STAKEHOLDER PERCEPTION ON PRESERVING WATER QUALITY OF INANAM-LIKAS RIVER BASIN (ILRB): CASE STUDY AMONG KOTA KINABALU CITY HALL (DBKK) STAFF

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ABSTRACT

STAKEHOLDER PERCEPTION ON PRESERVING WATER QUALITY OF INANAM-LIKAS RIVER BASIN (ILRB): CASE STUDY AMONG KOTA KINABALU CITY HALL (DBKK) STAFF

River basin is an important source of water to the people as it can as drinking water or hygienic activities. However not all river contain water that can safely be used by everyone because some of them have low water quality. Several stakeholders such as city council involved in preserving the river water quality level. Thus, these studies aim to find the relationship between behavioural intentions of DBKK staff to maintain the WQI_{SI} status of Inanam-Likas River Basin. Determining the Water Quality Index Sub-Indices ($WQIs_I$) based on the physico-chemical parameters of five sampling stations along the lower-stream of Inanam Likas River Basin in 2018. The water temperature (WTemp), pH value and dissolved oxygen (DO) were measured in-situ using a multiparameter YSI 500 Model MPS, while determination of the concentration levels of Nitrate Nitrogen (NO_3-N) were measured ex-situ in laboratory using DR 2800 Spectrophotometer. Based from the result, overall water quality level obtained from five stations are 43, which fall to class 4 where it is suited for irrigation and can be classified bad. Theory of Planned Behaviour (TPB) model was used to see the correlation between attitude, subjective norm, perceived behavioural control and behavioural intention among DBKK staff to preserve water quality of ILRB. From the result, subjective norm shows the highest correlation value ($r = 0.471$, $p < 0.005$) toward DBKK staff behavioural intention. However, there are negative correlation between behavioural intention and WQI_{SI} ($r = -0.26$, $p < 0.966$), suggesting that there was DBKK staff has an intention toward preserving water quality level of ILRB despite the low water quality. DBKK staff shows effort to preserve water quality level and if continuous effort is done, water quality level in ILRB may be improved further in the future.