0	0	4	228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	76	0	0
***Apiocystis* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Paulschulzia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	298	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)							0	0	0	0			0	0																								
Asterionella formosa	420	117608	170	47502	44	12449	31	8681	11	2948	18	4914	3	819	2	491	25	6880	26	7371	19	5242	1	164	8	2293	4	983	7	1966	16	4423	44	12285	35	9664	111	30958
Aulacoseira granulata	22	6710	35	10881	50	15596	46	14145	23	7073	0	0	23	7254	0	0	11	3446	17	5259	3	907	1	363	1	363	0	0	0	0	2	725	0	0	6	1814	19	5803
Aulacoseira granulata* var. *angustissima	76	19773	82	21446	111	28747	52	13537	25	6388	26	6845	0	0	9	2434	0	0	4	1065	0	0	6	1673	5	1217	7	1901	12	3042	3	761	4	913	8	2129	0	0
***Aulacoseria* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	4	1836	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	612	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	306	0	0	0	0
Cyclotella stelligera	9	1404	7	1123	16	2527	19	3089	8	1217	4	562	2	374	2	281	4	562	4	655	0	47	1	187	0	0	0	0	0	0	1	94	2	374	0	0	2	374
Fragilaria crotonensis	73	26179	64	22828	36	12985	101	36231	37	13194	40	14241	63	22409	47	16964	81	29111	84	29948	144	51520	53	18849	11	3770	5	1675	30	10681	39	14032	91	32462	82	29530	37	13404
***Fragilaria* sp.**											0	0			1	419							0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	838
***Nitzschia* sp.**	6	2282	1	228	11	4107	4	1369	2	684	1	228	1	228	1	456	6	2510	11	4335	7	2738	2	913	17	6616	8	3194	6	2282	4	1597	2	913	1	456	2	684
***Synedra* sp.**	2	691	0	0	1	461	0	0	0	0	0	0	1	230	0	0	0	0	1	230	0	0	0	0	0	0	0	0	1	230	0	0	0	0	0	0	0	0
***Amphora* sp.**	1	306	0	0	1	612	0	0	0	0	0	0	1	306	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1836
***Eunotia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum											0	0			0	0							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	2	257	0	0	4	386	3	322	0	0	0	0	9	965	0	0	0	0	2	257	0	0	6	708	0	0	0	0	2	257	0	0	2	193	0	0	3	322
Desmids (Mesotaeniaceae, Desmidiaceae)							0	0	0	0			0	0									0	0														
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	1	350	0	0	0	0	0	0	0	0	0	0	0	0	1	701	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum* var. *variable	1	441	1	221	2	882	1	441	1	221	1	221	2	662	0	0	0	0	4	1544	0	0	0	0	0	0	2	662	1	441	1	221	2	662	1	441	1	221
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Mougeotia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Spirogyra* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Staurastrum* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicornis* var. *gracilis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2000	0	0
Chrysophtya (Chrysophyceae)							0	0	0	0			0	0																								
***Dinobryon* sp.**	16	932	2	104	33	1933	53	3141	0	0	0	0	0	0	13	759	0	0	0	0	6	345	31	1829	7	414	1	69	0	0	3	173	12	725	0	0	19	1139
***Cryptomonas* sp.**	0	0	1	84	0	0	0	0	0	0	0	0	1	168	0	0	1	168	2	253	1	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Synura* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)							0	0	0	0			0	0																								
Ceratium hirundinella	1	12285	0	0	1	12285	0	0	0	0	0	420	0	0	0	840	0	0	1	12285	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	0	0
***Gymnodinium* sp. 1**	1	644	0	0	0	0	1	644	2	1931	0	0	1	1287	0	0	0	0	0	0	0	0	2	1931	0	0	0	0	0	0	0	0	1	1287	0	0	0	0
***Gymnodinium* sp. 2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1200	0	400	0	1200	0	0	0	3600	0	0	0	0	0	0
***Peridinium* sp.**	0	0	0	0	1	2340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2340	0	0	0	0
***Gonyaulax* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	25740	0	0	0	0	0	0	1	1170	0	0	0	0	0	0
Flagellates 5µm																																				
Flagellates < 5µm/unicells	64	2232	78	2744	53	1863	137	4812	76	2662	38	1331	78	2744	56	1945	90	3153	58	2027	83	2907	129	4525	99	3481	66	2314	29	1024	184	6429	50	1761	163	5692	67	2334

Lake Taupo phytoplankton enumeration (10-m tube) 2010-11

Cell counts and biovolume

Cells per ml numbers may be affected by rounding

Sample code	FY1	FY1	FY5	FY5	HQ1	HQ1	IV4	IV4	KC1	KC1	KS1	KS1	LE1	LE1	LV1	LV1	MJ1	MJ1	MJ4	MJ4	OP1	OP1	PL1	PL1	QN1	QN1	RK1	RK1	TQ1	TQ1	UI1	UI1	UX1	UX1	UT1	UT1	WU1	WU1
Sampling date	10/08/2010	10/08/2010	24/08/2010	24/08/2010	13/09/2010	13/09/2010	26/10/2010	26/10/2010	10/11/2010	10/11/2010	25/11/2010	25/11/2010	8/12/2010	8/12/2010	21/12/2010	21/12/2010	11/01/2011	11/01/2011	27/01/2011	27/01/2011	17/02/2011	17/02/2011	1/03/2011	1/03/2011	15/03/2011	15/03/2011	13/04/2011	13/04/2011	10/05/2011	10/05/2011	31/05/2011	31/05/2011	22/06/2011	22/06/2011	5/07/2011	5/07/2011	9/08/2011	9/08/2011
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)
Blue greens (Cyanophyceae)																																						
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	0.8	87	0.8	90	17.1	1980	27.5	3195	44.0	5106	11.2	1299	0.9	100	3.4	398	0.8	94	9.6	1118	5.7	660	21.4	2482	12.2	1411	34.7	4021	26.5	3072	8.5	991	0.1	14	0.2	23	0.0	0
***Leptolyngbya* sp.**	1.3	14	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.7	7	1.2	13	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	2.7	1057	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0			0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Anabaena* sp./ *Dolichospermum* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.1	99	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.3	67	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.4	287	0.0	0	0.0	0
***Chroococcus* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.1	2
***Aphanocapsa* sp.**	1.0	9	0.0	0	0.5	5	0.9	8	0.6	5	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3.6	32	0.0	0	0.0	0	0.0	0	0.0	0	16.4	148	3.4	31
***Heteroleibleinia* sp.cf**	0.0	0	0.0	0	0.0	0			0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0			22.7	409	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Microcystis* sp.**	0.4	8	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.5	32	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.8	37
***Snowella* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Phormidium* sp.**	0.0	0	0.0	0	0.4	9	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	6.6	139	0.0	0	0.5	11	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanothece* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanizomenon* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Pseudanabaena* sp.**	0.0	0	0.1	3	1.2	23	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.8	15	1.3	25	0.0	0	2.4	46	0.7	13	1.8	35	0.0	0	0.0	0	0.0	0	0.0	0	0.3	5
Greens (Chlorophyceae)																																			0.0	0		
Actinastrum hantschii	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium* sp. / *Ankistrodesmus falcatus	72	3022	128	5385	121	5090	151	6339	215	9043	77	3249	117	4931	50	2113	58	2431	105	4431	6	250	6	273	10	432	0	0	0	0	0	263	11043	184	7725	63	2636
Stichococcus contortus	29	526	32	584	60	1071	0	0	15	273	0	0	0	0	0	0	14	253	0	0	0	0	0	0	2	39	0	0	0	0	0	0	4	78	0	0	14	253
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	107	2	71	0	0	0	0
Botryococcus braunii (colonies)	0.0	6160	0.0	18946	0.0	0	0.0	0	0.0	3178	0.0	0	0.0	21852	0.0	0	0.0	0	0.0	0	0.0	0	0.0	36000	0.0	0	0.0	12008	0.0	4358	0.0	16933	0.0	0	0.0	2674	0.0	1462
***Chlamydomonas* sp.**	2	341	3	568	5	1022	0	0	0	0	0	0	0	0	0	0	2	341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Crucigeniella* sp**	3	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium	9	506	0	0	33	1815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	803	1	30	6	357
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	6	682	4	454	6	682	0	0	0	0	0	0	0	0	0	0	2	227	0	0	1	114	6	682	215	22552	2	227	0	0	0	0	2	227	2	227	13	1363
Eudorina elegans	16	4155	6	1662	6	1662	0	92	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	18	0	36	0	31	0	20	0	0	15	3878
***Lagerheimia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Oocystis* sp.**	3	384	6	845	6	922	5	768	6	922	1	154	0	0	3	461	5	691	0	0	14	1997	38	5378	43	6146	44	6223	15	2074	14	1997	5	768	13	1844	4	615
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	355	0	0
***Scenedesmus* sp.**	0	0	8	394	10	535	2	113	0	0	2	113	0	0	1	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	2	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	8	0	0
***Apiocystis* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Paulschulzia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																																			0	0		
Asterionella formosa	155	43323	268	74983	319	89222	136	38173	68	19086	19	5302	16	4544	8	2272	6	1818	1	303	1	151	0	0	0	0	2	606	21	5756	35	9695	23	6362	17	4847	117	32871
Aulacoseira granulata	52	16268	81	24989	113	34884	144	44611	90	28008	34	10566	12	3690	4	1174	0	0	0	0	0	0	0	0	0	0	9	2683	0	0	0	0	0	0	3	839	4	1174
Aulacoseira granulata* var. *angustissima	57	14910	13	3376	14	3517	16	4079	16	4220	0	0	1	141	0	0	6	1688	5	1407	0	70	2	422	4	985	0	0	16	4220	13	3376	8	2110	10	2532	28	7174
***Aulacoseira* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
Cocconeis	5	2829	3	1415	2	849	0	0	2	849	0	0	2	1132	0	0	2	849	1	283	0	0	0	0	0	0	0	0	0	0	1	566	2	1132	0	0	1	566
Cyclotella stelligera	11	1818	8	1212	5	779	10	1558	5	779	1	87	2	260	0	0	2	260	1	87	0	0	0	0	2	260	2	260	2	346	4	692	10	1645	4	606	2	260
Fragilaria crotonensis	108	38542	122	43578	69	24597	2	775	25	8909	17	6004	0	0	1	194	14	5036	11	4067	3	968	0	0	0	0	9	3099	128	45902	36	12976	8	2711	4	1549	64	23048
***Fragilaria* sp.**							12	4261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	775	0	0	0	0	0	0	5	1743	0	0		
***Nitzschia* sp.**	3	1266	2	633	9	3587	12	4642	32	12659	6	2321	4	1477	3	1266	3	1055	1	211	1	211	1	211	2	844	1	422	1	422	2	844	2	844	3	1055	5	1899
***Synedra* sp.**	6	2345	11	4263	12	4903	1	426	3	1066	0	0	0	0	0	0	1	213	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Amphora* sp.**	0	0	0	0	1	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	283	0	0	0	0	1	566	0	0	0	0
***Eunotia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum							4	476	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Small unknown diatom sp.	4	417	1	60	13	1428	2	179	3	357	0	0	2	179	1	60	2	179	1	119	0	0	0	0	0	0	0	0	2	179	0	0	5	536	14	1547	4	417
Desmids (Mesotaeniaceae, Desmidiaceae)							0	0																											0	0		
Closterium aciculare	2	1296	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	324	0	0
Closterium acutum* var. *variable	0	0	3	1020	4	1428	1	204	1	204	0	0	1	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	204
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Mougeotia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Spirogyra* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Staurastrum* sp.**	0	0	0	0	1	148	0	0	0	0	0	0	1	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	148	1	148	0	0	0	0	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns* var. *gracilis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																																			0	0		
***Dinobryon* sp.**	5	287	0	0	37	2202	49	2873	173	10214	18	1053	4	255	2	96	0	0	0	0	4	255	13	766	32	1883	23	1341	0	0	0	0	8	479	0	0	0	0
***Cryptomonas* sp.**	3	390	4	545	3	390	0	0	0	0	0	0	1	78	0	0	0	0	0	0	0	0	0	0	1	78	0	0	0	0	1	156	0	0	0	0	0	0
***Synura* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																																			0	0		
Ceratium hirundinella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	22722	0	3150	0	0
***Gymnodinium* sp. 1**	0	0	0	0	4	4166	2	1785	0	0	0	0	0	0	1	1190	1	1190	2	2380	1	595	1	595	1	595	1	595	0	0	0	0	0	0	0	0	0	0
***Gymnodinium* sp. 2**	0	0	0	0	0	0	1	10820	9	183940	0	0	0	0	1	10820	0	0	0	0	0	0	1	21640	0	0	0	0	0	0	0	0	0	0	0	800	0	0
***Peridinium* sp.**	0	0	1	2164	0	0	0	0	0	0	0	0	7	28132	1	2164	4	17312	6	25968	0	0	0	0	1	2164	0	0	0	0	1	2164	0	0	0	0	0	0
***Gonyaulax* sp.**	0	0	0	0	0	0	5	10820	0	0	24	47608	2	3246	4	8656	0	0	0	0	3	5410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm																																			0	0		
Flagellates < 5µm/unicells	70	2443	84	2954	111	3901	105	3692	108	3787	181	6343	104	3654	102	3560	70	2462	65	2291	22	776	48	1685	39	1382	29	1004	30	1060	29	1004	36	1269	87	3049	47	1628

Lake Taupo phytoplankton enumeration (50 m van Dorne) 2010-11																																						
Cell counts and biovolume																																							
Cells per ml numbers may be affected by rounding																																						
Sample code	FY3	FY3	FY7	FY7	HR1	HR1	IV6	IV6	KC3	KC3	KS3	KS3	LE3	LE3	LV3	LV3	MJ3	MJ3	MJ6	MJ6	OP3	OP3	PL3	PL3	QN3	QN3	RK3	RK3	TQ3	TQ3	UI3	UI3	UX3	UX3	UT3	UT3	WU3	WU3
Sampling date	10/08/2010	10/08/2010	24/08/2010	24/08/2010	13/09/2010	13/09/2010	26/10/2010	26/10/2010	10/11/2010	10/11/2010	25/11/2010	25/11/2010	8/12/2010	8/12/2010	21/12/2010	21/12/2010	11/01/2011	11/01/2011	27/01/2011	27/01/2011	17/02/2011	17/02/2011	1/03/2011	1/03/2011	15/03/2011	15/03/2011	13/04/2011	13/04/2011	10/05/2011	10/05/2011	31/05/2011	31/05/2011	22/06/2011	22/06/2011	5/07/2011	5/07/2011	9/08/2011	9/08/2011
Species composition by class	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume	Cell	Biovolume
	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)	(per ml)	(μm^3)
Blue greens (Cyanophyceae)																																						
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	0.9	101	0.5	53	0.0	0	15.5	1796	3.8	443	7.4	863	0.9	103	1.2	137	0.3	30	0.0	0	0.3	35	0.0	0	0.0	0	0.0	0	1.7	191	0.3	39	1.3	148	0.0	5	3.1	357
***Leptolyngbya* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena planktonica/Dolichospermum planctonicum	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.2	64	0.0	0	0.0	0	0.0	0	0.4	172	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena flos-aquae	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0			0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Anabaena* sp./*Dolichospermum* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.5	41	0.0	0	2.0	178	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis / Dolichospermum circinalis	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.1	19	0.0	0	0.0	0	0.0	0
***Chroococcus* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanocapsa* sp.**	2.0	18	0.6	6	0.0	0	0.0	0	0.3	3	0.0	0	0.4	4	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.6	68	0.0	0
***Heteroleibleinia* sp.cf**	0.0	0	0.0	0	0.0	0			0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0			0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Microcystis* sp.**	0.0	0	0.0	0	0.2	5	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.7	36
***Snowella* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.6	14	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Phormidium* sp.**	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanothece* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Aphanizomenon* sp.**	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
***Pseudanabaena* sp.**	0.0	0	0.2	3	0.0	0	0.1	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.1	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	5	0.0	0	0.0	0
Greens (Chlorophyceae)																																						
Actinastrum hantschii	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium* sp. / *Ankistrodesmus falcatus	60	2531	85	3587	100	4201	71	2998	74	3120	33	1400	107	4496	26	1106	97	4079	35	1450	7	295	55	2310	44	1867	30	1278	20	860	9	393	147	6167	159	6683	73	3071
Stichococcus contortus	37	674	67	1200	51	916	11	200	23	421	11	190	16	295	0	0	18	326	9	168	0	0	6	116	0	0	7	126	0	0	0	0	5	84	0	0	13	232
Kirchneriella contorta	0	0	0	0	2	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0.0	10258	0.0	812	0.0	3448	0.0	3000	0.0	0	0.0	1200	0.0	0	0.0	200	0.0	0	0.0	0	0.0	600	0.0	52500	0.0	0	0.0	3069	0.0	9535	0.0	0	0.0	365	0.0	215	0.0	4753
***Chlamydomonas* sp.**	4	860	3	614	1	246	0	0	0	0	0	0	3	614	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Crucigeniella* sp**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium	15	837	0	0	9	483	3	139	0	23	0	25	0	13	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	1	44	0	0
Gloeocystis planctonica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	6	614	8	860	5	491	0	0	5	491	0	0	0	0	0	0	5	491	1	123	0	0	0	0	1	123	0	0	1	123	0	0	2	184	1	123	4	430
Eudorina elegans	13	3444	9	2246	0	0	0	0	16	4193	18	4643	12	2995	0	0	10	2546	33	8387	1	300	0	0	6	1647	5	1198	9	2246	9	2246	0	0	0	0	4	1048
***Lagerheimia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Oocystis* sp.**	9	1329	9	1246	12	1661	11	1495	4	498	1	166	1	166	2	332	8	1163	2	332	2	332	8	1080	4	498	5	748	15	2077	7	997	22	3074	8	1163	8	1080
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	384	0	0
***Scenedesmus* sp.**	5	243	18	943	4	183	0	0	6	304	0	0	0	0	0	0	0	0	2	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	122	0	0
Sphaerocystis schroeteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volvox aureus	0	0	80	4774	94	5616	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	608	0	0
***Apiocystis* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Paulschulzia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																																						
Asterionella formosa	186	52088	309	86650	368	103030	163	45536	102	28665	50	14087	45	12613	82	22932	16	4586	7	1966	0	0	0	0	2	655	4	983	10	2785	8	2293	32	8845	23	6552	104	28993
Aulacoseira granulata	85	26477	90	27747	113	35182	336	104095	207	64017	122	37721	71	21943	43	13420	35	10700	8	2539	12	3627	0	0	17	5259	16	4896	15	4534	12	3627	12	3627	8	2358	7	2176
Aulacoseira granulata* var. *angustissima	21	5476	18	4715	20	5324	13	3498	25	6388	16	4107	12	3042	0	0	36	9430	10	2586	0	0	30	7909	15	3803	12	3194	16	4259	5	1217	22	5628	20	5171	35	9126
***Aulacoseira* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
Cocconeis	6	3366	4	1836	4	2142	0	0	1	612	2	918	1	306	0	0	3	1530	3	1530	0	0	0	0	0	0	1	306	0	0	1	612	0	0	0	0	2	1224
Cyclotella stelligera	13	2153	5	842	4	562	11	1685	8	1217	6	936	6	936	5	842	10	1591	2	374	3	468	1	187	2	374	5	842	5	842	3	468	6	1030	9	1404	4	562
Fragilaria crotonensis	124	44399	88	31624	27	9634	3	1047	18	6492	0	0	9	3351	1	209	0	0	6	2304	0	0	0	0	5	1675	0	0	108	38745	34	12147	0	0	33	11728	24	8587
***Fragilaria* sp.**							3	1047	0	0	0	0	0	0	0	0	6	2094	0	0	0	0	0	0	19	6702	0	0	0	0	0	0	9	3141	0	0		
***Nitzschia* sp.**	2	684	2	913	3	1141	19	7301	20	7757	8	2966	4	1597	0	114	2	913	1	456	1	228	0	0	1	456	1	456	2	684	1	228	4	1369	4	1369	6	2282
***Synedra* sp.**	5	1844	9	3688	6	2535	0	0	5	1844	1	461	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	691
***Amphora* sp.**	1	306	0	0	0	0	0	0	0	0	1	612	1	612	0	0	0	0	0	0	1	306	0	0	0	0	0	0	0	0	1	306	1	612	0	0	1	306
***Eunotia* sp.**	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Selenastrum minutum							2	257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Small unknown diatom sp.	1	129	2	257	6	708	0	0	2	257	0	0	1	64	0	0	2	193	2	193	1	129	0	0	0	0	2	193	2	257	0	0	2	257	11	1223	4	450
Desmids (Mesotaeniaceae, Desmidiaceae)							0	0																											0	0		
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	420	0	0
Closterium acutum* var. *variable	4	1323	3	1103	2	662	1	221	1	441	2	882	1	221	2	662	1	441	0	0	0	0	0	0	1	441	2	882	1	441	2	662	0	0	0	0	2	662
Cerasterias staurastroides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Mougeotia* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Spirogyra* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Staurastrum* sp.**	1	80	0	0	1	80	0	0	1	80	1	80	1	160	0	0	1	80	1	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0
Staurastrum tangaroaii	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staurodesmus unicorns* var. *gracilis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)															0	0																			0	0		
***Dinobryon* sp.**	14	828	0	0	25	1484	33	1933	0	0	6	345	0	0	0	0	0	0	4	207	0	0	3	173	1	69	7	414	0	0	0	0	18	1070	1	50	11	621
***Cryptomonas* sp.**	2	253	3	421	3	421	1	168	0	0	0	0	1	84	0	0	1	84	2	253	0	0	0	0	0	0	2	253	1	168	1	168	0	0	0	0	0	0
***Synura* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	81	0	0
Dinoflagellates (Dinophyceae)																																			0	0		
Ceratium hirundinella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12285	0	2100	0	0
***Gymnodinium* sp. 1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	644	0	0	0	0	0	0	0	0	0	0
***Gymnodinium* sp. 2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11700	0	0	0	0	0	0	0	0	0	0	0	0	0	400	0	0
***Peridinium* sp.**	1	2340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***Gonyaulax* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm																																			0	0		
Flagellates < 5µm/unicells	56	1966	58	2027	85	2989	161	5631	59	2068	78	2744	37	1310	144	5057	56	1945	31	1085	9	328	118	4136	21	737	27	942	43	1515	23	799	34	1188	128	4484	47	1658

