

Jukrapun Wongwieng 2006: Polluted Nutrients Loading from Agriculture Land in Bangpakong Watershed. Master of Science (Watershed and Environmental Management), Major Field: Watershed and Environmental Management, Department of Conservation.  
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Polluted Nutrients Loading from Agriculture Land in Bangpakong Watershed, this study objectives are 1) To analyzed concentration of nutrients in water. 2) Comparison of nutrients loading in agriculture and forest representative watershed. 3) To studied nutrients loading releasing in Bangpakong watershed. Determination of selected sampling areas by dividing to 3 land use types were agricultural areas, forest areas and community areas. Water collected sampling in dry period (April and November 2005) and wet period (July 2005).

The results of nutrients concentration; ammonia nitrate and phosphate, found that agricultural watershed were between ND-0.47, ND-0.09 mg/l, and ND-0.05 mg/l respectively, forest watershed were between ND-0.40, ND-0.43 mg/l and ND-0.05 mg/l respectively, community areas were ND-0.28, ND-0.64 and ND-0.11 mg/l respectively. Ammonia loading from agricultural watershed in wet and dry period were 0.2402 and 0.0885 kg/km<sup>2</sup>/day., forest watershed were 0.0404 and 0.0828 kg/km<sup>2</sup>/day. Nitrate loading from agricultural watershed in wet and dry period were 0.0321 and 0.0155 kg/km<sup>2</sup>/day., forest watershed were 0.0537 and 0.0387 kg/km<sup>2</sup>/day. And phosphate loading from agricultural watershed in wet and dry period were 0.0146 and 0.0099 kg/km<sup>2</sup>/day., forest watershed were 0.0237 and 0.0146 kg/km<sup>2</sup>/day.

Nutrients loading in Bangpakong Watershed by GIS technique found that ammonia in agricultural land in wet and dry period were 2,338.10 and 861.46 kg/day, in forest land were 229.12 and 469.59 kg/day. Nitrate loading in agricultural land were 312.46 and 150.88 kg/day, in forest land were 304.55 and 219.48 kg/day. And phosphate loading in agricultural land were 142.12 and 96.37 kg/day, in forest land were 134.41 and 82.80 kg/day.

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