Abstract

Nutrients and related water quality characteristics were measured at six sites along a transect from the Barron River estuary to Green Island over a twenty-month period.

The water column was generally well mixed and so depth was not a significant source of variation. Overall, slightly higher nutrient concentrations tended to be found at the two most inshore sites. Furthermore, some elevated nutrient levels were recorded right across the transect after periods of heavy rain and/or rough weather. This elevation was most noticeable at the two inshore sites, suggesting input from the Barron River discharge. At Green Island there was no significant increase over background levels in the mean levels of nutrients in the vicinity of the sewage outfall, however relatively high chlorophyll *a* levels were recorded near to the sewage discharge. These high chlorophyll *a* levels could indeed result from the discharge of sewage effluent but further studies will need to be carried out in order to confirm this.