Lake Taupo phytoplankton enumeration (10-m tube) 2009-10

Cell counts and biovolume

Cells per ml numbers may be affected by rounding

Sample code	PH1	PH1	QJ1	QJ1	TT1	TT1	VA1	VA1	VA3	VA3	XF1	XF1	ZD1	ZD1	BX1	BX1	CU1	CU1	CU3	CU3
Sampling date	19/10/2009	19/10/2009	12/11/2009	12/11/2009	13/01/2010	13/01/2010	2/02/2010	2/02/2010	18/02/2010	18/02/2010	10/03/2010	10/03/2010	8/04/2010	8/04/2010	20/05/2010	20/05/2010	3/06/2010	3/06/2010	23/06/2010	23/06/2010
Species composition by class	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)																				
Dolichospermum c.f. lemmermannii (formerly; *Anabaena c.f. lemmermannii)*	0.0	0	77.4	6964	3.0	270	17.6	1582	182.5	21172	4.2	492	5.6	652	3.6	418	4.6	531	1.9	218
Dolichospermum planctonicum (formerly; *Anabaena planktonica)*	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	100	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum sp. (formerly; *Anabaena sp.)*	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Dolichospermum circinalis (formerly; *Anabaena circinalis)*	6.9	1429	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.8	11	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcystis sp.	0.0	0	0.6	13	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Leptolyngbya sp.	17.1	188	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.6	7	0.0	0	0.0	0
Snowella sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pseudanabaena sp.	0.7	14	0.0	0	0.2	4	0.0	0	0.0	0	0.1	2	0.1	1	0.8	15	0.0	0	0.4	7
Phormidium sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.2	5	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanocapsa sp.	4.0	36	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	2.0	18
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.3	6	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																				
Monoraphidium sp. / Ankistrodesmus falcatus	67	2818	32	1341	5	227	21	863	0	0	2	68	18	750	14	591	27	1113	11	477
Stichococcus contortus	11	204	0	0	0	0	9	166	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii (colonies)	0	0	0.002	3900	0.000	1950	0	0	0	0	0	0	0	0	0	0	0.0	3248	0.0	1570
Chlamydomonas sp.	2	341	0	0	1	227	0	0	0	0	0	0	0	0	2	454	0	0	3	568
Elakotothrix gelatinosa	4	454	3	341	1	114	4	454	0	0	1	114	0	0	15	1591	6	682	2	170
Eudorina elegans	8	2077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocytsis sp.	9	1229	12	1690	22	3150	36	5070	45	6376	10	1383	34	4840	11	1613	11	1613	6	845
Tetraedon gracile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium	45	0	0	0	6	0	8	0	0	0	0	0	0	0	0	0	4	238	0	0
Crucigeniella sp	17	1090	18	1160	77	4993	48	3095	8	492	0	0	0	0	0	0	1	70	0	0
Kirchneriella contorta	10	321	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	214	0	0
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Scenedesmus sp.	0	0	0	0	4	225	0	0	0	0	0	0	0	0	0	0	4	225	0	0
Volvox aureus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	325	19476	173	10387	498	29863
Diatoms (Bacillariophyceae)																				
Asterionella formosa	186	51958	31	8786	3	757	0	0	0	0	4	1060	0	0	4	1212	10	2727	9	2575
Aulacoseira granulata	21	6541	23	7044	6	2013	0	0	0	0	0	0	0	0	12	3857	9	2683	9	2851
Aulacoseira granulata var. angustissima	54	13925	4	1125	1	281	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aulacoseria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclotella stelligera	10	1558	3	519	4	606	2	346	1	173	0	0	0	0	0	0	0	0	2	346
Fragilaria crotonensis	158	56554	121	43190	60	21498	98	35249	8	2905	15	5229	12	4261	22	7941	57	20336	135	48226
Nitzschia sp.	2	844	1	211	2	633	3	1266	0	0	1	211	2	844	7	2743	2	633	0	0
Synedra sp.	1	426	0	0	1	213	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amphora sp.	0	0	0	0	2	849	0	0	0	0	0	0	0	0	0	0	1	566	1	283
Cocconeis	1	566	0	0	0	0	2	849	0	0	6	3112	0	0	6	3395	8	3961	7	3678
Small unknown diatom sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	238	1	60	1	119
Desmids (Mesotaeniaceae, Desmidiaceae)									0	0										
Closterium aciculare	0	0	1	648	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. variable	1	408	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	204	1	408
Staurastrum sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	74	1	74	0	0
Chrysophtya (Chrysophyceae)																				
Dinobryon sp.	98	5809	289	17077	16	926	37	2202	29	1692	4	223	4	223	25	1468	0	0	6	383
Cryptomonas sp.	1	78	0	0	1	78	0	0	0	0	1	156	0	0	1	78	2	234	1	156
Dinoflagellates (Dinophyceae)																				
Ceratium hirundinella	0	0	0	0	1	11361	1	22722	0	0	0	0	0	0	0	0	0	0	0	0
Gymnodinium sp. 1	0	0	0	0	0	0	0	0	1	1190	0	0	0	0	1	595	1	595	0	0
Gymnodinium sp. 2	0	0	0	0	2	40575	0	0	1	27050	0	0	0	5410	0	0	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	4	15148	0	0	3	12984	0	0	1	2164
Gonyaulax sp.	0	0	0	0	0	0	0	0	1	2164	0	0	3	6492	0	0	0	0	0	0
Flagellates 5µm																				
Flagellates < 5µm/unicells	153	5340	61	2140	43	1496	42	1477	85	2973	34	1193	33	1155	29	1004	23	795	36	1269

Lake Taupo phytoplankton enumeration (10-m tube) 2009-10 (continued)

Cell counts and biovolume	Cells per ml numbers may be affected by rounding			
Sample code	EX1	EX1	FY1	FY1
Sampling date	13/07/2010	13/07/2010	10/08/2010	10/08/2010
Species composition by class	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)				
Dolichospermum c.f. lemmermannii (formerly; ***Anabaena c.f. lemmermannii)***	0.2	22	0.8	87
Dolichospermum planctonicum (formerly; ***Anabaena planktonica)***	0.0	0	0.0	0
Dolichospermum sp. (formerly; ***Anabaena sp.)***	0.0	0	0.0	0
Dolichospermum circinalis (formerly; ***Anabaena circinalis)***	0.0	0	0.3	67
Chroococcus sp.	0.0	0	0.0	0
Microcystis sp.	0.0	0	0.4	8
Leptolyngbya sp.	0.0	0	1.3	14
Snowella sp.	0.0	0	0.0	0
Pseudanabaena sp.	0.5	9	0.0	0
***Phormidium* sp.**	0.3	5	0.0	0
***Aphanocapsa* sp.**	2.4	22	1.0	9
***Aphanothece* sp.**	0.0	0	0.0	0
***Aphanizomenon* sp.**	0.0	0	0.0	0
Greens (Chlorophyceae)				
Monoraphidium sp. / Ankistrodesmus falcatus	68	2863	72	3022
Stichococcus contortus	0	0	29	526
Botryococcus braunii (colonies)	0.0	0	0.0	6160
Chlamydomonas sp.	0	0	2	341
Elakotothrix gelatinosa	6	625	6	682
Eudorina elegans	0	0	16	4155
Nephrocytium lunatum	0	0	0	0
Oocytsis sp.	4	538	3	384
Tetraedon gracile	0	0	0	0
Paulschulzia sp.	0	0	0	0
Dictyosphaerium	0	0	9	506
Crucigeniella sp	0	0	3	211
Kirchneriella contorta	0	0	0	0
Planktosphaeria gelatinosa	0	0	0	0
***Scenedesmus* sp.**	2	113	0	0
Volvox aureus	87	5194	0	0
Diatoms (Bacillariophyceae)				
Asterionella formosa	39	11058	155	43323
Aulacoseira granulata	23	7044	52	16268
Aulacoseira granulata var. angustissima	0	0	57	14910
Aulacoseria sp.	17	0	0	0
Cyclotella stelligera	8	1212	11	1818
Fragilaria crotonensis	62	22273	108	38542
Nitzschia sp.	1	422	3	1266
Synedra sp.	1	213	6	2345
Amphora sp.	0	0	0	0
Cocconeis	4	2264	5	2829
	4	417	4	417
Desmids (Mesotaeniaceae, Desmidiaceae)				
Closterium aciculare	0	0	2	1296
Closterium acutum var. variable	0	0	0	0
***Staurastrum* sp.**	0	0	0	0
Chrysophtya (Chrysophyceae)				
Dinobryon sp.	0	0	5	287
Cryptomonas sp.	4	623	3	390
Dinoflagellates (Dinophyceae)				
Ceratium hirundinella	0	0	0	0
Gymnodinium sp. 1	1	595	0	0
Gymnodinium sp. 2	0	0	0	0
Peridinium sp.	0	0	0	0
Gonyaulax sp.	0	0	0	0
Flagellates 5µm				
Flagellates < 5µm/unicells	59	2064	70	2443

Lake Taupo phytoplankton enumeration (10-m tube) 2008-09

Cell counts and biovolume

Cells per ml numbers may be affected by rounding

Sample code	RL4	RL4	SV2	SV2	UP4	UP4	XE2	XE2	XZ2	XZ2	XZ1	XZ1	AH2	AH2	AH4	AH4	DU1	DU1	EW2	EW2	GV2	GV2
Sampling date	16/09/2008	16/09/2008	14/10/2008	14/10/2008	26/11/2008	26/11/2008	22/12/2008	22/12/2008	13/01/2009	13/01/2009	28/01/2009	28/01/2009	11/02/2009	11/02/2009	25/02/2009	25/02/2009	26/03/2009	26/03/2009	15/04/2009	15/04/2009	7/05/2009	7/05/2009
Species composition by class	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)																						
Anabaena lemmermannii	0.0	0	0.0	0	46.5	1905	16.3	670	1.3	116	1.3	120	7.4	669	75.6	41	1.4	126	27.7	2495	13.6	1226
Pseudanabaena limnetica	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.1	2	0.0	0	4.4	83	0.0	0	0.0	0
Anabaena planktonica	0.0	0	0.0	0	0.0	0	0.0	0	0.8	299	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anabaena circinalis	0.0	0	8.9	581	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	4
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0		
Leptolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	2.1	23
Snowella sp.																	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																						
Monoraphidium sp. / *Ankistrodesmus falcatus*	94	3956	4	172	4	172	16	688	53	2236	139	5848	56	2359	0	0	0	0	1	49	5	221
Stichococcus contortus	12	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii	0.0	218	0.0	0	0.0	8877	0.0	127636	0.0	0	0.0	1908	0.0	0	0.0	543	0	0	0.0	4213	0.0	6058
Chlamydomonas sp.	0	0	1	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	4	369	0	0	0	0	0	0	5	491	12	1229	16	1720	18	1843	0	0	1	114	0	0
Eudorina elegans	0	0	0	0	0	0	0	0	6	1647	0	0	0	0	0	0	0	0	3	674	0	0
Nephrocytium lunatum	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocystis sp.	14	1994	8	1163	5	748	5	665	0	0	2	249	5	665	0	0	0	0	5	748	4	498
Tetraedon gracile	0	0	0	0	0	0	20	2252	9	1030	1	64	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	18	0	7	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium sp.	0	0	0		0		0	0	0		0	0	0		0				5	0	0	0
Crucigeniella sp	0	0	0		7	456	4	228	2	152	0	0	0	0	0	0	0	0	30	1969	53	3422
Diatoms (Bacillariophyceae)																						
Asterionella formosa	64	18018	42	11794	29	8190	3	819	22	6061	35	9828	5	1310	1	328	4	1147	11	3112	19	5242
Aulacoseira granulata	15	4534	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2539	0	0	0	0
Aulacoseira granulata var. *angustissima*	0	0	1	304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aulacoseria sp.	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclotella stelligera	15	2340	2	374	7	1123	0	0	1	187	1	187	1	187	0	0	1	187	1	187	4	655
Fragilaria crotonensis	37	13194	33	11728	99	35603	66	23456	70	25132	21	7539	48	17173	16	5864	2	838	21	7539	8	2723
Nitzschia sp.	0	0	0	0	0	0	4	1369	0	0	4	1597	2	913	2	913	0	0	0	0	0	0
Synedra sp.	1	230	0	0	0	0	2	691	0	0	0	0	0	0	0	0	1	230	0	0	0	0
Amphora sp.	0	0	0	0	0	0	1	306	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cocconeis	1	306	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Desmids (Mesotaeniaceae, Desmidiaceae)																						
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum var. *variable*	1	441	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																						
Dinobryon sp.	0	0	53	3106	313	18466	23	1381	0	0	2	104	38	2243	53	3141	0	0	11	621	13	794
Cryptomonas sp.	0	0	0	0	1	168	0	0	0	0	0	0	1	84	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																						
Ceratium hirundinella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gymnodinium sp. 1	0	0	0	0	1	205	1	205	1	205	4	4505	4	4505	3	3218	0	0	1	1287	1	644
Gymnodinium sp. 2	0	0	0	0	1	14625	0	0	0	0	0	0	0	0	0	0	0	150	0	50	0	25
Peridinium sp.	0	0	0	0	0	0	0	0	0	0	2	4680	1	2340	0	0	0	0	1	2340	0	0
Gonyaulax sp.																	1	1170	1	1170	0	0
Flagellates 5µm																						
Flagellates < 5µm/unicells	113	3972	68	2375	78	2723	249	8722	182	6368	57	2007	51	1781	83	2907	37	1290	51	1781	145	5078

Lake Taupo phytoplankton enumeration (10-m tube) 2008-09 continued

Sample code	GV4	GV4	JO1	JO1	KI1	KI1	NEW NAMES INTRODUCED	LT1	LT1	ND1	ND1
Sampling date	27/05/2009	27/05/2009	18/06/2009	18/06/2009	6/07/2009	6/07/2009	August 2009	13/08/2009	13/08/2009	7/09/2009	7/09/2009
Species composition by class	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)		Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)							**Blue greens (Cyanophyceae)**				
Anabaena lemmermannii	9.4	849	5.8	41	0.3	28	*Dolichospermum c.f. lemmermannii* (formerly; *Anabaena c.f. lemmermannii)*	0.1	10	0.1	11
Pseudanabaena limnetica	0.0	0	0.0	0	1.0	19	*Pseudanabaena sp.*	0.0	0	0.0	0
Anabaena planktonica	0.2	88	0.0	0	0.0	0	*Dolichospermum planctonicum* (formerly; *Anabaena planktonica)*	0.0	0	0.0	0
Anabaena sp.	2.1	188	0.3	23	0.5	46	*Dolichospermum sp.* (formerly; *Anabaena sp.)*	0.0	0	0.0	0
Anabaena circinalis	0.0	0	0.0	0	0.0	0	*Dolichospermum circinalis* (formerly; *Anabaena circinalis)*	0.0	0	0.0	0
Chroococcus sp.	0.1	1	0.0	0	0.0	0	*Chroococcus sp.*	0.2	2	0.8	11
Microcystis sp.	0.0	0	0.0	0	0.0	0	*Microcystis sp.*	0.0	0	2.5	53
Leptolyngbya sp.	0.6	6	0.1	2	0.0	0	*Leptolyngbya sp.*	0.0	0	120.0	1320
Snowella sp.	0.1	3	0.0	0	0.0	0	*Snowella sp.*	3.3	83	222.9	5572
Greens (Chlorophyceae)							**Greens (Chlorophyceae)**			0.0	0
Monoraphidium sp. / *Ankistrodesmus falcatus*	14	590	42	1744	42	1750	*Monoraphidium sp. / Ankistrodesmus falcatus*	24	1022	225	9459
Stichococcus contortus	0	0	3	53	0	0	*Stichococcus contortus*	19	351	63	1141
Botryococcus braunii	0.0	15954	0.0	14315	0.0	30946	*Botryococcus braunii (colonies)*	0.0	0	0.0	205716
Chlamydomonas sp.	0	0	0	0	0	0	*Chlamydomonas sp.*	0	0	0	0
Elakotothrix gelatinosa	0	0	0	0	0	0	*Elakotothrix gelatinosa*	1	114	8	819
Eudorina elegans	0	0	0	0	0	0	*Eudorina elegans*	0	0	0	0
Nephrocytium lunatum	0	0	0	0	0	0	*Nephrocytium lunatum*	0	0	0	0
Oocytsis sp.	0	0	4	498	0	0	*Oocytsis sp.*	15	2151	0	0
Tetraedon gracile	0	0	0	0	0	0	*Tetraedon gracile*	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	*Paulschulzia sp.*	0	0	0	0
Dictyosphaerium sp.	0	0	0		0	0	*Dictyosphaerium*	0	0	12	295
Crucigeniella sp	36	2358	11	722	9	598	*Crucigeniella sp*	2	141	0	0
Diatoms (Bacillariophyceae)							**Diatoms (Bacillariophyceae)**				
Asterionella formosa	10	2785	22	6143	55	15299	*Asterionella formosa*	366	102400	215	60333
Aulacoseira granulata	7	2176	0	0	102	31529	*Aulacoseira granulata*	30	9392	18	5441
Aulacoseira granulata var. *angustissima*	0	0	15	3955	0	0	*Aulacoseira granulata var. angustissima*	0	0	4	1014
Aulacoseria sp.	0	0	0	0	0	0	*Aulacoseria sp.*	0	0	0	0
Cyclotella stelligera	1	187	9	1404	2	346	*Cyclotella stelligera*	5	866	21	3432
Fragilaria crotonensis	18	6492	35	12566	24	8716	*Fragilaria crotonensis*	0	0	34	12217
Nitzschia sp.	1	456	2	913	2	844	*Nitzschia sp.*	5	2110	1	380
Synedra sp.	0	0	0	0	0	0	*Synedra sp.*	1	213	0	0
Amphora sp.	0	0	0	0	0	0	*Amphora sp.*	0	0	0	0
Cocconeis	0		1	306	0	0	*Cocconeis*	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)							**Desmids (Mesotaeniaceae, Desmidiaceae)**				
Closterium aciculare	0	0	1	350	0	0	*Closterium aciculare*	0	0	0	0
Closterium acutum var. *variable*	0	0	0	0	1	204	*Closterium acutum var. variable*	0	0	1	368
Chrysophtya (Chrysophyceae)							**Chrysophtya (Chrysophyceae)**			0	0
Dinobryon sp.	8	449	0	0	0	0	*Dinobryon sp.*	0	0	0	0
Cryptomonas sp.	0	0	1	84	1	78	*Cryptomonas sp.*	0	0	0	0
Dinoflagellates (Dinophyceae)							**Dinoflagellates (Dinophyceae)**				
Ceratium hirundinella	0	0	0	0	0	0	*Ceratium hirundinella*	0	0	0	0
Gymnodinium sp. 1	1	1287	1	644	2	1785	*Gymnodinium sp. 1*	0	0	0	0
Gymnodinium sp. 2	0	0	0	2925	0	0	*Gymnodinium sp. 2*	0	0	0	0
Peridinium sp.	0	0	0	0	0	0	*Peridinium sp.*	0	0	0	0
Gonyaulax sp.	1	2340	1	1170	0	0	*Gonyaulax sp.*	0	0	0	0
Flagellates 5µm							**Flagellates 5µm**			0	0
Flagellates < 5µm/unicells	67	2334	51	1781	76	2651	Flagellates < 5µm/unicells	328	11494	193	6757

