

Study of the water environment evaluation method using aquatic organisms

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In order to evaluate the desirable water environment, it's necessary to have the perspective of various water environmental factors in addition to water quality like Biochemical Oxygen Demand (BOD). For example, there are water quantity, aquatic organisms and the waterside environment. We can know the soundness of water environment by investigating aquatic organisms, because aquatic organisms are affected by various factors of water environment. Ministry of the Environment is considering the method that can be evaluated for water environment soundness using an average score per taxon (ASPT) of benthos in river. This method is called "Biological Monitoring Working Party System in Japanese version". The method has different advantage from the indicator of water quality like BOD. Civilians can understand more easily whether water environment is good, and have friendly feeling to the waterside. In order to improve the advantage of the method, it needs to set reference values of ASPT. In this study, we examined the setting of the reference values of ASTP based on BOD by analyzing the correlation between BOD and ASPT. As the results, we suggested that it's more possible for ASTP to set reference values in middle basin of river than in lower basin.