

Research Title The Study of Water Quality Assessment at Lam Ta Khong River from Utilizing Eco-friendly Cleanser at Lam Ta Khong and Pha Kluay Mai Camping Site, Khao Yai National Park

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Abstract

This research studied impacts of eco-friendly cleansers on Lam Ta Khong River at Lam Ta Khong and Pha Kluay Mai Campsites in Khao Yai National Park during October 2009 to January 2010. Eco-friendly cleansers such as dish washer, liquid soap, detergent, and cleanser were utilized in campsites for tourists, restaurants and staff accommodations along Lam Ta Khong River. The Prominent parameters which are Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD), Nitrate, Phosphate and Fat Oil and Grease (FOG) have been monitored monthly as well as bio-indicators. The results of this research can be indicated that, after implemented environmental friendly cleansers BOD and Phosphate were decreased with the significant level of 95%. For bioindicator, Gerridae and Vellidae were the most number of species have been recorded in this area which can indicated water quality between slightly poor to good quality.

From tourist questionnaires can concluded that shampoo, dish washer, and soap are proper eco-friendly cleansers for sale in the national park. 98.3 percent of tourists agree with the promotion of eco-friendly cleanser in national park. Especially, they have willingness to pay average 20 baht. Consequently, eco-friendly cleansers are appropriate for implemented in other protected areas in order to decreased discharge of chemical contamination into natural ecosystem.

Keywords: Eco-friendly Cleansers, Khao Yai National Park