Lake Taupo phytoplankton enumeration (10-m tube) 2007-08

Cell counts and biovolume

Cells per ml numbers may be affected by rounding

Sample code	TZ2	TZ2	TZ4	TZ4	WF2	WF2	XX1	XX1	XX4	XX4	AM1	AM1	BM1	BM1	BM3	BM3	DT1	DT1	EO1	EO1	EO3	EO3	EO5	EO5
Sampling date	8/08/2007	8/08/2007	23/08/2007	23/08/2007	11/09/2007	11/09/2007	9/10/2007	9/10/2007	30/10/2007	30/10/2007	15/11/2007	15/11/2007	4/12/2007	4/12/2007	20/12/2007	20/12/2007	17/01/2008	17/01/2008	31/01/2008	31/01/2008	14/02/2008	14/02/2008	27/02/2008	27/02/2008
Species composition by class	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)																								
Anabaena lemmermannii	2	64	3	108	1	27	17	696	51	2100	18	725	1	27	29	1175	28.7	1175	21.3	875	25.0	1025	85.8	3518
Pseudanabaena limnetica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	2	0.0	0	0.0	0	0.5	9
Chroococcus sp.	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcystis sp.	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0
c.f Rivularia sp.	0	0	0	0	1	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanothece sp.	0	0	1	15	0	1	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	2	30	0	0	0	0	0	0	0	0	2	32	3	48	4	78	0.0	0	0.0	0	0.0	0	4.0	76
Leptolyngbya sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	0.0	0	0.0	0	0.0	0	0.0	0
Greens (Chlorophyceae)																								
Monoraphidium sp. / *Ankistrodesmus falcatus*	20	839	17	695	3	123	6	247	10	418	28	1189	18	737	114	4785	66	2764	0	0	0	0	0	0
Stichococcus contortus	175	0	97	1749	25	453	0	0	0	0	0	0	3	53	0	0	0	0	0	0	0	0	0	0
Kirchneriella contorta	0	0	0	0	56	1853	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botryococcus braunii	0	0	0	4800	0	0	0	0	0	0	0	0	0	1100	1	92840	0	0	0	0	0	0	0	259720
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	532	0	0	0	0	0	0	2	246
Eudorina elegans	0	0	0	0	0	0	0	0	1	300	0	0	0	0	0	0	2	624	4	1108	0	0	3	749
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocystis sp.	0	0	0	0	1	166	5	758	5	665	0	0	1	166	6	839	2	277	0	0	0	0	0	0
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quadrigula lacustrus	0	0	5	788	3	480	0	0	0	0	0	0	0	0	3	554	0	0	0	0	0	0	0	0
Westella botryoides	10	634	29	1909	0	0	0	0	9	608	0	0	0	0	0	0	17	1077	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																								
Asterionella formosa	275	77123	292	81787	753	210974	124	34838	62	17363	15	4187	4	983	2	473	50	14060	11	3181	0	0	2	655
Aulacoseira granulata	0	0	0	0	13	3990	0	0	16	5078	3	993	0	0	0	0	0	0	0	0	0	0	0	0
Aulacoseira granulata var. *angustissima*	52	13436	11	2777	0	0	0	0	3	761	0	0	0	0	0	0	2	507	0	0	0	0	0	0
Cyclotella stelligera	14	2184	11	1709	8	1310	9	1452	11	1685	0	0	0	0	0	0	1	156	0	0	0	0	0	0
Fragilaria crotonensis	57	20419	27	9750	0	0	0	0	0	0	2	574	1	209	9	3324	19	6806	5	1743	0	0	13	4607
Nitzschia sp.	0	0	5	2083	1	228	0	0	0	0	0	0	1	456	14	5596	1	380	0	0	0	0	2	684
Synedra sp.	1	0	0	0	1	1638	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	60	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)																								
Closterium aciculare	0	0	0	0	0	0	0	160	0	0	1	320	1	350	1	506	0	0	0	0	0	0	0	0
Closterium acutum var. *variable*	1	551	1	201	1	221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chrysophtya (Chrysophyceae)																								
Dinobryon sp.	21	1266	2	126	0	0	146	8633	297	17534	81	4789	76	4487	8	448	7	431	6	383	32	1915	73	4314
Cryptomonas sp.	0	0	1	77	0	0	1	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mallomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																								
Gymnodinium sp. 1	0	1463	0	0	0	0	1	3204	1	1755	0	0	1	1755	1	2532	0	0	6	17853	4	10820	16	49140
Gymnodinium sp. 2	0	12188	1	13350	0	0	0	6675	0	0	0	0	0	7313	3	63300	0	6094	0	0	0	0	3	73125
Flagellates 5µm																								
Flagellates < 5µm/unicells	153	6582	296	10354	112	3911	129	4504	93	3256	78	2729	125	4382	526	18403	83	2901	99	3465	39	1373	60	2109

Sample code	HT1	HT1	HT3	HT3	KB1	KB1	LB1	LB1	LB3	LB3	MW1	MW1	MW3	MW3	OL1	OL1	OL3	OL3	QA2	QA2	QA4	QA4	RL2	RL2
Sampling date	13/03/2008	13/03/2008	26/03/2008	26/03/2008	17/04/2008	17/04/2008	7/05/2008	7/05/2008	22/05/2008	22/05/2008	5/06/2008	5/06/2008	18/06/2008	18/06/2008	1/07/2008	1/07/2008	15/07/2008	15/07/2008	7/08/2008	7/08/2008	20/08/2008	20/08/2008	4/09/2008	4/09/2008
Species composition by class	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)	Cell (per ml)	Biovolume (μm^3)
Blue greens (Cyanophyceae)																								
Anabaena lemmermannii	92	3778	7.0	288	56.6	2319	120.6	4946	2.2	91	1.1	46	1.7	71	12.2	500	9.8	403	0.8	32	0.2	7	0.9	37
Pseudanabaena limnetica	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	2.8	53	0.3	5	0.0	0	0.0	0
Chroococcus sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Microcystis sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
c.f Rivularia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aphanothece sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Aphanizomenon sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Leptolyngbya sp.	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1.4	16	0.0	0
Greens (Chlorophyceae)																								
Monoraphidium sp. / *Ankistrodesmus falcatus*	0	0	0	0	0	0	5	197	0	0	0	0	0.0	0	188	7907	0	0	73	3047	73	3071	130	5479
Stichococcus contortus	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0.0	0	0	0	26	474
Kirchneriella contorta	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0.0	0	0	0	0	0
Botryococcus braunii	0.1	469151	0	14435	0.04	259837	0	104870	0	28871	0	132806	0.0	3609	0	5774	0.1	226456	0.0	5413	0	0	0.0	17746
Chlamydomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elakotothrix gelatinosa	2	246	6	676	1	123	4	369	2	246	1	123	0	0	1	114	0	0	0	0	0	0	0	0
Eudorina elegans	8	2097	0	0	0	0	0	0	0	0	11	2696	0	0	0	0	0	0	0	0	9	2246	0	0
Lagerheimia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1797
Oocytsis sp.	0	0	0	0	1	166	5	665	2	332	0	0	0	0	6	914	0	0	5	665	7	997	0	0
Planktosphaeria gelatinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1412
Quadrigula lacustrus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westella botryoides	0	0	0	0	0	0	15	951	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)																								
Asterionella formosa	19	5242	12	3276	5	1310	10	2785	28	7862	25	6880	22	6061	25	7043	102	28501	191	53399	79	22113	94	26208
Aulacoseira granulata	0	0	0	0	0	0	2	725	12	3808	13	4171	2	725	0	0	35	10700	151	46788	0	0	18	5622
Aulacoseira granulata var. *angustissima*	0	0	0	0	0	0	4	913	0	0	0	0	0	0	25	6388	0	0	0	0	57	14754	0	0
Cyclotella stelligera	0	0	0	0	0	0	3	468	1	187	2	374	1	94	4	562	1	94	1	187	12	1872	18	2902
Fragilaria crotonensis	0	0	15	5445	4	1466	0	0	57	20315	61	21781	84	29948	46	16545	30	10890	18	6283	49	17592	59	20943
Nitzschia sp.	1	228	1	342	3	1141	2	684	2	913	0	0	1	228	4	1369	4	1597	1	456	0	0	2	684
Synedra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)																								
Closterium aciculare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1051
Closterium acutum var. *variable*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	221	0	0	1	441	0	0	0	0
Chrysophtya (Chrysophyceae)																								
Dinobryon sp.	26	1519	2	104	4	242	8	483	8	466	9	518	0	0	9	518	0	0	0	0	0	0	20	1208
Cryptomonas sp.	1	84	0	0	1	84	1	168	1	84	1	84	2	337	0	0	2	337	0	0	0	0	0	0
Mallomonas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1053	0	0	0	0	0	0	0	0
Dinoflagellates (Dinophyceae)																								
Gymnodinium sp. 1	6	19305	42	126360	12	36855	5	1843	35	12285	5	1638	4	1229	0	0	6	2048	0	0	0	0	0	0
Gymnodinium sp. 2	0	0	0	0	0	0	0	0	0	0	1	29250	0	7313	0	0	1	14625	0	0	0	0	0	0
Flagellates 5µm																								
Flagellates < 5µm/unicells	57	1986	56	1945	73	2539	131	4586	47	1638	63	2191	111	3890	121	4238	115	4013	87	3030	207	7228	104	3645

Lake Taupo phytoplankton dominance plus enumeration (10-m tube) 2006-07

Dominance by biovolume (rank 1 = dominant,…rank 10 = rare), plus cell counts and biovolume from May 2007

Sample code	EM8	EM10	EM13	EM17	EM20	EM23	EM27	EM29	EM31	EM34	EM36	EM38	EM40	EM40	EM40	EM42	EM42	EM42	RY2	RY2	RY2	RY5	RY5	RY5
Sampling date	26/09/2006	18/10/2006	1/11/2006	5/12/2007	14/12/2007	9/01/2007	8/02/2007	21/02/2007	21/03/2007	3/04/2007	19/04/2007	8/05/2007	22/05/07	22/05/07	22/05/07	14/06/07	14/06/07	14/06/07	27/06/07	27/06/07	27/06/07	18/07/2007	18/07/2007	18/07/2007
Species composition by class	Rank	Rank	Rank	Rank	Rank	Rank	Rank	Rank	Rank	Rank	Rank	Rank	Rank	Biovolume (μm^3)	cell (per ml)	Rank	Biovolume (μm^3)	cell (per ml)	Rank	Biovolume (μm^3)	cell (per ml)	Rank	Biovolume (μm^3)	cell (per ml)
Blue greens (Cyanophyceae)																								
Anabaena lemmermannii	5	5	5	5	9	5	9	9	3	4	5	4	6	303	10	8	450	15	5	1091	36	4	3652	17
***Anabaena* sp.**														0	0		0	0	10	29	0		0	0
***Aphanizomenon* sp.**							8	8	7	7	9	9	10	5	0		0	0		0	0	10	27	1
***Phormidium* sp.**									10	10	10			0	0		0	0		0	0		0	0
Greens (Chlorophyceae)																								
Ankistrodesmus falcatus/ Schroederia sp.																			9	120	5		0	0
Botryococcus braunii	7	2	2	3	3	1	1	1	1	1	5	3	1	1014600	0	1	38448	1	8	438	0		0	0
***Chlorosarcinopsis* sp.**	10	10																						
Elakotothrix gelatinosa													6	342	4		0	0		0	0		0	0
Eudorina elegans	9	9	10	10	10		10	10	10	10		10		0	0		0	0		0	0		0	0
Kirchneriella contorta														0	0	10	157	7		0	0	10	21	1
Monoraphidium sp/ Ankistrodesmus falcatus	10	10	10	10	10	10	10	10	8	8	9	7	5	561	19	2	20456	259	2	5061	46	5	2574	12
***Oocytsis* sp.**	7	8	9	9	9	10	7	7	10	10	10		9	43	1	6	3210	11	4	1605	5	9	293	1
Quadrigula lacustrus	9													0	0		0	0		0	0		0	0
Stichococcus contortus														0	0		0	0	7	534	4	6	1073	5
Westella botryoides	9	9	9	10	10	10	10	10						0	0		0	0		0	0		0	0
Diatoms (Bacillariophyceae)																					0			
Asterionella formosa	2	2	6	4	4		4	5						0	0	6	3173	10	3	4414	14	2	25087	81
Aulacoseira granulata	3	1	1	1	2	9	6	2	2	2	1			0	0	4	6760	22	1	7863	25	2	29167	94
Aulacoseira granulata* var. *angustissima												2	3	5590	8		0	0		0	0		0	0
Cyclotella stelligera	5	5	9	7	6	6	5	6						0	0	8	427	3	10	71	0	8	468	3
Fragilaria crotonensis	1	4	7				6	7	6	6		7	4	2294	6	3	13382	37	10	33	0	1	109152	107
***Gomphonema* sp.**																5	5559	14	5	1042	3	7	952	2
***Nitzschia* sp.**	10	10	10	10	10	10	10	10	10	10	7		8	155	1									
unknown diatom sp.											8			0	0		0	0		0	0		0	0
Desmids (Mesotaeniaceae, Desmidiaceae)																								
Closterium acutum	9	10	10	9	9	7	8	8	10	10				0	0	7	1335	3	6	668	1		0	0
Closterium acutum* var. *variable	10	10	10	9	8	8	8	8						0	0		0	0		0	0	7	731	1
***Mougeotia* sp.**		10												0	0		0	0		0	0		0	0
***Staurastrum* sp.**	10	10				10					9	6		0	0		0	0		0	0		0	0
Chrysophtya (Chrysophyceae)																								
***Cryptomonas* sp.**	10	10	10				10	10	10	10	10			0	0	9	267	1	9	196	1	9	293	1
***Dinobryon* sp.**	9	3	3	2	1	2	6	8	3	5	2	1	7	256	1		0	0		0	0		0	0
Dinoflagellates (Dinophyceae)																								
Ceratium hirundinella		10	10	10	10		4	1	3					0	0		0	0		0	0		0	0
***Gymnodinium* sp.**	5	7	4	3	5	7	3	3	4	6	4		2	11748	1		0	0		0	0		0	0
***Gymnodinium* sp. 2**												8		0	0		0	0	3	4450	0		0	0
Flagellates 5µm																								
Flagellates < 5µm/unicells	3	6	8	6	6	6	2	4	5	4	3	4	4	2138	50	3	16227	381	1	7521	177	3	4133	97

