

**EVALUATION OF WATER QUALITY OF TUARAN RIVER
ACCORDING TO PHYSICO-CHEMICAL
CHARACTERISTICS**

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JUNE 2014

ACKNOWLEDGEMENT

Alhamdulillah, highest praise to Allah S.W.T., the Great and Almighty God, Most Merciful and Most Gracious for the blessings, guidance and permission given to me to complete my Degree of Science thesis successfully by kept me in good health and strength during my difficulties in preparing this research project report. Also, my prayers and peace be upon Prophet Muhammad S.A.W.

I would like to express my thank you to my supervisor Miss Diana Indim for her continuous encouragement, advices, criticisms and guidance during preparing completing my thesis report. I also want to express my special thanks to my co-supervisor Mr Ajimi Jawan for his guidance, help, advices and criticisms.

I would like to extend my appreciation to my seniors especially Herman Umbau Anak Lindang, Raimalynah Abdul Razak and Sharmiza for helping me with sharing their knowledge, telling and teaching the useful information in completing this thesis report.

I gratefully acknowledge to the lab assistance of Kompleks Makmal Sains dan Agroteknologi (KOMSAT) which are Pn Dayang Suhana Ak Yunos for her helps in preparing all equipments and materials. I also want to express my deep gratitude to Pn Atifah Remat, Pn Nor Ezawaniee Moulton for assisting during my lab work.

My regards to my beloved parents En Ghazali Abu Bakar and Pn Norizan Karia, who always encouraged and remained me to achieve the success.

Last but not least, special thanks to my friends especially Faridah Yasmin, Putri Diyanah, Nasrur Rahman and others who involved in helping me directly or indirectly during completing this project.

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ABSTRACT

EVALUATION OF WATER QUALITY OF TUARAN RIVERS ACCORDING TO PHYSICO-CHEMICAL CHARACTERISTICS

The Tuaran river has catchment area for about 50 km² and it flows from the Crocker Range and passes through Tuaran town and Tamparuli before reaches sea. Tuaran river is one of the main water resources in Kota Kinabalu region. The water quality of Tuaran river is degraded due to anthropogenic activities like agricultural practices, development of infrastructure and industrial discharges. The aim for this studies is to evaluate the water quality of Tuaran river and ensure the safety of Tuaran river as water resources. The samples were collected from four different stations along the river. Analysis for temperature, pH value, Dissolved Oxygen (DO), turbidity, Electrical Conductivity (EC) and ammoniacal-nitrogen were determined in situ by using multiparameter hydrolab model DS5X meanwhile nitrite concentration was analysed by using DR 2800 machine in laboratory. The results show that average results for the physical parameters were in an acceptable range for INQWS. The water quality index (WQI) showed that the river were in medium class and slightly polluted. Therefore, the river is suitable for recreational activities and safe for body contact.

... dan mengalami sedikit pencemaran. Oleh itu, sungai ini sesuai digunakan untuk aktiviti rekreasi dan selamat untuk digunakan.