

Ariyaporn Khunpaksi 2014: The Study of Community Potential for Water Quality Management: A Case Study of Bang Len District, Nakhon Pathom Province. Master of Science (Environmental Science and Technology), Major Field: Environmental Science and Technology, Division of Science. Thesis Advisor: Mr. Kittipot Permpul, Ph.D. 169 pages.

The Study aimed to investigated the effect of community potential in managing community water quality. Three communities including; Ban Tai Wat Silamoon, Ban Klong Savittachart and Ban Klong Mueng, Nakhon Pathom Province were selected as the study site. The Community Potential Assessment form was used to measured water quality management which considered four aspects including; success in water pollution reduction activities, community process, learning, and sustainable management. Statistic mean was used as the measurement. The study also utilized the changes in water quality index (WQI) which consider BOD₅, DO, NH₃-N, TCB and FCB as a tool. The results showed, Ban Tai Wat Silamoon community had the highest potential score at 4.27 points which effected water quality by increasing value to 6.2 points. The Ban Klong Mueng community had potential score at 3.88 points which effected value to 11.6 points. For Ban Klong Savittachart community had potential score at 3.77 points, but had no effect in changing water quality and the WQI had reduced by 1.8 points. In conclusion, community with high score in community potential was not significantly related to water quality management.

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