Lake Taupo phytoplankton species composition and biovolume (μm^3) 2018-2019														
From Site A (Mid Lake) 07/05/2019														
	Surface	**10m**	**20m**	**50m**	**100m**	**150m**		**Surface**	**10m**	**20m**	**50m**	**100m**	**150m**
	LO1	**LO2**	**LO3**	**LO6**	**LO11**	**LO16**		**LO1**	**LO2**	**LO3**	**LO6**	**LO11**	**LO16**
	7/05/2019	**7/05/2019**	**7/05/2019**	**7/05/2019**	**7/05/2019**	**7/05/2019**		**7/05/2019**	**7/05/2019**	**7/05/2019**	**7/05/2019**	**7/05/2019**	**7/05/2019**
	Cell	Cell	Cell	Cell	Cell	Cell		Biovolume	Biovolume	Biovolume	Biovolume	Biovolume	Biovolume
	(per ml)	(per ml)	(per ml)	(per ml)	(per ml)	(per ml)		(μm^3)	(μm^3)	(μm^3)	(μm^3)	(μm^3)	(μm^3)
Blue greens (Cyanophyceae)													
Aphanizomenon sp.	0.3	0.5	0.4	0	0	0		6	10	8	0	0	0
Aphanocapsa sp.	0	1	0	0	0	0		0	9	0	0	0	0
Aphanothece sp.	0	0	0	0	0	0		0	0	0	0	0	0
Chroococcus sp.	0	0	0	0	0	0		0	0	0	0	0	0
Dolichospermum c.f lemmermannii (formerly Anabaena c.f lemmermannii)	3	0	0	0	0	0.4		336	0	0	0	0	48
Dolichospermum circinale	0	0	0	0	0	0.2		0	0	0	0	0	47
Dolichospermum planctonicum	0	0	0	0	0	0		0	0	0	0	0	0
Dolichospermum sp. (formerly Anabaena sp.)	0	0	0	0	0	0		0	0	0	0	0	0
Gloeocapsa sp.	0	0	0	0	0	0		0	0	0	0	0	0
Microcystis sp.	0	0	0	0	0	0		0	0	0	0	0	0
Phormidium sp.	0	0	0	0	0	0		0	0	0	0	0	0
Pseudanabaena sp.	0.3	0	0.2	0	1	0.4		5	0	3	0	28	7
Greens (Chlorophyceae)													
Botryococcus braunii cells/mL	38	0	0	0	0	0		3612	0	0	0	0	0
Crucigeniella sp	1	0	0	2	1	0		76	0	0	129	65	0
Elakatothrix gelatinosa	6	3	1	0	0	0		614	314	105	0	0	0
Lagerheimia sp.	0	0	0	2	0	2		0	0	0	0	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	19	19	10	10	10	4		786	795	418	439	418	172
Oocystis sp.	1	0	0	1	2	0		166	0	0	212	354	0
Sphaerocystis schroeteri	0	2	0	0	0	0		0	100	0	0	0	0
Tetraedron gracile	0	0	0	0.5	0	0.6		0	0	0	55	0	64
unidentified Colonial green	1	0	1	0	1	0.6		44	0	112	0	112	44
Diatoms (Bacillariophyceae)													
Asterionella formosa	0	0	8	0	1	1		0	0	2231	0	418	328
Aulacoseira granulata	5	6	8	15	5	105		1451	1853	2470	4786	1698	32643
Aulacoseira granulata var. angustissima	11	0	0	6	0	13		2890	0	0	1554	0	3346
Cocconeis	0	0	0	0	0	1		0	0	0	0	0	612
Cyclotella sp.	1	1	0.5	3	1	26		187	159	80	478	239	4118
Epithemia sp.	0	0	0	0	0	2		0	0	0	0	0	0
Fragilaria crotonensis	26	27	45	0	0	11		9215	9806	16046	0	0	3770
Fragilaria sp.	0	0	0	13	0	9		0	0	0	4635	0	3351
Lindavia sp.	0	0	0	0	0	5		0	0	0	0	0	3084
Nitzschia sp.	0	0	0	0	1	0		0	0	0	0	388	0
Rhopalodia sp.	0	0.5	0	0	0	1		0	249	0	0	0	585
Rhoicosphenia sp.	0	0	0	0	0	1		0	0	0	0	0	0
Synedra sp.	0	0	0	0	0	0		0	0	0	0	196	0
Desmids (Mesotaeniaceae, Desmidiaceae)	0							0					
Closteriopsis sp.	0.6	0	0	1	1	0		212	0	0	361	361	0
Chrysophtya (Chrysophyceae)													
Dinoflagellates (Dinophyceae)													
Ceratium sp.	0	0.5	0	0	0	0		0	13944	0	0	0	0
Gymnodinium sp. 1	1	1	1	0	0	0		1287	1096	1096	0	0	0
Peridinium sp.	4	1	1	0	0	0		16380	5976	5976	0	0	0
Flagellates 5µm													
Cryptomonas sp.	0.6	0.5	0	1	0	0		84	72	0	143	0	0
Flagellates < 5µm/unicells	152	66	16	67	98	33		12121	5299	1275	5339	7848	2621

Lake Taupo phytoplankton species composition and biovolume (µm³) 2018-2019														
From Site A (Mid Lake) 16/10/2018														
	Surface	10m	20m	50m	100m	150m		Surface	10m	20m	50m	100m	150m
	SC1	SC2	SC3	SC6	SC11	SC16		SC1	SC2	SC3	SC6	SC11	SC16
	16/10/2018	16/10/2018	16/10/2018	16/10/2018	16/10/2018	16/10/2018		16/10/2018	16/10/2018	16/10/2018	16/10/2018	16/10/2018	16/10/2018
	Cell	Cell	Cell	Cell	Cell	Cell		Biovolume	Biovolume	Biovolume	Biovolume	Biovolume	Biovolume
	(per ml)	(per ml)	(per ml)	(per ml)	(per ml)	(per ml)		(µm³)	(µm³)	(µm³)	(µm³)	(µm³)	(µm³)
Blue greens (Cyanophyceae)													
Aphanocapsa sp.	0	0	11	0	0	27		0	0	95	0	0	247
Aphanothece sp.	4	6	0	0	0	0		38	52	0	0	0	0
Chroococcus sp.	0	0	0	0	0	0		0.6	0	0	0	0	0
Dolichospermum c.f lemmermannii (formerly Anabaena c.f lemmermannii)	0.1	9	0	0	0	0		13	1003	0	0	0	0
Dolichospermum circinale	0	0	0	0	0	0		0	0	0	0	0	0
Dolichospermum planctonicum	0	0	0	0	0	0		0	0	0	0	0	0
Dolichospermum sp. (formerly Anabaena sp.)	0	0	0	0	0	0		0	0	0	0	0	0
Gloeocapsa sp.	0	0	0	0	0	0		0	0	0	0	0	0
Microcystis sp.	0	0	0	0	0	0		0	0	0	0	0	0
Phormidium sp.	0	0	0	0	0	0		0	0	0	0	0	0
Pseudanabaena sp.	0	0	0	0	0.3	1		0	0	0	0	5	22
Greens (Chlorophyceae)													
Botryococcus braunii (colonies)	0	0	0	0	0	0		59400	10763	0	0	0	0
Crucigeniella sp	0	0	2	0	0	0		0	0	152	0	0	0
Dictyosphaerium sp.	0.3	0.9	0	0	0	0		14	48	0	0	0	0
Elakatothrix gelatinosa	1	4	0	0	0	0		123	369	0	0	0	0
Eudorina elegans	0.2	0.2	0	0	9	0		41	41	0	0	2246	0
Lagerheimia sp.	11	5	12	0	2	1		0	0	0	0	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	39	60	97	20	23	37		1622	2531	4054	835	958	1548
Nephrocytium lunatum	0	0	0	0	0	0		0	0	0	0	0	0
Oocystis sp.	14	8	15	5	8	10		1994	1080	2160	748	1080	1412
Paulschulzia sp.	0	2	0	0	0	0		0	199	0	0	0	0
Scenedesmus sp.	0	0	2	0	0	0		0	0	122	0	0	0
Stichococcus contortus	0	0	0	0	7	18		0	0	0	0	126	316
Diatoms (Bacillariophyceae)													
Asterionella formosa	112	91	31	15	6	5		31286	25389	8681	4095	1638	1474
Attheya sp.	0	0	0.6	0	0	0		0	0	176	0	0	0
Aulacoseira granulata	0	0	60	39	61	29		0	0	18498	11969	19042	9068
Aulacoseira granulata var. angustissima	27	30	14	13	6	6		7149	7757	3650	3346	1521	1673
Cyclotella sp.	13	10	9	6	6	3		2059	1591	1404	1030	936	468
Fragilaria crotonensis	28	8	13	22	6	4		10053	2932	4817	7958	2094	1257
Fragilaria sp.	0	0	0	0	10	0		0	0	0	0	3560	0
Lindavia sp.	5	8	4	4	2	0.6		3084	5012	2313	2313	1157	386
Nitzschia sp.	0	0	1	0.6	0.6	0.6		0	0	456	228	228	228
Rhopalodia sp.	0	0	0.6	0	0	0		0	0	293	0	0	0
Rhoicosphenia sp.	0	0	0	0.6	0	0		0	0	0	0	0	0
Synedra sp.	19	17	0.6	0	0	0.6		7606	6684	230	0	0	230
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closteriopsis sp.	4	6	4	3	6	3		1271	2118	1482	1059	2118	1059
Chrysophtya (Chrysophyceae)													
Dinobryon sp.	58	0	1	0	0	0		3417	0	69	0	0	0
Synura sp.	0	0	0	0	0	0		0	0	0	0	0	0
Dinoflagellates (Dinophyceae)													
Ceratium sp.	0	0.6	0	0	0	0		0	16380	0	0	0	0
Gonyaulax sp.	0.6	0	0	0.6	0	0		1170	0	0	1170	0	0
Gymnodinium sp. 1	0	0	0.6	0	0	0		0	0	644	0	0	0
Gymnodinium sp. 2	0	0	0	0	0	0		0	0	0	0	0	0
Peridinium sp.	0	0	0	0.6	0	0		0	0	0	2340	0	0
Flagellates 5µm													
Cryptomonas sp.	0	0	2	0.6	0	0.6		0	0	253	84	0	84
Flagellates < 5µm/unicells	249	172	57	17	10	15		19937	13759	4540	1357	796	1217

Lake Taupo phytoplankton species composition, cell numbers and biovolume (µm³) 2017-2018														
From Site A (Mid Lake) 1/5/2018														
	Surface	**10m**	**20m**	**50m**	**100m**	**150m**		**Surface**	**10m**	**20m**	**50m**	**100m**	**150m**
	DK1	**DK2**	**DK3**	**DK6**	**DK11**	**DK16**		**DK1**	**DK2**	**DK3**	**DK6**	**DK11**	**DK16**
	1/05/2018	**1/05/2018**	**1/05/2018**	**1/05/2018**	**1/05/2018**	**1/05/2018**		**1/05/2018**	**1/05/2018**	**1/05/2018**	**1/05/2018**	**1/05/2018**	**1/05/2018**
	Cell	**Cell**	**Cell**	**Cell**	**Cell**	**Cell**		**Biovolume**	**Biovolume**	**Biovolume**	**Biovolume**	**Biovolume**	**Biovolume**
	(per ml)	**(per ml)**	**(per ml)**	**(per ml)**	**(per ml)**	**(per ml)**		**(µm³)**	**(µm³)**	**(µm³)**	**(µm³)**	**(µm³)**	**(µm³)**
Blue greens (Cyanophyceae)													
Aphanizomenon sp.	0.5	0	0	0	0	0		10	5	2	9	0	3
Aphanocapsa sp.	1.6	0	0	0	0	0		14	4	0	0	0	0
Dolichospermum c.f lemmermannii (formerly *Anabaena c.f lemmermannii*)	5.0	2	1	0	0	0		579	249	160	10	0	0
Dolichospermum circinale	0.1	1	0	0	0	0		23	109	12	23	0	0
Dolichospermum planctonicum	0.4	1	0	0	0	0		62	224	0	26	75	0
Pseudanabaena sp.	0.0	1	0	0	2	0		0	12	0	4	30	6
Woronichinia naegeliana	0	0	0	0	0	0.31		0	0	0	0	0	0
Botryococcus braunii (colonies)	0	0	0	0	0	0		2884	7541	0	0	0	1700
Crucigeniella sp	0	1	0	0	0	0		0	76	0	0	0	0
Elakatothrix gelatinosa	0	4	4	0	0	1		0	369	369	0	0	123
Eudorina elegans	0	25	14	0	0	0		0	6290	3594	0	0	0
Chlamydocapsa planctonica	0	0	9	0	5	2		0	0	749	0	374	187
Lagerheimia sp.	2	0	1	0	0	0		0	0	0	0	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	33	23	30	47	11	6		1400	958	1278	1990	442	246
Oocystis sp.	8	6	8	8	1	0		1080	914	1080	1080	166	0
Sphaerocystis schroeteri	9	8	5	0	0	0		0	0	0	0	0	0
Stichococcus contortus	0	2	0	0	0	0		0	42	0	0	0	0
unidentified Colonial green	0	1	1	0	0	0		0	44	44	0	0	0
Volvox aureus	0	293	0	0	0	0		0	17550	0	0	0	0
Diatoms (Bacillariophyceae)													
Asterionella formosa	1	6	5	0	1	1		328	1638	1310	0	164	328
Aulacoseira granulata	4	6	0	4	12	13		1088	1814	0	1269	3808	3990
Aulacoseira granulata var. angustissima	0	0	0	0	0	8		0	0	0	0	0	1977
Cocconeis	1	0	0	0	0	0		306	0	0	0	0	0
Cyclotella sp.	8	3	9	3	1	2		1217	468	1404	468	187	374
Epithemia sp.	0	0	0	0	0	1		0	0	0	0	0	0
Fragilaria crotonensis	47	0	17	0	2	1		16754	0	6073	0	838	419
Fragilaria sp.	0	0	0	6	0	2		0	0	0	2304	0	628
Lindavia sp.	0	0	0	2	0	1		0	0	0	421	0	105
Nitzschia sp.	1	1	0	0	0	1		456	456	0	0	0	228
Rhopalodia sp.	0	0	0	0	0	1		0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closteriopsis sp.	1	0	0	2	1	0		424	0	0	635	424	0
Staurastrum sp.	0	1	0	1	0	0		0	807	0	807	0	0
Chrysophtya (Chrysophyceae)													
Dinobryon sp.	53	33	54	2	0	0		3141	1967	3175	104	0	0
Dinoflagellates (Dinophyceae)													
Ceratium sp.	0	0	1	0	0	0		0	0	16380	0	0	0
Gymnodinium sp.	0	0	2	0	0	0		0	0	1931	0	0	0
Peridinium sp.	2	2	0	0	0	0		7020	7020	0	0	0	0
Flagellates 5µm													
Cryptomonas sp.	0	2	2	3	0	0		0	253	253	421	0	0
Flagellates < 5µm/unicells	87	63	53	12	9	4		6926	5054	4259	936	749	281

Lake Taupo phytoplankton species composition, cell numbers and biovolume (µm³) 2017-2018														
From Site A (Mid Lake) 14/11/2017														
	Surface	**10m**	**20m**	**50m**	**100m**	**150m**		**Surface**	**10m**	**20m**	**50m**	**100m**	**150m**
	QS1	**QS2**	**QS3**	**QS6**	**QS11**	**Qs16**		**QS1**	**QS2**	**QS3**	**QS6**	**QS11**	**QS16**
	14/11/2017	**14/11/2017**	**14/11/2017**	**14/11/2017**	**14/11/2017**	**14/11/2017**		**14/11/2017**	**14/11/2017**	**14/11/2017**	**14/11/2017**	**14/11/2017**	**14/11/2017**
	Cell	**Cell**	**Cell**	**Cell**	**Cell**	**Cell**		**Biovolume**	**Biovolume**	**Biovolume**	**Biovolume**	**Biovolume**	**Biovolume**
	(per ml)	**(per ml)**	**(per ml)**	**(per ml)**	**(per ml)**	**(per ml)**		**(µm³)**	**(µm³)**	**(µm³)**	**(µm³)**	**(µm³)**	**(µm³)**
Blue greens (Cyanophyceae)													
Aphanizomenon sp.	0.1	0	0	0	0	0		2	0	0	0	0	0
Dolichospermum c.f lemmermannii (formerly *Anabaena c.f lemmermannii*)	3.1	12	6	7	2	0		356	1431	638	836	283	0
Dolichospermum planctonicum	0.1	0	0	0	0	0		13	0	0	0	0	0
Dolichospermum sp. (formerly *Anabaena* sp.)	3.0	0	3	0	0	0		456	36	450	0	0	0
Pseudanabaena sp.	0.0	0	0	0	0	1		0	0	0	0	3	25
Greens (Chlorophyceae)													
Crucigeniella sp	0	2	0	0	0	0		0	152	0	0	0	0
Elakatothrix gelatinosa	0	1	4	1	1	0		0	123	430	123	61	0
Eudorina elegans	0	0	9	16	0	0		0	0	2396	4193	0	0
Lagerheimia sp.	6	4	5	0	0	0		0	0	0	0	0	0
Monoraphidium sp. / Ankistrodesmus falcatus	11	8	8	27	4	4		442	344	319	1155	172	172
Oocystis sp.	44	37	39	25	4	6		6230	5233	5483	3489	498	831
Sphaerocystis schroeteri	7	0	7	0	0	2		0	0	0	0	0	0
Stichococcus contortus	0	0	0	7	4	2		0	0	0	126	74	32
Tetraedron gracile	1	0	1	4	4	2		129	0	64	450	386	257
unidentified Colonial green	0	0	0	1	0	0		0	0	0	44	0	0
Volvox aureus	0	0	0	176	0	0		0	0	0	10530	0	0
Diatoms (Bacillariophyceae)													
Asterionella formosa	9	16	16	39	11	5		2621	4586	4586	10811	3112	1310
Aulacoseira granulata	4	36	43	107	94	95		1088	11244	13420	33187	29016	29379
Aulacoseira granulata var. angustissima	0	19	11	25	14	34		0	5019	2738	6540	3650	8822
Cyclotella sp.	1	1	3	3	1	2		187	187	468	468	94	281
Epithemia sp.	0	0	1	1	0	0		0	0	0	0	0	0
Fragilaria crotonensis	53	67	46	35	0	25		18849	24084	16336	12356	0	8796
Fragilaria sp.	0	0	0	13	0	2		0	0	0	4817	0	838
Lindavia sp.	1	2	1	1	0	0		771	1157	771	386	0	0
Nitzschia sp.	2	2	3	2	1	1		684	684	1141	684	228	228
Rhoicosphenia sp.	0	1	0	1	0	0		0	0	0	0	0	0
Rhopalodia sp.	0	0	1	0	0	0		0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	1	0	1		0	0	0	64	0	64
Synedra sp.	2	1	1	2	1	2		691	230	461	691	230	691
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closteriopsis sp.	1	2	1	4	2	2		212	635	212	1482	847	635
Chrysophtya (Chrysophyceae)													
Dinobryon sp.	38	68	63	19	0	0		2243	4038	3728	1139	0	0
Dinoflagellates (Dinophyceae)													
Ceratium sp.	0	1	0	0	0	0		0	16380	0	0	0	0
Peridinium sp.	4	0	0	0	0	0		14040	0	0	0	0	0
Flagellates 5µm													
Cryptomonas sp.	0	1	0	1	1	0		0	168	0	168	84	0
Flagellates < 5µm/unicells	22	41	25	20	10	9		1778	3276	1966	1638	796	702

Lake Taupo phytoplankton species composition, cell numbers and biovolume (µm³) 2016-2017

From Site A (Mid Lake) 18/4/2017

	Surface	10m	20m	50m	100m	150m		Surface	10m	20m	50m	100m	150m
	ZT1	ZT2	ZT3	ZT6	ZT11	ZT16		ZT1	ZT2	ZT3	ZT6	ZT11	ZT16
	18/04/2017	18/04/2017	18/04/2017	18/04/2017	18/04/2017	18/04/2017		18/04/2017	18/04/2017	18/04/2017	18/04/2017	18/04/2017	18/04/2017
	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)		Biovolume (µm³)	Biovolume (µm³)	Biovolume (µm³)	Biovolume (µm³)	Biovolume (µm³)	Biovolume (µm³)
2016-17 list													
Blue greens (Cyanophyceae)													
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	15.9	9.8	7.1	1.4	0.0	0.0		1844	1131	828	162	0	0
Dolichospermum planctonicum	0.0	0.0	1.0	0.0	0.0	0.0		0	0	395	0	0	0
***Aphanizomenon* sp.**	0.0	0.0	0.0	0.5	0.0	0.5		0	0	0	10	0	10
***Pseudanabaena* sp.**	0.0	0.0	0.0	0.7	0.2	1.6		0	0	0	14	5	31
Greens (Chlorophyceae)													
Monoraphidium* sp. / *Ankistrodesmus falcatus	13	6	9	30	0	4		565	270	369	1253	0	147
Stichococcus contortus	19	20	23	0	4	5		337	358	421	0	63	84
Botryococcus braunii (colonies)	0.0	0.0	0.0	0.0	0.0	0.0		0	0	0	2509	0	0
***Crucigeniella* sp**	0	0	4	0	0	0		0	0	228	0	0	0
Dictyosphaerium	40	32	28	0	0	0		2188	1737	1544	0	0	0
Elakotothrix gelatinosa	12	6	11	2	1	0		1229	676	1106	184	123	0
***Oocytsis* sp.**	43	32	53	7	2	4		6064	4569	7559	997	249	581
***Scenedesmus* sp.**	0	0	0	0	2	0		0	0	0	0	122	0
Sphaerocystis schroeteri	2	6	16	0	0	0		0	0	0	0	0	0
Tetraedon gracile	0	0	1	1	1	0		0	0	129	129	64	0
unidentified Colonial green	0	0	0	1	0	1		0	0	0	0	0	0
Diatoms (Bacillariophyceae)													
Asterionella formosa	0	5	2	1	0	7		0	1310	655	328	0	1966
Aulacoseira granulata	0	0	0	0	6	8		0	0	0	0	1814	2539
Cocconeis	0	0	0	0	0	1		0	0	0	0	0	306
Cyclotella stelligera	9	7	14	9	1	2		1498	1123	2246	1404	187	281
Fragilaria crotonensis	53	54	84	4	4	4		18849	19268	30158	1466	1257	1257
***Nitzschia* sp.**	4	4	8	15	1	1		1597	1597	2966	5704	456	228
***Synedra* sp.**	1	2	1	1	0	0		230	691	230	461	0	0
***Eunotia* sp.**	0	0	0	1	0	0		0	0	0	0	0	0
Small unknown diatom sp.	0	0	0	1	0	1		0	0	0	64	0	64
Desmids (Mesotaeniaceae, Desmidiaceae)													
***Closteriopsis* sp.**	0	0	0	0	0	1		0	0	0	0	0	0
***Staurastrum* sp.**	0	0	0	0	0	0		0	0	0	0	0	14
Chrysophtya (Chrysophyceae)													
***Dinobryon* sp.**	5	45	12	0	0	0		311	2658	725	0	0	0
***Cryptomonas* sp.**	0	2	0	0	1	0		0	253	0	0	84	0
Dinoflagellates (Dinophyceae)													
Ceratium hirundinella	0	0	0	0	0	0		0	840	630	0	0	0
***Gymnodinium* sp. 1**	1	0	0	0	0	0		1287	0	0	0	0	0
***Peridinium* sp.**	1	1	1	0	1	0		4680	2340	4680	0	2340	0
Flagellates 5µm													
Flagellates < 5µm/unicells	48	40	23	20	8	6		1679	1392	819	696	287	225

