

Phytoplankton activity and standing crop in an impoundment of central Chile

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Seasonal and spatial variations of the primary productivity were measured in Rapel reservoir, Chile in 1976 and 1977. Chlorophyll a, phytoplankton and several environmental factors were also measured. The results show that primary productivity began to increase in September, and remained at high levels until the following June near the dam. The same pattern, slightly displaced in time (October - May) was observed near the main river inflow areas. Standing crops were high at the beginning and at the end of those periods. The photosynthetic behavior of the phytoplankton was shown to be affected mainly by absolute light availability and the dimension of the illuminated water column. The phytoplankton composition and standing crop seems to be controlled by water temperature and flow. © 1982 IRL Press Ltd.