

ASSESSMENT OF SURFACE WATER RESOURCES IN ALFONSO, CAVITE

Undergraduate Thesis
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ABSTRACT

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The study was conducted from August 2014 to February 2015 to assess the available surface water resources of Alfonso, Cavite. Specifically, the study aimed to: 1) identify the surface water and their location; 2) prepare a map showing the location of the surface waters; 3) collect information on how the surface water is utilized in the area; 4) measure the discharge of the surface water resources, and; 5) conduct a potability test of water from springs that are utilized for drinking purpose.

Eight springs were identified in the municipality. Information such as the history and uses of the surface water resources were collected by interviewing the residents living near the springs. Location and elevation of the springs were determined using a GPS device and a location map of the springs was prepared.

Litlitan Spring in Brgy. Pajo and Matagbak Spring in Brgy. Matagbak have a discharge of 0.22 L/s and 0.40 L/s, respectively, classified as magnitude 5. Bulbok Spring in Brgy. Sta. Theresa and Talon Sinto located at Brgy. Taywanak Ilaya have discharges of 1.63 L/s and 3.75 L/s, respectively, classified as magnitude 4. Impyerno Spring in Brgy. Kaysuyo, has a discharge of 10.13 L/s falling under magnitude 3 while Saluysoy Spring has a discharge of 410 L/s, classified as magnitude 1. Two of the springs, Suwag and Kalangitan, were dry during the time of the survey. Three among the identified surface water resources were used as a source of water for drinking, namely: Litlitan Spring, Bulbok Spring and Saluysoy Spring. Water samples from these springs passed the fecal coliform test, but Litlitan and Bulbok Spring failed the coliform test. Hence, water obtained from these springs poses threat to human health.