Lake Taupo phytoplankton species composition, cell numbers and biovolume (µm³) 2016-2017														
From Site A (Mid Lake) 8/12/2016														
	Surface	10m	20m	50m	100m	150m		Surface	10m	20m	50m	100m	150m
	QI1	QI2	QI3	QI6	QI11	QI16		QI1	QI2	QI3	QI6	QI11	QI16
	8/12/2016	8/12/2016	8/12/2016	8/12/2016	8/12/2016	8/12/2016		8/12/2016	8/12/2016	8/12/2016	8/12/2016	8/12/2016	8/12/2016
	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)		Biovolume (µm³)	Biovolume (µm³)	Biovolume (µm³)	Biovolume (µm³)	Biovolume (µm³)	Biovolume (µm³)
Blue greens (Cyanophyceae)													
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	3.8	3.1	18.2	47.1	0.0	0.0		443	358	2114	5466	0	0
Greens (Chlorophyceae)													
Monoraphidium* sp. / *Ankistrodesmus falcatus	4	19	9	8	3	2		182	811	369	319	123	74
Stichococcus contortus	2	0	2	0	9	0		39	0	32	0	168	0
Botryococcus braunii (colonies)	0.0	0.0	0.0	0.0	0.0	0.0		0	0	2509	0	0	0
***Crucigeniella* sp**	0	0	0	1	0	0		0	0	0	76	0	0
Dictyosphaerium	0	0	5	0	0	0		0	0	257	0	0	0
Elakotothrix gelatinosa	1	2	1	1	0	0		114	246	123	123	0	0
Eudorina elegans	0	0	9	0	0	0		0	0	2246	0	0	0
***Oocytsis* sp.**	14	22	21	5	3	4		1921	3074	2991	665	415	581
Sphaerocystis schroeteri	97	100	45	18	0	0		0	0	0	0	0	0
Diatoms (Bacillariophyceae)													
Asterionella formosa	32	11	20	52	10	11		9089	3112	5569	14578	2785	3112
Aulacoseira granulata	0	8	11	29	13	16		0	2539	3446	8886	4171	5078
Aulacoseira granulata* var. *angustissima	0	2	0	6	6	10		0	456	0	1673	1673	2586
Cyclotella stelligera	19	19	21	17	7	8		3030	2995	3370	2714	1123	1217
Fragilaria crotonensis	95	3	63	27	19	6		34087	1047	22618	9634	6702	2304
Fragilaria sp.	0	0	0	0	0	2		0	0	0	0	0	838
***Nitzschia* sp.**	0	1	1	1	1	0		0	456	228	456	228	0
Small unknown diatom sp.	0	0	0	1	0	0		0	0	0	64	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closterium aciculare	0	0	0	0	1	1		0	0	0	0	350	701
Closterium acutum* var. *variable	0	0	0	1	0	0		0	0	0	221	0	0
Chrysophtya (Chrysophyceae)													
***Dinobryon* sp.**	39	15	37	0	0	0		2330	863	2174	0	0	0
***Cryptomonas* sp.**	1	1	2	2	0	0		78	168	253	253	0	0
Dinoflagellates (Dinophyceae)													
Ceratium hirundinella	0	0	0	0	0	0		420	210	0	0	0	0
***Gymnodinium* sp. 1**	1	0	0	0	0	1		595	0	0	0	0	644
***Peridinium* sp.**	2	0	0	0	0	0		6492	0	0	0	0	0
Flagellates 5µm													
Flagellates < 5µm/unicells	13	11	27	21	10	8		454	369	962	737	348	287

Lake Taupo phytoplankton species composition and biovolume (µm³) 2015-2016													
From Site A (Mid Lake) 2/11/2015													
	Surface	10m	20m	50m	100m	150m		Surface	10m	20m	50m	100m	150m
	UK1	UK2	UK3	UK6	UK11	UK16		UK1	UK2	UK3	UK6	UK11	UK16
	2/11/2015	2/11/2015	2/11/2015	2/11/2015	2/11/2015	2/11/2015		2/11/2015	2/11/2015	2/11/2015	2/11/2015	2/11/2015	2/11/2015
	Cell	Cell	Cell	Cell	Cell	Cell		Biovolume	Biovolume	Biovolume	Biovolume	Biovolume	Biovolume
	(per ml)	(per ml)	(per ml)	(per ml)	(per ml)	(per ml)		(µm³)	(µm³)	(µm³)	(µm³)	(µm³)	(µm³)
Blue greens (Cyanophyceae)													
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	1.7	1.0	10.8	0.0	0.0	0.0		194	115	0	0	0	0
Dolichospermum sp.	0.0	0.0	0.0	0.0	0.4	0.0		0	0	0	0	61	0
***Aphanocapsa* sp.**	0.0	0.0	0.0	0.0	0.0	1.6		0	0	0	0	0	14
***Snowella* sp.**	0.0	0.2	0.0	0.0	0.0	1.2		0	4	0	0	0	30
Greens (Chlorophyceae)													
Monoraphidium* sp. / *Ankistrodesmus falcatus	49	51	32	62	38	39		2068	2138	1351	2604	1597	1646
Stichococcus contortus	2	1	0	0	6	0		39	21	0	0	105	0
Botryococcus braunii (colonies)	0.0	0.0	0.0	0.0	0.0	0.0		0	2509	0	2509	0	0
***Crucigeniella* sp**	3	5	2	4	5	1		211	304	152	228	304	76
Dictyosphaerium	0	2	0	0	0	0		0	129	0	0	0	0
Elakotothrix gelatinosa	3	6	1	3	0	0		341	676	123	307	0	0
Eudorina elegans	0	12	0	0	0	0		0	3145	0	0	0	0
***Oocytsis* sp.**	22	16	13	12	5	6		3073	2243	1828	1661	748	914
***Scenedesmus* sp.**	0	0	0	0	5	0		0	0	0	0	243	0
Sphaerocystis schroeteri	0	9	9	9	0	0		0	0	0	0	0	0
Asterionella formosa	11	6	5	20	8	5		3030	1802	1310	5569	2129	1310
Aulacoseira granulata	27	22	18	33	75	52		8218	6891	5622	10156	23213	16140
Aulacoseira granulata* var. *angustissima	4	5	24	15	2	2		985	1369	6236	3803	608	608
***Aulacoseria* sp.**	0	0	0	8	0	0		0	0	0	0	0	0
Cyclotella stelligera	4	6	6	8	10	9		692	936	936	1217	1591	1404
Fragilaria crotonensis	0	34	0	7	9	17		0	12147	0	2513	3351	6073
Fragilaria sp.	1	0	1	0	0	0		387	0	209	0	0	0
***Nitzschia* sp.**	0	0	0	4	2	1		0	0	0	1597	913	228
***Synedra* sp.**	1	0	0	0	2	2		213	0	0	0	691	691
***Amphora* sp.**	0	0	0	0	0	1		0	0	0	0	0	306
***Eunotia* sp.**	0	0	0	0	0	1		0	0	0	0	0	0
Small unknown diatom sp.	0	1	1	1	0	0		0	129	64	64	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closterium acutum* var. *variable	1	0	1	0	0	1		204	0	221	0	0	441
Chrysophtya (Chrysophyceae)													
***Dinobryon* sp.**	52	46	21	12	0	0		3096	2727	1243	725	0	0
***Cryptomonas* sp.**	0	0	1	1	2	0		0	0	84	168	253	0
Dinoflagellates (Dinophyceae)													
Ceratium hirundinella	0	0	0	0	0	0		0	0	0	420	0	0
***Gymnodinium* sp. 1**	0	0	0	0	0	1		0	0	0	0	0	644
***Peridinium* sp.**	0	1	0	0	0	0		0	2340	0	0	0	0
Flagellates 5µm													
Flagellates < 5µm/unicells	42	42	42	26	6	7		1458	1474	1474	921	225	246

Lake Taupo phytoplankton species composition and biovolume (µm³) 2014-2015														
From Site A (Mid Lake) 25/4/2015														
	Surface	**10m**	**20m**	**50m**	**100m**	**150m**		**Surface**	**10m**	**20m**	**50m**	**100m**	**150m**
	JS1	**JS2**	**JS3**	**JS6**	**JS11**	**JS16**		**JS1**	**JS2**	**JS3**	**JS6**	**JS11**	**JS16**
	22/04/2015	**22/04/2015**	**22/04/2015**	**22/04/2015**	**22/04/2015**	**22/04/2015**		**22/04/2015**	**22/04/2015**	**22/04/2015**	**22/04/2015**	**22/04/2015**	**22/04/2015**
	Cells/ml	**Cells/ml**	**Cells/ml**	**Cells/ml**	**Cells/ml**	**Cells/ml**		**Biovolume µm³**	**Biovolume µm³**	**Biovolume µm³**	**Biovolume µm³**	**Biovolume µm³**	**Biovolume µm³**
Blue greens (Cyanophyceae)													
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	7.9	9.8	1.1	0.5	0.0	0.2		913	1131	0	58	5	27
***Leptolyngbya* sp.**	0.0	0.0	6.6	0.0	0.0	0.0		0	0	73	0	0	0
Dolichospermum sp.	6.9	0.3	0.0	0.0	0.0	0.0		1101	53	0	0	0	0
Greens (Chlorophyceae)													
Monoraphidium* sp. / *Ankistrodesmus falcatus	7	11	13	63	23	6		295	467	565	2654	983	246
Stichococcus contortus	0	14	9	16	9	0		0	253	168	295	168	0
Botryococcus braunii (colonies)	0	0.0	0.0	0.0	0.0	0.0		0	0	0	18152	18152	0
***Chlamydomonas* sp.**	0	0	1	0	1	1		0	0	246	0	123	123
***Crucigeniella* sp**	0	1	0	2	1	0		0	76	0	152	76	0
Elakatothrix gelatinosa	5	1	1	0	0	0		553	123	123	0	0	0
Eudorina elegans	6	0	14	0	0	0		1647	0	3594	0	0	0
***Oocystis* sp.**	10	5	5	9	2	2		1412	748	665	1246	332	332
Sphaerocystis schroeteri	19	5	5	15	12	0		0	0	0	0	0	0
unidentified Colonial green	0	0	0	1	0	0		0	0	0	0	0	0
Diatoms (Bacillariophyceae)													
Asterionella formosa	0	4	0	16	10	22		0	1147	0	4423	2785	6224
Aulacoseira granulata	0	6	7	2	6	22		0	1814	2176	725	1995	6891
Aulacoseira granulata* var. *angustissima	0	0	0	0	0	9		0	0	0	0	0	2434
Cocconeis	0	0	0	0	0	1		0	0	0	0	0	612
Cyclotella stelligera	2	1	3	1	2	10		374	187	468	187	281	1591
Fragilaria crotonensis	2	0	0	0	0	4		838	0	0	0	0	1466
Fragilaria sp.	0	15	0	0	0	0		0	5236	0	0	0	0
***Nitzschia* sp.**	6	4	5	0	3	2		2510	1369	2053	0	1141	913
***Synedra* sp.**	0	0	1	4	4	1		0	0	230	1383	1383	461
***Amphora* sp.**	1	0	0	0	0	0		306	0	0	0	0	0
Small unknown diatom sp.	1	0	1	1	1	0		64	0	129	64	64	0
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closterium acutum* var. *variable	1	0	0	2	3	1		221	0	0	662	1103	441
***Staurastrum* sp.**	0	0	0	0	0	0		0	0	0	14	0	0
Chrysophtya (Chrysophyceae)													
***Dinobryon* sp.**	0	5	0	0	0	0		0	276	0	0	0	0
***Cryptomonas* sp.**	0	0	1	3	1	1		0	0	168	421	84	84
Dinoflagellates (Dinophyceae)													
Ceratium hirundinella	0	0	0	0	0	0		0	210	210	0	0	0
***Gymnodinium* sp. 1**	3	2	3	1	1	0		3218	2574	3218	1287	644	0
***Gymnodinium* sp. 2**	0	0	0	0	0	0		0	0	0	0	0	0
***Peridinium* sp.**	4	2	6	7	0	0		16380	7020	25740	28080	0	0
Flagellates 5µm													
Flagellates < 5µm/unicells	35	26	30	43	13	15		1229	921	1044	1495	471	512

Lake Taupo phytoplankton species composition and biovolume (μm^3) 2014-2015

From Site A (Mid Lake) 25/11/2014

	Surface	10m	20m	50m	100m	150m		Surface	10m	20m	50m	100m	150m
	CK1	CK2	CK3	CK6	CK11	CK16		CK1	CK2	CK3	CK6	CK11	CK16
	25/11/2014	25/11/2014	25/11/2014	25/11/2014	25/11/2014	25/11/2014		25/11/2014	25/11/2014	25/11/2014	25/11/2014	25/11/2014	25/11/2014
	Cells/ml	Cells/ml	Cells/ml	Cells/ml	Cells/ml	Cells/ml		Biovolume μm^3	Biovolume μm^3	Biovolume μm^3	Biovolume μm^3	Biovolume μm^3	Biovolume μm^3
Blue greens (Cyanophyceae)													
Dolichospermum c.f. lemmermannii (formerly Anabaena c.f. lemmermannii)	11.9	30.5	33.3	10.4	0.0	0.0		1379	3543	3863	1211	0	0
Greens (Chlorophyceae)													
Monoraphidium* sp. / *Ankistrodesmus falcatus	11	15	14	22	13	13		477	614	590	909	541	541
Stichococcus contortus	4	2	0	27	13	9		78	42	0	484	242	168
Botryococcus braunii (colonies)	0.0	0.0	0.0	0.0	0.0	0.0		0	0	0	0	18152	18152
***Crucigeniella* sp**	2	0	4	1	2	2		141	0	228	76	152	152
Elakatothrix gelatinosa	0	3	1	0	0	0		0	307	123	0	0	0
Eudorina elegans	0	0	5	0	0	0		0	0	1198	0	0	0
***Oocytsis* sp.**	9	8	7	6	5	1		1306	1163	997	831	748	166
***Scenedesmus* sp.**	0	0	5	0	0	0		0	0	243	0	0	0
Sphaerocystis schroeteri	23	26	17	5	0	5		0	0	0	0	0	0
Diatoms (Bacillariophyceae)													
Asterionella formosa	8	16	13	11	3	2		2121	4586	3767	2948	819	655
Aulacoseira granulata	0	14	14	41	40	72		0	4352	4352	12695	12332	22306
Aulacoseira granulata* var. *angustissima	2	22	7	0	3	7		563	5780	1825	0	761	1825
Cocconeis	1	0	1	1	1	0		283	0	306	306	306	0
Cyclotella stelligera	3	13	11	6	6	6		519	2153	1778	936	1030	936
Fragilaria crotonensis	22	36	93	16	4	10		7941	12775	33299	5864	1257	3560
***Nitzschia* sp.**	2	3	1	0	1	1		633	1141	456	0	228	228
***Synedra* sp.**	1	1	1	2	1	1		213	230	461	922	230	461
***Amphora* sp.**	0	2	1	0	0	0		0	1224	306	0	0	0
***Eunotia* sp.**	0	0	1	0	0	0		0	0	0	0	0	0
Small unknown diatom sp.	2	2	1	4	1	2		179	257	129	386	129	193
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closterium acutum* var. *variable	0	0	0	1	1	1		0	0	0	441	221	441
Cerasterias staurastroides	1	0	0	0	0	0		0	0	0	0	0	0
Chrysophtya (Chrysophyceae)													
***Dinobryon* sp.**	101	145	82	11	0	0		5969	8560	4832	656	0	0
***Cryptomonas* sp.**	0	2	2	1	0	0		0	253	253	84	0	0
Dinoflagellates (Dinophyceae)													
Ceratium hirundinella	0	0	0	0	0	0		0	210	420	0	0	0
***Gymnodinium* sp. 1**	1	0	0	1	0	1		1190	0	0	1287	0	644
***Gymnodinium* sp. 2**	0	0	0	0	0	0		0	0	0	0	0	0
***Peridinium* sp.**	3	2	2	0	1	0		10820	9360	9360	0	2340	0
Flagellates 5µm													
Flagellates < 5µm/unicells	15	36	28	26	5	8		530	1269	983	901	164	266

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2013-2014													
From Site A (Mid Lake) 9/04/2014													
	Surface	**10m**	**20m**	**50m**	**100m**	**150m**		**Surface**	**10m**	**20m**	**50m**	**100m**	**150m**
	RQ1	**RQ2**	**RQ3**	**RQ6**	**RQ11**	**RQ16**		**RQ1**	**RQ2**	**RQ3**	**RQ6**	**RQ11**	**RQ16**
	9/04/2014	**9/04/2014**	**9/04/2014**	**9/04/2014**	**9/04/2014**	**9/04/2014**		**9/04/2014**	**9/04/2014**	**9/04/2014**	**9/04/2014**	**9/04/2014**	**9/04/2014**
	Cells/ml	**Cells/ml**	**Cells/ml**	**Cells/ml**	**Cells/ml**	**Cells/ml**		**µm3**	**µm3**	**µm3**	**µm3**	**µm3**	**µm3**
Blue greens (Cyanophyceae)													
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	15.3	18.7	24.2	2.2	0.0	0.4		1778	2174	2805	260	0	45
Pseudanabaena sp.	0.0	0.0	0.0	0.0	0.0	3.4		0	0	0	0	0	64
Greens (Chlorophyceae)													
Monoraphidium sp. / Ankistrodesmus falcatus	1	3	1	31	4	1		45	123	49	1302	172	25
Stichococcus contortus	0	0	0	7	9	0		0	0	0	126	168	0
Botryococcus braunii (colonies)	0.01	0.00	0.00	0.00	0.00	0.00		22337	0	0	0	0	0
Crucigeniella sp	2	0	2	2	1	0		141	0	152	152	76	0
Dictyosphaerium	6	0	3	0	0	0		357	0	161	0	0	0
Elakotothrix gelatinosa	0	0	1	0	0	0		0	0	123	0	0	0
Oocytsis sp.	9	12	11	6	1	2		1229	1661	1578	831	83	332
Sphaerocystis schroeteri	2	0	4	0	0	0		0	0	0	0	0	0
Diatoms (Bacillariophyceae)													
Asterionella formosa	0	2	0	12	3	5		0	655	0	3440	819	1310
Aulacoseira granulata	0	0	5	4	5	4		0	0	1451	1269	1451	1269
Aulacoseira granulata var. angustissima	0	0	0	0	0	3		0	0	0	0	0	761
Cyclotella stelligera	3	5	5	5	1	0		433	842	842	749	94	0
Fragilaria crotonensis	75	87	207	104	21	30		26921	31205	73929	37279	7539	10681
Fragilaria sp.	0	0	0	6	0	0		0	0	0	2094	0	0
Nitzschia sp.	0	1	1	0	0	0		0	456	228	0	0	0
Small unknown diatom sp.	0	1	0	0	0	0		0	64	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closterium acutum var. variable	0	0	0	2	1	0		0	0	0	882	221	0
Chrysophtya (Chrysophyceae)													
Dinobryon sp.	17	0	11	0	0	0		989	0	621	0	0	0
Cryptomonas sp.	0	0	1	1	0	0		0	0	84	84	0	0
Dinoflagellates (Dinophyceae)													
Ceratium hirundinella	0	0	0	0	0	0		0	0	210	0	0	0
Gymnodinium sp. 1	0	1	2	0	0	0		0	1287	1931	0	0	0
Gymnodinium sp. 2	0	0	0	0	0	0		0	0	0	0	0	0
Peridinium sp.	1	0	1	1	0	0		4328	0	2340	2340	0	0
Flagellates 5µm													
Flagellates < 5µm/unicells	24	29	37	17	9	9		833	1003	1290	594	328	328

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2013-2014													
From Site A (Mid Lake) 7/11/2013													
	Surface	10m	20m	50m	100m	150m		Surface	10m	20m	50m	100m	150m
	JK1	JK2	JK3	JK6	JK11	JK16		JK1	JK2	JK3	JK6	JK11	JK16
	7/11/2013	7/11/2013	7/11/2013	7/11/2013	7/11/2013	7/11/2013		7/11/2013	7/11/2013	7/11/2013	7/11/2013	7/11/2013	7/11/2013
	Cells/ml	Cells/ml	Cells/ml	Cells/ml	Cells/ml	Cells/ml		Biovolume µm3	Biovolume µm3	Biovolume µm3	Biovolume µm3	Biovolume µm3	Biovolume µm3
Blue greens (Cyanophyceae)													
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	19.4	31.6	31.7	0.1	0.0	0.0		2249	3670	3680	48	0	0
***Pseudanabaena* sp.**	0.0	0.0	0.0	0.0	1.8	2.3		0	0	0	0	35	44
Greens (Chlorophyceae)													
Monoraphidium* sp. / *Ankistrodesmus falcatus	18	9	14	5	5	11		750	393	590	221	221	467
Stichococcus contortus	8	9	0	5	13	9		136	168	0	84	232	168
Botryococcus braunii (colonies)	0.00	0.00	0.01	0.01	0.00	0.00		0	0	18152	18152	0	0
***Chlamydomonas* sp.**	0	0	0	1	0	0		0	0	0	123	0	0
Dictyosphaerium	0	9	0	0	0	0		0	515	0	0	0	0
Eudorina elegans	0	0	0	0	0	0		20	0	0	0	0	0
***Oocytsis* sp.**	13	25	13	10	3	5		1844	3572	1828	1412	415	748
***Scenedesmus* sp.**	0	0	5	5	0	5		0	0	243	243	0	243
Sphaerocystis schroeteri	35	46	60	25	0	0		0	0	0	0	0	0
Tetraedon gracile	1	1	0	1	0	0		60	129	0	64	0	0
Volvox aureus	0	4	0	0	0	0		0	216	0	0	0	0
unidentified Colonial green	14	9	0	0	0	0		0	0	0	0	0	0
Diatoms (Bacillariophyceae)													
Asterionella formosa	29	22	40	5	6	0		8028	6061	11302	1474	1638	0
Aulacoseira granulata	29	27	17	85	39	43		8889	8523	5259	26477	12150	13420
Aulacoseira granulata* var. *angustissima	2	0	6	13	11	13		422	0	1673	3346	2890	3346
Cyclotella stelligera	4	4	6	11	5	11		606	562	936	1685	749	1778
Fragilaria crotonensis	58	57	28	27	1	4		20724	20524	10053	9843	419	1257
Fragilaria sp.	0	16	0	0	7	0		0	5864	0	0	2513	0
***Nitzschia* sp.**	5	11	1	2	1	1		1899	4335	456	913	456	228
***Synedra* sp.**	1	0	1	2	1	0		426	0	230	922	230	0
***Eunotia* sp.**	0	0	1	1	0	0		0	0	0	0	0	0
Small unknown diatom sp.	2	2	1	0	1	0		179	193	129	0	64	0
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closterium acutum* var. *variable	3	2	1	1	1	2		1224	662	441	441	441	662
Chrysophtya (Chrysophyceae)													
***Dinobryon* sp.**	38	21	0	0	0	0		2234	1243	0	0	0	0
***Cryptomonas* sp.**	0	2	5	4	1	2		0	337	674	505	168	253
Dinoflagellates (Dinophyceae)													
Ceratium hirundinella	0	0	0	0	0	0		0	210	210	420	0	0
***Gymnodinium* sp. 1**	0	2	1	1	0	0		0	2574	644	644	0	0
***Peridinium* sp.**	8	4	4	1	1	0		32460	16380	14040	2340	2340	0
Flagellates 5µm													
Flagellates < 5µm/unicells	48	49	54	15	6	8		1685	1720	1884	532	225	287

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2012-2013											
From Site A (Mid Lake) 22/04/2013											
	Surface	10m	50m	100m	150m		Surface	10m	50m	100m	150m
	ZE1	ZE2	ZE6	ZE11	ZE16		ZE1	ZE2	ZE6	ZE11	ZE16
	22/04/2013	22/04/2013	22/04/2013	22/04/2013	22/04/2013		22/04/2013	22/04/2013	22/04/2013	22/04/2013	22/04/2013
	Cells/ml	Cells/ml	Cells/ml	Cells/ml	Cells/ml		µm3	µm3	µm3	µm3	µm3
Blue greens (Cyanophyceae)											
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	25.6	26.4	5.6	5.6	2.0		2968	3065	645	644	226
***Aphanocapsa* sp.**	0.0	0.0	0.0	0.0	1.3		0	0	0	0	11
***Phormidium* sp.**	0.0	0.0	0.0	0.0	0.2		0	0	0	0	5
***Pseudanabaena* sp.**	0.3	0.0	0.0	0.0	2.4		5	0	0	0	45
Greens (Chlorophyceae)											
Monoraphidium* sp. / *Ankistrodesmus falcatus	0	0	4	1	1		0	0	147	49	49
Stichococcus contortus	0	0	0	0	2		0	0	0	0	32
Elakotothrix gelatinosa	8	5	0	0	1		795	491	0	0	61
***Oocytsis* sp.**	17	23	5	4	2		2458	3240	748	581	332
Volvox aureus	0	10	0	0	0		0	570	0	0	0
unidentified Colonial green	0	0	2	6	2		0	0	0	0	0
Diatoms (Bacillariophyceae)					0						0
Asterionella formosa	0	0	8	0	2		0	0	2293	0	491
Aulacoseira granulata	3	6	1	6	8		1006	1995	363	1995	2539
Aulacoseira granulata* var. *angustissima	0	0	4	6	1		0	0	913	1673	304
***Aulacoseria* sp.**	5	0	0	0	0		0	0	0	0	0
Cocconeis	1	0	0	0	1		283	0	0	0	306
Cyclotella stelligera	0	1	2	1	1		0	94	281	187	94
Fragilaria crotonensis	15	11	2	19	5		5423	3770	838	6911	1675
Fragilaria sp.	0	0	9	0	0		0	0	3141	0	0
***Nitzschia* sp.**	2	4	1	1	1		844	1369	456	228	456
***Synedra* sp.**	0	1	0	0	1		0	230	0	0	230
***Amphora* sp.**	0	1	1	0	1		0	306	612	0	306
Small unknown diatom sp.	2	1	1	0	1		179	129	129	0	64
Desmids (Mesotaeniaceae, Desmidiaceae)											
Closterium acutum* var. *variable	0	0	1	1	1		0	0	221	441	221
Chrysophtya (Chrysophyceae)											
***Dinobryon* sp.**	88	61	0	1	0		5171	3624	0	69	0
***Cryptomonas* sp.**	1	4	3	1	0		156	590	421	84	0
Dinoflagellates (Dinophyceae)											
Ceratium hirundinella	0	0	0	0	0		0	0	420	210	210
***Gymnodinium* sp. 1**	1	0	0	0	0		1190	0	0	0	0
***Peridinium* sp.**	2	2	0	0	1		8656	9360	0	0	2340
Flagellates 5µm											
Flagellates < 5µm/unicells	31	42	16	8	9		1079	1474	553	266	307

Lake Taupo phytoplankton species composition and biovolume (μm^3) 2012-2013

From Site A (Mid Lake) 24/10/2012

	Surface	10m	20m	50m	100m	150m		Surface	10m	20m	50m	100m	150m
	RF1	RF2	RF3	RF6	RF11	RF16		RF1	RF2	RF3	RF6	RF11	RF16
	24/10/2012	24/10/2012	24/10/2012	24/10/2012	24/10/2012	24/10/2012		24/10/2012	24/10/2012	24/10/2012	24/10/2012	24/10/2012	24/10/2012
	Cells/ml	Cells/ml	Cells/ml	Cells/ml	Cells/ml	Cells/ml		Biovolume µm3	Biovolume µm3	Biovolume µm3	Biovolume µm3	Biovolume µm3	Biovolume µm3
Blue greens (Cyanophyceae)													
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	31.1	38.8	20.9	15.0	4.1	2.7		3610	4501	2429	1735	473	312
***Aphanocapsa* sp.**	1.5	0.9	0.0	1.6	2.4	2.5		13	8	0	15	22	23
***Pseudanabaena* sp.**	0.0	0.0	0.0	0.0	1.5	12.8		0	0	0	0	28	242
Greens (Chlorophyceae)			0							0			
Monoraphidium* sp. / *Ankistrodesmus falcatus	21	29	5	15	14	9		863	1229	197	614	590	393
Stichococcus contortus	2	0	5	0	0	0		29	0	84	0	0	0
Botryococcus braunii (colonies)	0.0	0.0	0.0	0.0	0.0	0.0		58590	0	0	51006	0	0
***Crucigeniella* sp**	4	0	0	0	0	0		281	0	0	0	0	0
Elakotothrix gelatinosa	2	2	2	6	2	0		227	184	246	614	246	0
Eudorina elegans	0	29	13	9	20	0		10	7488	3295	2396	5092	0
Nephrocytium lunatum	0	0	0	0	0	2		0	0	0	0	0	0
***Oocytsis* sp.**	5	11	5	17	4	5		768	1495	748	2409	581	748
***Scenedesmus* sp.**	0	5	0	0	0	0		0	243	0	0	0	0
Westella botryoides	0	32	23	27	25	0		8	2053	1521	1749	1635	0
unidentified Colonial green	6	4	0	6	5	0		0	0	0	0	0	0
Diatoms (Bacillariophyceae)													
Asterionella formosa	104	101	147	85	107	122		29236	28337	41114	23915	29975	34234
Aulacoseira granulata	0	46	105	74	95	84		0	14327	32643	23031	29560	25933
Aulacoseira granulata* var. *angustissima	13	32	16	40	14	4		3376	8366	4107	10495	3650	913
Cyclotella stelligera	6	4	2	7	5	10		952	562	374	1123	842	1591
Fragilaria sp.	0	1	0	0	0	0		0	209	0	0	0	0
***Nitzschia* sp.**	0	0	1	1	1	2		0	0	228	228	456	913
Closterium acutum* var. *variable	1	1	0	1	1	0		204	221	0	221	221	0
Chrysophtya (Chrysophyceae)													
***Dinobryon* sp.**	34	39	34	50	6	16		2011	2313	2002	2968	380	966
***Cryptomonas* sp.**	0	0	0	2	1	0		0	0	0	337	84	0
Dinoflagellates (Dinophyceae)			0							0			
Ceratium hirundinella	0	0	0	0	0	0		0	420	0	210	420	0
***Gymnodinium* sp. 2**	0	0	0	0	0	0		0	200	1600	400	2400	0
Flagellates 5µm													
Flagellates < 5µm/unicells	28	147	148	109	68	82		985	5160	5180	3808	2396	2867

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2011-2012											
From Site A (Mid Lake) 10/04/2012											
	Surface	10m	50m	100m	150m		Surface	10m	50m	100m	150m
	HC1	HC2	HC6	HC11	HC16		HC1	HC2	HC6	HC11	HC16
	10/04/2012	10/04/2012	10/04/2012	10/04/2012	10/04/2012		10/04/2012	10/04/2012	10/04/2012	10/04/2012	10/04/2012
	Cells/ml	Cells/ml	Cells/ml	Cells/ml	Cells/ml		µm3	µm3	µm3	µm3	µm3
Blue greens (Cyanophyceae)											
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	16.66	5.5	0.8	0	0.3		1933	636	92	0	32
Anabaena planktonica	0	0	1.1	0	0		0	0	439	0	0
Anabaena sp.	0	0	0	0	0.6		0	0	0	0	51
Snowella sp.	0	0	0.2	0.1	0		0	0	5	3	0
Phormidium sp.	0	0	0.7	0	0.1		0	0	14	0	3
Aphanothece sp.	0	0.7	0	0	0		0	6	0	0	0
Pseudanabaena sp.	2.8	0	0	0	0.2		54	0	0	0	3
Greens (Chlorophyceae)											
Monoraphidium* sp. / *Ankistrodesmus falcatus	49	45	35	3	4		2039	1892	1474	123	147
Botryococcus braunii (colonies)	0	0	0	0	0		0	38315	0	0	0
Dictyosphaerium	0	0	0	0	0		0	10	7	0	0
Elakotothrix gelatinosa	0	0	1	0	0		0	0	123	0	0
Eudorina elegans	0	4	0	0	0		0	899	0	0	0
Nephrocytium lunatum	0	2	0	0	0		0	0	0	0	0
***Oocytsis* sp.**	7	8	6	0	1		997	1163	831	0	166
***Scenedesmus* sp.**	0	0	0	0	1		0	0	0	0	61
Diatoms (Bacillariophyceae)											
Asterionella formosa	8	0	9	3	4		2293	0	2457	819	1147
Aulacoseira granulata	0	0	9	0	15		0	0	2720	0	4534
Aulacoseira granulata var. angustissima	0	4	0	2	17		0	1065	0	608	4411
Cyclotella stelligera	1	0	1	0	1		94	0	187	0	187
Fragilaria crotonensis	47	111	13	31	41		16754	39792	4817	11100	14660
Nitzschia sp.	8	10	18	6	8		2966	3879	7073	2282	2966
Synedra sp.	1	0	0	0	0		230	0	46	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)											
Closterium aciculare	0	0	0	0	1		0	0	0	0	350
Closterium acutum* var. *variable	1	1	1	2	1		221	221	221	662	441
Chrysophtya (Chrysophyceae)											
***Dinobryon* sp.**	11	20	5	0	0		621	1208	276	0	0
***Cryptomonas* sp.**	0	1	1	0	0		0	168	168	0	0
Dinoflagellates (Dinophyceae)											
***Gymnodinium* sp. 1**	1	2	0	0	0		644	2574	0	0	0
***Gymnodinium* sp. 2**	0	0	0	0	0		0	0	260	0	20
***Gonyaulax* sp.**	4	4	0	0	0		7020	7020	0	0	0
Flagellates 5µm											
Flagellates < 5µm/unicells	94	178	75	12	22		3276	6245	2641	410	778

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2011-2012														
From Site A (Mid Lake) 25/10/2011														
	Surface	**10m**	**20m**	**50m**	**100m**	**150m**		**Surface**	**10m**	**20m**	**50m**	**100m**	**150m**
	ZH1	**ZH2**	**ZH16**	**ZH3**	**ZH6**	**ZH11**		**ZH1**	**ZH2**	**ZH16**	**ZH3**	**ZH6**	**ZH11**
	25/10/2011	**25/10/2011**	**25/10/2011**	**25/10/2011**	**25/10/2011**	**25/10/2011**		**25/10/2011**	**25/10/2011**	**25/10/2011**	**25/10/2011**	**25/10/2011**	**25/10/2011**
	Cells/ml	**Cells/ml**	**Cells/ml**	**Cells/ml**	**Cells/ml**	**Cells/ml**		**µm3**	**µm3**	**µm3**	**µm3**	**µm3**	**µm3**
Blue greens (Cyanophyceae)													
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	4.1	0.0	0.0	4.6	0.0	0.1		478	0	0	529	0	10
Greens (Chlorophyceae)													
Monoraphidium* sp. / *Ankistrodesmus falcatus	0	1	3	3	27	3		0	25	123	123	1155	123
Stichococcus contortus	0	0	0	0	36	0		0	0	0	0	653	0
Botryococcus braunii (colonies)	0.0	0.0	0.0	0.0	0.0	0.0		0	18152	0	0	0	18152
Dictyosphaerium	0	0	0	2	0	0		0	0	0	129	0	0
Elakotothrix gelatinosa	1	1	0	2	2	1		114	123	0	246	184	123
***Oocytsis* sp.**	5	2	0	3	4	5		768	332	0	415	498	665
Sphaerocystis schroeteri	0	0	0	0	24	10		0	0	0	0	0	0
unidentified Colonial green	4	2	0	2	2	0		0	0	0	0	0	0
Diatoms (Bacillariophyceae)													
Asterionella formosa	4	4	0	2	9	6		1060	1147	0	655	2621	1802
Aulacoseira granulata	6	6	11	23	25	16		1845	1995	3446	7073	7617	5078
Aulacoseira granulata* var. *angustissima	17	24	11	26	30	20		4501	6236	2738	6692	7757	5171
Cocconeis	0	1	0	0	0	0		0	306	0	0	0	0
Cyclotella stelligera	10	7	5	6	14	11		1645	1123	842	1030	2246	1685
Fragilaria crotonensis	13	18	0	31	20	11		4648	6283	0	11100	7121	3770
***Nitzschia* sp.**	1	1	1	0	2	3		422	456	228	0	913	1141
***Synedra* sp.**	0	0	1	1	1	2		0	0	230	230	461	922
***Amphora* sp.**	0	0	1	0	0	1		0	0	306	0	0	306
Small unknown diatom sp.	0	0	0	1	1	1		0	0	0	129	64	129
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closterium acutum* var. *variable	1	0	2	1	1	0		204	0	662	221	221	0
Chrysophtya (Chrysophyceae)													
***Dinobryon* sp.**	14	32	0	30	12	0		798	1898	0	1795	725	0
***Cryptomonas* sp.**	0	0	0	2	1	1		0	0	0	337	168	168
Dinoflagellates (Dinophyceae)													
Ceratium hirundinella	0	0	0	0	0	0		210	0	0	210	0	0
Flagellates 5µm													
Flagellates < 5µm/unicells	23	25	11	24	22	8		795	880	389	839	778	287

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2010-2011													
From Site A (Mid Lake) 10/11/2010													
Sample code	**KD1**	**KD2**	**KD3**	**KD6**	**KD11**	**KD16**		**KD1**	**KD2**	**KD3**	**KD6**	**KD11**	**KD16**
Depth	**Surface**	**10m**	**20m**	**50m**	**100m**	**150m**		**Surface**	**10m**	**20m**	**50m**	**100m**	**150m**
	10/11/2010	**10/11/2010**	**10/11/2010**	**10/11/2010**	**10/11/2010**	**10/11/2010**		**10/11/2010**	**10/11/2010**	**10/11/2010**	**10/11/2010**	**10/11/2010**	**10/11/2010**
	Cells/ml	**Cells/ml**	**Cells/ml**	**Cells/ml**	**Cells/ml**	**Cells/ml**		**µm3**	**µm3**	**µm3**	**µm3**	**µm3**	**µm3**
Blue greens (Cyanophyceae)													
Anabaena c.f. lemmermannii	11.4	48.7	25.5	6.1	0.0	0.0		1023	4387	2293	547	0	0
***Aphanocapsa* sp.**	0.0	0.0	0.0	0.0	0.0	8.2		0	0	0	0	0	74
***Pseudanabaena* sp.**	0.0	0.0	0.0	0.0	0.1	40.6		0	0	0	0	3	772
Greens (Chlorophyceae)													
Actinastrum hantschii	0	0	0.0	0	0	0.2		0	0	0	0	0	0
Monoraphidium* sp. / *Ankistrodesmus falcatus	382	539	235	115	38	0.4		16042	22631	9884	4817	1593	15
Stichococcus contortus	0	0	0	18	9	0.0		0	0	0	321	160	0
Botryococcus braunii (colonies)	0.0	0	0	0	0	0		0	0	0	0	110	0
Dictyosphaerium sp.	1	20	2	9	0	0		0	0	0	0	0	0
Eudorina elegans	1	1	1	1	0	0		277	150	138	300	0	0
***Oocytsis* sp.**	4	2	2	9	2	0		615	332	307	1246	229	0
***Scenedesmus* sp.**	0	2	0	2	0	10		0	122	0	122	0	504
Diatoms (Bacillariophyceae)													
Asterionella formosa	102	129	73	104	10	6		28630	36036	20450	29156	2711	1582
Aulacoseira granulata	18	137	76	235	88	140		5534	42436	23479	72903	27390	43274
Aulacoseira granulata* var. *angustissima	0	0	0	18	5	0		0	0	0	4715	1259	0
Cyclotella stelligera	2	2	2	4	0	4		346	374	346	655	0	581
Fragilaria crotonensis	16	15	6	4	0	0		5810	5236	2130	1257	0	0
***Nitzschia* sp.**	0	5	3	2	4	4		0	1825	1266	684	1573	1731
***Synedra* sp.**	3	0	0	1	1	0		1279	0	0	461	318	0
Desmids (Mesotaeniaceae, Desmidiaceae)													
Closterium acutum* var. *variable	0	0	0	2	0	1		0	0	0	662	152	456
***Mougeotia* sp.**	0	0	0	2	0	0		0	0	0	0	0	0
Staurastrum tangaroaii	0	1	1	0	0	0		0	0	0	0	0	0
Chrysophtya (Chrysophyceae)													
***Dinobryon* sp.**	62	191	145	13	0	0		3639	11252	8554	759	0	0
***Cryptomonas* sp.**	0	0	0	1	1	0		0	0	0	168	116	0
Dinoflagellates (Dinophyceae)													
***Gymnodinium* sp. 1**	0	1	1	0	0	1		0	644	1190	0	0	888
***Gymnodinium* sp. 2**	0	0	1	1	0	0		0	0	27050	14625	0	0
***Gonyaulax* sp.**	207	2	4	0	0	0		413324	4680	7574	0	0	0
Flagellates 5µm													
Flagellates < 5µm/unicells	214	205	188	147	26	28		7498	7166	6589	5160	918	988

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2010-2011											
From Site A (Mid Lake) 13/04/2011											
Sample code	RL1	RL2	RL6	RL11	RL16		RL1	RL2	RL6	RL11	RL16
Depth	0m	10m	50m	100m	150m		0m	10m	50m	100m	150m
	13/04/2011	13/04/2011	13/04/2011	13/04/2011	13/04/2011		13/04/2011	13/04/2011	13/04/2011	13/04/2011	13/04/2011
	Cells/ml	Cells/ml	Cells/ml	Cells/ml	Cells/ml		µm3	µm3	µm3	µm3	µm3
Blue greens (Cyanophyceae)											
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	16.7	5.0	0.4	0.0	0.0		1933	580	42	0	0
Gloeocapsa sp.	0.0	0.0	0.2	0.0	0.0		0	0	2	0	0
Snowella sp.	0.0	0.0	0.0	0.2	0.0		0	0	0	5	0
Pseudanabaena sp.	2.8	0.0	0.0	0.0	0.0		54	0	0	0	0
Greens (Chlorophyceae)											
Monoraphidium* sp. / *Ankistrodesmus falcatus	2	1	5	1	2		74	49	217	49	74
Botryococcus braunii (colonies)	0	1	0	0	0		8760	512447	0	0	0
Dictyosphaerium	2	2	2	0	0		97	97	97	0	0
Elakotothrix gelatinosa	2	0	0	0	0		227	0	0	0	0
Eudorina elegans	0	0	0	0	0		18	0	0	0	0
***Oocytsis* sp.**	44	55	1	0	0		6223	7808	166	0	0
Diatoms (Bacillariophyceae)											
Asterionella formosa	3	3	2	1	2		746	819	655	328	655
Aulacoseira granulata	6	1	4	2	2		1753	363	1088	544	725
Aulacoseira granulata var. angustissima	0	3	18	19	15		0	760	4563	4867	3802
Cyclotella stelligera	3	2	1	2	1		420	374	187	281	94
Fragilaria crotonensis	14	23	0	0	0		4889	8377	0	0	0
Fragilaria sp.	0	0	1	0	0		0	0	209	0	0
Nitzschia sp.	0	0	1	0	0		0	0	228	0	0
Synedra sp.	0	1	0	0	0		0	230	0	0	0
Rhoicosphenia sp.	0	0	1	0	0		0	0	306	0	0
Small unknown diatom sp.	0	0	1	0	0		0	0	129	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)											
Closterium acutum* var. *variable	0	1	1	0	0		0	221	221	0	0
Chrysophtya (Chrysophyceae)											0
***Dinobryon* sp.**	13	13	0	1	1		751	794	0	35	35
***Cryptomonas* sp.**	0	1	2	0	0		0	84	253	0	0
Dinoflagellates (Dinophyceae)											0
***Gymnodinium* sp. 1**	1	1	0	0	0		595	643	0	0	0
Flagellates 5µm											0
Flagellates < 5µm/unicells	35	32	28	6	3		1214	1106	983	225	102

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2009-2010

From Site A (Mid Lake) 19/10/2009

Sample code	OT1	OT2	OT3	OT6	OT8	OT11	OT16	OT1	OT2	OT3	OT6	OT8	OT11	OT16
Depth	Surface	10m	20m	50m	70m	100m	150m	Surface	10m	20m	50m	70m	100m	150m
	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)
Blue greens (Cyanophyceae)														
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	27.4	6.8	1.1	0.4	0.0	0.0	0.1	2470	610	99	40	0	0	9
***Chroococcus* sp.**	0.2	0.0	0.0	0.0	0.0	0.0	0.0	2	0	0	0	0	0	0
***Microcystis* sp.**	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0	19	0	0	0	0	0
Dictyosphaerium sp.	18.0	31.6	31.3	7.4	2.7	0.4	0.0	451	789	782	186	67	11	0
***Phormidium* sp.**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0
***Pseudanabaena* sp.**	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0	0	0	0	4	0	0
Greens (Chlorophyceae)														
Monoraphidium* sp. / *Ankistrodesmus falcatus	2	4	0	0	12	0	0	68	147	0	0	491	0	0
Botryococcus braunii (colonies)	0.0	0	0	0	0	0	0	30946	0	950	0	0	0	1900
***Crucigeniella* sp**	4	8	0	0	0	2	0	281	494	0	0	0	152	0
Dictyosphaerium sp.	0	0	0	0	0	0	9	0	0	0	0	0	0	658
Eudorina elegans	0	0	0	11	0	0	0	0	0	0	2696	0	0	0
Nephrocytium agardhianum	0	11	5	0	0	0	0	0	790	351	0	0	0	0
***Oocytsis* sp.**	0	7	5	0	2	2	0	0	997	665	0	332	332	0
Westella botryoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paulschulzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)														
Asterionella formosa	128	218	97	78	26	4	43	35749	60934	27191	21785	7207	983	12121
Aulacoseira granulata* var. *angustissima	17	49	43	21	65	40	36	4360	12624	11103	5476	16883	10343	9278
Cyclotella stelligera	4	5	1	2	11	15	18	692	842	187	374	1778	2340	2808
Fragilaria crotonensis	267	467	352	153	76	32	47	95677	167335	126077	54871	27226	11519	16754
***Nitzschia* sp.**	1	0	1	0	0	0	0	422	0	228	0	0	0	0
***Synedra* sp.**	1	2	0	0	0	0	2	213	922	0	0	0	0	691
Desmids (Mesotaeniaceae, Desmidiaceae)														
Closterium aciculare	0	1	1	0	0	0	0	0	350	350	0	0	0	0
Closterium acutum* var. *variable	2	1	0	1	2	1	1	612	441	0	441	662	221	441
Chrysophtya (Chrysophyceae)														
***Dinobryon* sp.**	23	70	140	89	3	0	0	1373	4142	8284	5246	173	0	0
***Cryptomonas* sp.**	0	0	0	1	1	0	0	0	0	0	84	168	0	0
Dinoflagellates (Dinophyceae)														
***Gymnodinium* sp. 1**	1	0	0	0	0	0	0	595	0	0	0	0	0	0
***Gymnodinium* sp. 2**	0	0	0	0	0	0	0	0	0	2925	2925	0	0	0
***Peridinium* sp.**	0	0	0	0	0	0	0	0	0	0	1170	0	0	0
***Gonyaulax* sp.**	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flagellates 5µm														
Flagellates < 5µm/unicells	144	294	211	172	159	79	102	5037	10299	7371	6020	5569	2764	3583

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2009-2010

From Site A (Mid Lake) 7/04/2010

Sample code / Depth	YZ1 Surface Cell (per ml)	YZ2 10m Cell (per ml)	YZ3 20m Cell (per ml)	YZ6 50m Cell (per ml)	YZ11 100m Cell (per ml)	YZ16 150m Cell (per ml)	YZ1 Surface Biovolume (µm^3)	YZ2 10m Biovolume (µm^3)	YZ3 20m Biovolume (µm^3)	YZ6 50m Biovolume (µm^3)	YZ11 100m Biovolume (µm^3)	YZ16 150m Biovolume (µm^3)
Blue greens (Cyanophyceae)												
Anabaena c.f. lemmermannii	10.2	27.6	15.4	5.3	0.3	0.6	921	2482	1390	475	27	53
Dolichospermum planctonicum (formerly; ***Anabaena planktonica)***	0.6	0.0	0.0	0.0	0.0	0.0	242	0	0	0	0	0
***Aphanocapsa* sp.**	0.0	0.0	0.0	0.0	0.4	0.0	0	0	0	0	4	0
***cf Heteroleibleinia* sp.**	0.0	0.0	0.3	0.0	0.0	0.0	0	0	5	0	0	0
***Phormidium* sp.**	0.0	0.0	0.0	0.0	0.0	0.4	0	0	0	0	0	8
***Pseudanabaena* sp.**	0.0	0.0	0.0	0.0	2.3	0.3	0	0	0	0	44	6
Greens (Chlorophyceae)												
Monoraphidium* sp. / *Ankistrodesmus falcatus	0	0	0	111	0	0	0	0	0	4643	0	0
Botryococcus braunii (colonies)	0.0	0	0	0	0	0	1200	76	6621	0	76	76
Elakotothrix gelatinosa	1	0	0	0	0	0	157	0	0	0	0	0
Eudorina elegans	0	0	4	0	0	0	96	0	930	0	0	0
Nephrocytium agardhianum	10	2	2	2	0	0		182	0	0	0	0
Nephrocytium lunatum	0	5	0	0	0	0	784	387	121	121	0	0
***Oocytsis* sp.**	16	28	12	23	2	15	2225	4010	1719	3208	344	2177
Quadrigula lacustrus	1	0	0	0	0	0	245	0	0	0	0	0
***Scenedesmus* sp.**	0	2	0	3	0	0	0	84	0	168	0	0
Diatoms (Bacillariophyceae)												
Asterionella formosa	0	0	0	0	1	0	0	0	0	0	226	0
Aulacoseira granulata	0	0	0	0	0	8	116	0	0	0	0	2626
Aulacoseira granulata* var. *angustissima	0	0	0	1	5	0	0	0	0	210	1259	0
Cocconeis	0	0	0	0	0	0	0	0	211	0	0	0
Cyclotella stelligera	4	0	0	2	0	1	716	0	0	323	0	194
Fragilaria crotonensis	0	23	7	8	2	1	134	8088	2600	2744	578	433
***Nitzschia* sp.**	2	4	4	0	1	0	873	1416	1416	0	315	0
***Eunotia* sp.**	4	0	0	0	0	0	0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)												
Closterium acutum* var. *variable	0	0	0	1	1	0	0	0	0	304	456	152
***Staurastrum* sp.**	0	0	0	0	0	0	0	0	0	1	0	0
Chrysophtya (Chrysophyceae)												
***Dinobryon* sp.**	42	13	61	6	0	0	2487	738	3618	381	0	0
***Cryptomonas* sp.**	0	0	0	2	0	0	0	0	58	232	0	0
Dinoflagellates (Dinophyceae)												
Ceratium hirundinella	0	0	2	4	0	0	126	147	246	369	0	0
***Gymnodinium* sp. 1**	0	1	0	0	0	0	0	888	0	0	444	0
***Gymnodinium* sp. 2**	0	1	0	0	0	0	0	20172	0	0	0	0
***Gonyaulax* sp.**	6	5	3	0	0	0	12686	10490	5648	0	0	0
Flagellates 5µm												
Flagellates < 5µm/unicells	47	59	56	40	11	19	1658	2062	1949	1384	395	650

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2008-2009
From Site A (Mid Lake) 15/04/2009

Sample code	SZ1	SZ2	SZ3	SZ6	SZ11	SZ16	SZ1	SZ2	SZ3	SZ6	SZ11	SZ16
Depth	Surface Cell (per ml)	10m Cell (per ml)	20m Cell (per ml)	50m Cell (per ml)	100m Cell (per ml)	150m Cell (per ml)	Surface Biovolume (µm^3)	10m Biovolume (µm^3)	20m Biovolume (µm^3)	50m Biovolume (µm^3)	100m Biovolume (µm^3)	150m Biovolume (µm^3)
Species composition by class												
Blue greens (Cyanophyceae)												
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	0.0	1.3	0.0	0.8	0.0	0.0	0	51	0	31	0	0
Aphanothece sp.	0.0	0.0	0.0	0.0	7.3	0.0	0	0	0	0	66	0
Pseudanabaena sp.	0.0	0	0.0	0.0	22.2	5.3	0	0	0	0	422	100
Greens (Chlorophyceae)												
Monoraphidium sp. / Ankistrodesmus falcatus	68	71	0.5	55	13	6	2875	2998	22	2318	545	273
Stichococcus contortus	0	0	0.0	0	17	15	0	0	0	0	302	263
Kirchneriella contorta	0	0	0.0	1	0	0	0	0	0	36	0	0
Botryococcus braunii (colonies)	0.0	0	0.0	0.0	0	0	0	0	21653	16240	76507.95	0
Elakotothrix gelatinosa	5	10	2	2	0	0	491	1044	227	227	0	0
Nephrocytium agardhianum	2	0	0	0	0	0	0	0	0	0	0	0
Oocytsis sp.	6	1	4	1	4	1	831	166	581	166	498	166
Quadrigula lacustrus	2	0	0	0	0	0	384	0	0	0	0	0
Diatoms (Bacillariophyceae)												
Asterionella formosa	94	71	102	71	6	2	26372	19820	28501	19984	1802	655
Aulacoseira granulata	0	0	0	1	3	1	0	0	0	363	907	363
Aulacoseira granulata var. angustissima	1	22	8	8	0	0	304	5628	2129	1977	0	0
Cyclotella stelligera	5	4	11	4	2	2	842	562	1685	562	374	281
Fragilaria crotonensis	151	42	9	183	15	7	54033	14870	3141	65552	5236	2513
Synedra sp.	1	0	0	0	0	0	0	0	0	0	0	0
Eunotia sp.	0	1	0	0	0	0	0	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)												
Closterium aciculare	1	1	0	1	0	0	701	701	0	701	0	0
Closterium acutum var. variable	0	0	1	0	1	1	0	0	221	0	221	221
Chrysophtya (Chrysophyceae)												
Dinobryon sp.	1	0	32	3	0	0	69	0	1898	173	0	0
Cryptomonas sp.	0	1	0	1	0	0	0	84	0	84	0	0
Dinoflagellates (Dinophyceae)												
Gymnodinium sp. 2	1	0	1	0	0	0	14625	0	14625	0	0	0
Flagellates 5µm												
Flagellates < 5µm/unicells	132	201	111	140	24	13	4607	7023	3870	4914	839	450

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2008-2009

From Site A (Mid Lake) 14/10/2008

Sample code	EU1	EU2	EU6	EU8	EU11	EU16	EU1	EU2	EU6	EU8	EU11	EU16
Depth	Surface	10m	50m	70m	100m	150m	Surface	10m	50m	70m	100m	150m
	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Cell (per ml)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)
Species composition by class												
Blue greens (Cyanophyceae)												
Dolichospermum c.f. lemmermannii (formally; Anabaena c.f. lemmermannii)	1.2	8.5	1.6	0.0	0.0	0.0	104	767	143	4	0	0
***Dolichospermum sp. (formally; Anabaena* sp.)**	0.5	0.9	0.0	0.0	0.0	0.0	49	83	0	0	0	0
Pseudanabaena sp.	0.0	0.0	0.0	1.7	0.3	0.6	0	0	0	33	5	11
Greens (Chlorophyceae)												
Monoraphidium sp. / Ankistrodesmus falcatus	0	0	54	2	19	2	0	0	2260	66	786	82
Botryococcus braunii (colonies)	0.0	1	0	0	1	0	123784	1111500	370500	0	741000	0
Crucigeniella sp	52	53	5	3	0	0	3399	3448	304	203	0	0
Elakotothrix gelatinosa	1	0	0	0	0	0	76	0	0	0	0	0
Eudorina elegans	0	11	2	0	0	0	0	2796	599	0	0	0
Oocytsis sp.	3	0	2	0	1	0	410	0	222	0	111	0
Westella botryoides	0	5	3	2	0	0	0	304	203	152	0	0
Paulschulzia sp.	2	0	0	0	0	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)												
Asterionella formosa	3	6	4	4	1	1	707	1638	1201	1092	218	218
Aulacoseira granulata	0	2	4	9	5	1	0	605	1209	2660	1693	242
Aulacoseira granulata var. angustissima	0	2	6	0	0	2	0	507	1622	0	0	406
Cyclotella stelligera	1	1	4	1	0	0	115	187	686	125	62	62
Fragilaria crotonensis	6	10	0	0	0	1	2066	3630	0	0	0	419
Nitzschia sp.	0	0	0	0	0	0	70	152	0	0	0	152
Desmids (Mesotaeniaceae, Desmidiaceae)												
Closterium aciculare	0	0	0	0	0	0	0	0	117	0	0	0
Closterium acutum var. variable	0	0	0	2	0	0	0	0	147	735	0	0
Chrysophtya (Chrysophyceae)												
Dinobryon sp.	7	2	0	0	0	0	426	138	0	0	0	0
Cryptomonas sp.	0	0	1	0	0	0	0	0	168	0	0	0
Dinoflagellates (Dinophyceae)												
Gymnodinium sp. 1	0	2	0	0	0	0	0	2145	0	0	0	0
Gymnodinium sp. 2	0	1	0	0	0	0	0	19500	0	0	0	0
Gonyaulax sp.	1	1	0	0	0	0	2164	1560	0	0	0	0
Flagellates 5µm												
Flagellates < 5µm/unicells	34	46	27	22	10	9	1174	1611	956	778	355	300

Lake Taupo phytoplankton species composition and biovolume (μm^3) 2007-2008
From Site A (Mid Lake) 30/10/2007

Sample code	ZA1	ZA2	ZA3	ZA6	ZA8	ZA11	ZA16	ZA1	ZA2	ZA3	ZA6	ZA8	ZA11	ZA16
Depth	**Surface**	**10m**	**20m**	**50m**	**70m**	**100m**	**150m**	**Surface**	**10m**	**20m**	**50m**	**70m**	**100m**	**150m**
Species composition by class	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	Biovolume (μm^3)	Biovolume (μm^3)	Biovolume (μm^3)	Biovolume (μm^3)	Biovolume (μm^3)	Biovolume (μm^3)	Biovolume (μm^3)
Blue greens (Cyanophyceae)														
Anabaena lemmermannii	18.7	22.0	2.9	0.4	0.0	0.0	1.6	1683	1976	257	33	0	0	140
Chroococcus sp.	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0	0	0	1	0	0	0
Aphanocapsa sp.	0.0	0.0	0.0	6.9	0.0	5.8	6.6	0	0	0	62	0	52	59
Planktolyngbya sp.	21.3	0.0	0.0	0.0	0.0	0.0	0.0	192	0	0	0	0	0	0
Pseudanabaena sp.	0.0	0.0	0.0	0.0	0.0	4.9	0.3	0	0	0	0	0	94	6
Greens (Chlorophyceae)														
Monoraphidium sp. / *Ankistrodesmus falcatus*	52	21	29	15	6	0	0	2187	885	1229	614	270	0	0
Stichococcus contortus	39	6	13	15	6	2	4	706	116	242	274	116	42	63
Botryococcus braunii (colonies)	0	0	0	1	0	0	0	0	0	0	235139	0	804	0
Eudorina elegans	13	3	7	0	0	0	0	3295	749	1797	0	0	0	0
Crucigeniella sp.	0	2	8	5	5	0	0	0	152	532	304	304	0	0
Nephrocytium agardhianum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oocytsis sp.	9	4	0	1	0	9	1	1246	498	0	166	0	1246	166
Diatoms (Bacillariophyceae)														
Asterionella formosa	33	73	102	62	34	4	14	9173	20311	28665	17363	9500	983	3931
Aulacoseira granulata	15	37	91	25	9	25	13	4715	11606	28109	7617	2902	7617	4171
Aulacoseira granulata var. angustissima	0	0	0	0	0	3	0	0	0	0	0	0	761	0
Cyclotella stelligera	6	8	22	9	5	9	10	1030	1217	3557	1404	842	1404	1591
Fragilaria crotonensis	11	14	22	7	7	20	2	3770	5026	7958	2513	2513	7330	838
Nitzschia sp.	0	0	0	0	0	1	0	0	0	0	0	0	228	0
Desmids (Mesotaeniaceae, Desmidiaceae)														
Closterium aciculare	1	1	0	1	1	1	1	701	350	0	526	526	350	350
Closterium acutum var. *variable*	1	1	0	0	0	0	0	221	265	0	44	0	0	0
Chrysophtya (Chrysophyceae)														
Dinobryon sp.	275	182	227	135	108	1	0	16222	10734	13392	7938	6351	69	0
Cryptomonas sp.	0	0	1	1	0	0	0	0	0	168	168	0	0	0
Dinoflagellates (Dinophyceae)														
Gymnodinium sp. 1	0	1	1	1	1	0	0	0	3510	3510	1755	1755	0	0
Gymnodinium sp. 2	0	1	0	1	0	0	0	0	14044	26750	1463	0	0	0
Flagellates 5µm														
Flagellates < 5µm/unicells	139	404	406	243	144	25	13	4853	14148	14210	8497	5037	860	450

Lake Taupo phytoplankton species composition and biovolume (µm^3) 2007-2008

From Site A (Mid Lake) 17/04/2008

Sample code	KA1	KA2	KA3	KA6	KA11	KA16	KA1	KA2	KA3	KA6	KA11	KA16
Depth	Surface	10m	20m	50m	100m	150m	Surface	10m	20m	50m	100m	150m
Species composition by class	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)	Biovolume (µm^3)
Blue greens (Cyanophyceae)												
Anabaena lemmermannii	44.8	46.9	24.3	0.0	6.5	1.4	4031	4220	2183	0	584	16
Pseudanabaena sp.	0.0	0.0	0.0	0.0	0.0	17.4	0	0	0	0	0	331
Greens (Chlorophyceae)												
Monoraphidium sp. / *Ankistrodesmus falcatus*	14	3	8	8	0	1	590	123	344	344	0	49
Stichococcus contortus	6	26	6	0	0	0	116	463	116	0	0	0
Botryococcus braunii (colonies)	0	0	0	0	0	1	54	31352	6431	26908	1608	156759
Elakotothrix gelatinosa	0	1	1	0	1	0	0	154	123	0	123	0
Eudorina elegans	0	6	0	0	0	0	75	1498	75	0	0	0
Crucigeniella sp.	0	0	0	1	0	0	0	0	0	76	0	0
Oocytsis sp.	2	10	2	0	2	1	332	1412	332	0	332	83
Westella botryoides	0	0	0	0	0	0	0	0	0	8	0	0
Diatoms (Bacillariophyceae)												
Asterionella formosa	12	23	32	12	3	4	3276	6552	8935	3276	819	983
Aulacoseira granulata	5	16	5	12	5	9	1484	4946	1484	3808	1632	2720
Cyclotella stelligera	2	6	2	5	1	1	340	936	340	749	94	94
Fragilaria crotonensis	4	10	39	1	1	1	1523	3427	14089	419	419	209
Nitzschia sp.	0	0	22	0	0	0	0	0	8442	0	0	0
Small unknown diatom sp.	0	0	0	0	1	0	0	0	0	0	64	0
Desmids (Mesotaeniaceae, Desmidiaceae)												
Closterium aciculare	0	1	0	0	1	0	105	701	105	0	350	4
Closterium acutum* var. *variable	0	1	2	2	0	0	0	221	662	662	0	22
Chrysophtya (Chrysophyceae)												
Dinobryon sp.	64	164	101	0	0	0	3797	9664	5971	0	0	0
Cryptomonas sp.	1	1	1	3	0	0	84	84	84	421	0	0
Dinoflagellates (Dinophyceae)												
Gymnodinium sp. 1	1	1	1	0	0	0	3191	3191	3191	0	0	0
Gymnodinium sp. 2	0	0	0	0	0	0	0	0	0	146	134	0
Flagellates 5µm												
Flagellates < 5µm/unicells	46	126	196	37	7	3	1619	4411	6850	1290	246	102

Lake Taupo phytoplankton species composition and biovolume (µm3) 2006-2007
From Site A (Mid Lake) 1/11/2006

Sample code	HW1	HW3	HW6	HW11	HW16	HW1	HW3	HW6	HW11	HW16
Depth	**surface**	**20 m**	**50 m**	**100 m**	**150 m**	**surface**	**20 m**	**50 m**	**100 m**	**150 m**
	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	Biovolume (μm^3)	Biovolume (μm^3)	Biovolume (μm^3)	Biovolume (μm^3)	Biovolume (μm^3)
Species composition by class										
Blue greens (Cyanophyceae)										
Anabaena lemmermannii	63	25	0	0	0	3488.1	1367	25	15	0
Aphanocapsa sp.	0	0	2	3	0	0	0	14	31	0
Greens (Chlorophyceae)										
Botryococcus braunii (colonies)	0	0	0	0	0	5151	5901	7321	0	0
Chlorosarcinopsis sp.	3	0	2	2	0	259	0	182	208	0
Eudorina elegans	2	5	6	0	0	621	1198	1498	0	0
Kirchneriella contorta	5	4	0	0	0	176	116	0	0	0
Lagerheimia sp.	0	1	1	0	0	0	125	166	0	0
Monoraphidium sp. / *Ankistrodesmus falcatus*	3	0	0	0	0	143	0	0	0	0
Oocytsis sp.	7	6	6	6	3	1034	872	831	831	415
Westella botryoides	0	0	7	0	0	0	0	0	0	0
Diatoms (Bacillariophyceae)										
Asterionella formosa	14	8	7	8	2	3806	2129	1884	2211	573
Aulacoseira granulata	63	54	49	47	54	19413	16866	15052	14689	16594
Aulacoseira granulata var. *angustissima*	0	0	2	3	0	0	0	456	837	0
Cyclotella stelligera	46	8	4	7	4	7301	1264	562	1123	655
Fragilaria crotonensis	5	0	2	8	3	1912	0	628	2723	1047
Nitzschia sp.	2	1	1	0	0	947	342	342	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)										
Closterium aciculare	0	0	0	0	0	0	35	175	0	0
Closterium acutum var. *variable*	0	0	0	0	0	0	0	110	0	0
Chrysophtya (Chrysophyceae)										
Dinobryon sp.	8	4	6	0	0	458	242	362	0	0
Dinoflagellates (Dinophyceae)										
Gymnodinium sp. 1	0	1	0	0	0	0	2633	1316	0	88
Gymnodinium sp. 2	0	0	0	0	0	6068	0	0	0	0
Flagellates 5µm										
Flagellates < 5µm/unicells	50	19	31	23	4	1750	676	1085	788	143

Lake Taupo phytoplankton species composition and biovolume (µm3) 2006-2007
From Site A (Mid Lake) 2/04/2007

Sample code	HW17	HW18	HW19	HW22	HW27	HW32	HW17	HW18	HW19	HW22
Depth	surface	10 m	20 m	50 m	100 m	150 m	surface	10 m	20 m	50 m
	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	cell (per ml)	Biovolume (μm^3)	Biovolume (μm^3)	Biovolume (μm^3)	Biovolume (μm^3)
Species composition by class										
Blue greens (Cyanophyceae)										
Anabaena lemmermannii	36	65	56	0	2	0	1493	2655	2286	5
Greens (Chlorophyceae)										
Botryococcus braunii (colonies)	1	0	0	0	0	0	27630	0	0	41446
Monoraphidium sp. / *Ankistrodesmus falcatus*	49	17	17	0	1	0	2064	725	725	0
Oocytsis sp.	2	1	1	0	1	0	332	166	125	0
Stichococcus contortus	0	0	0	0	0	1	0	0	0	0
Diatoms (Bacillariophyceae)										
Asterionella formosa	0	0	1	0	0	1	0	82	246	0
Aulacoseira granulata	2	0	0	5	11	8	544	0	0	1541
Aulacoseira granulata var. *angustissima*	0	0	0	0	7	2	0	0	0	76
Cyclotella stelligera	1	1	1	1	2	1	168	94	94	234
Eunotia sp.	0	0	0	0	4	0	0	0	0	0
Fragilaria crotonensis	0	0	0	0	0	1	0	0	0	0
Nitzschia sp.	2	0	1	0	0	0	799	114	228	0
Small unknown diatom sp.	0	0	0	0	1	0	0	0	0	0
Desmids (Mesotaeniaceae, Desmidiaceae)										
Closterium aciculare	0	0	0	1	4	0	0	0	0	350
Closterium acutum var. *variable*	0	0	0	1	0	0	0	0	0	331
Chrysophtya (Chrysophyceae)										
Cryptomonas sp.	0	1	1	4	0	0	0	211	126	590
Dinobryon sp.	0	0	0	1	0	0	0	0	0	86
Dinoflagellates (Dinophyceae)										
Gymnodinium sp. 1	1	0	0	0	0	0	2106	878	878	176
Gymnodinium sp. 2	1	1	1	0	0	0	14625	21938	14625	0
Flagellates 5µm										
Flagellates < 5µm/unicells	185	97	84	127	16	10	6470	3389	2928	4433

Appendix 5 - Historical data

Historical data held by NIWA have frequently been referred to and included in analysis or comparison with the data from the long-term monitoring programme. To ensure that these data are always readily available, the relevant historical data are included in this report. These data are the spring and autumn profiles of NO_3-N and DRP from 1974 to 1990. The nitrate data for 27 September 1979 was taken from Vincent (1983). The more recent data can be found in the previous appendices.

The profiles given are separated by season with the spring data above the data of the following autumn. The earlier profiles were to a depth of 110 m rather than 150 m. Also, as there was no March or April data collected in 1976, for completeness the last available profile in that series (12 January 1976) has been included.

The elapsed time given is the number of days between the spring profile in about October and the autumn profile in March/April of the following year.

The historical data also include an un-paired profile from July 1987. As there were no data for April 1987 and the lake was still stratified in July, when the next period of monitoring began, the July 1987 data may be used to indicate the total mass of nutrients accumulated in the hypolimnion in that year.

Historical data from Site A in Lake Taupo

Nitrate concentrations (mg m^{-3})

Spring Date	18/11/1974	16/10/1975	4/10/1977	10/10/1978	27/09/1979		5/10/1987	17/10/1988	6/10/1989
Depth (m)									
0	0.8	0.3	1.1	0.0	0.0		0.3	2.6	1.2
10	0.3	0.4	1.2	1.4	0.0		0.4	2.7	1.8
20	0.0	0.0	0.6	0.8	0.5		0.5	2.8	1.0
30	0.3	0.4	0.0	0.7	0.5		0.4	2.8	1.4
40	0.8	0.0	0.1	0.6	1.0		0.6	3.0	1.3
50	2.1	0.3	0.6	0.7	1.0		0.8	2.9	1.0
60	4.9	0.0	1.0	0.8	0.5		1.2	2.5	0.8
70	4.1	0.4	1.1	0.8	1.0		1.0	2.9	1.6
80	5.3	0.0	3.2	1.2	1.5		1.4	2.9	1.6
90	5.4	0.0	1.3	1.2	1.0		1.5	2.5	1.7
100	8.4	1.8	3.3	1.4	1.5		1.2	2.6	1.7
110	12.0	4.1	2.8	1.4	1.5		6.0	2.4	0.8
120			2.8	1.7	2.5		0.7	2.7	1.6
130			2.7	2.1	5.0		1.2	2.7	1.1
140			1.7	2.1	6.0		1.2	3.1	1.1
150			1.4	2.5	7.0		1.1	2.4	0.3

Autumn Date	14/04/1975	12/01/1976	14/03/1978	10/04/1979	10/03/1980	7/07/1987	5/04/1988	4/04/1989	10/04/1990
Depth (m)									
0	0.8	0.5	0.0	0.3	0.0	2.0	1.1	2.1	0.1
10	0.4	1	0.0	0.0	0.3	1.6	1.3	2.5	0.6
20	0.2	0.2	0.0	0.0	0.0	1.0	1.3	2.4	1.3
30	0.1	0	0.0	0.0	0.0	0.2	1.1	2.5	1.2
40	0.3	0.2	0.0	0.3	0.2	0.9	2.2	2.4	1.7
50	0.5	0.3	0.0	1.0	0.8	1.1	4.0	4.9	4.9
60	4.2	1.3	0.0	7.3	4.9	14.5	12.3	5.2	3.4
70	5.6	1.5	2.2	11.1	6.2	16.4	14.6	5.1	12.0
80	9.2	8.3	4.9	12.7	9.4	16.1	16.9	10.9	11.2
90	11.2	11.1	5.8	13.5	13.5	18.5	19.0	13.5	12.4
100	12.4	14	7.4	15.0	14.4	19.8	20.7	17.1	17.1
110	16.0		9.2	14.8	15.7	20.2	19.1	20.4	16.2
120			10.1	15.0	16.7	20.9	18.6	23.3	18.2
130			8.0	16.6	18.9	21.9	21.5	24.2	17.9
140			11.0	17.3	19.4	22.1	25.4	27.1	22.4
150			14.2	19.7	19.9	21.5	27.0	28.6	24.2

DRP concentrations (mg m^{-3})

Spring Date	18/11/1974	16/10/1975	4/10/1977	10/10/1978			5/10/1987	17/10/1988	6/10/1989
Depth (m)	???								
0	8.7	1.1	0.3	0.6			0.2	0.2	0.0
10	8.0	1.2	0.0	0.6			0.1	0.1	0.2
20	8.3	1.1	0.1	0.5			0.2	0.0	0.1
30	7.5	0.9	0.0	0.3			0.3	0.1	0.0
40	8.4	0.8	0.3	0.2			0.2	0.1	0.0
50	7.6	0.8	0.2	0.3			0.4	0.1	0.0
60	8.3	0.7	0.0	0.3			0.3	0.2	0.0
70	7.7	0.7	1.1	0.4			0.3	0.2	0.0
80	8.1	0.8	0.7	0.5			0.3	0.2	0.3
90	7.9	1.0	0.8	0.4			0.2	0.3	0.1
100	8.5	1.7	0.4	0.4			0.2	0.3	0.1
110	9.8	1.6	0.4	0.4			0.4	0.5	0.1
120			0.5	0.4			0.4	0.4	0.0
130			0.4	0.3			0.4	0.4	0.2
140			0.6	0.3			0.4	0.5	0.3
150			0.5	0.4			0.3	0.5	0.2

Autumn Date	14/04/1975	12/01/1976	14/03/1978	10/04/1979	10/03/1980	7/07/1987	5/04/1988	4/04/1989	10/04/1990
Depth (m)									
0	0.8	1.4	0.2	0.1	0.7	1.9	0.1	0.0	0.2
10	0.5	1.4	0.2	0.1	0.4	2.2	0.1	0.0	0.0
20	0.5	7.0	0.2	0.1	0.3	0.9	0.2	0.0	0.1
30	0.5	2.5	0.2	0.1	0.2	1.0	0.2	0.0	0.2
40	0.5	0.2	0.2	0.4	0.5	0.9	0.6	0.2	0.5
50	0.5	0.9	0.7	1.0	0.7	0.7	1.1	0.5	1.1
60	1.0	0.1	0.7	1.6	1.0	3.4	2.0	0.6	0.9
70	1.0	0.8	1.0	2.0	1.1	3.7	2.2	0.9	1.9
80	1.7	1.2	1.5	2.2	1.6	3.6	2.7	1.1	1.7
90	2.0	2.0	1.8	2.4	2.2	4.1	2.9	1.3	1.8
100	2.2	3.3	1.9	2.7	2.4	4.6	3.1	1.9	2.6
110	2.9		2.4	2.8	2.6	4.5	2.9	2.7	2.1
120			2.7	2.9	2.7	4.7	3.0	3.4	2.5
130			2.1	3.0	3.7	5.1	3.4	3.8	2.4
140			2.8	3.6	3.6	5.3	4.4	4.5	3.5
150			0.9	3.8	3.8	5.0	4.6	4.8	4.0
Elapsed period (days)									
	147	88	161	182	165	270*	183	169	186

??? = possible analytical problem (e.g., Si interference)

* = average period of 165 days plus 3 months