

**ASSESSMENT OF WATER SUPPLY SYSTEM IN
HARASAN, INDANG, CAVITE**

Undergraduate Thesis
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ABSTRACT

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The study was conducted from October 2016 to February 2017 to assess the water supply system in Brgy. Harasan in Indang, Cavite. Specifically, the study aimed to: 1) assess the functional elements of the water supply system; 2) assess the present water demand of the service area; 3) project the water demand in the next ten years; and 4) determine the physical, chemical and microbial properties of the water supplied by the system in the service area.

Two water supply systems exist in Brgy. Harasan: the *Harasan Waterworks and Services* and the *EJ and TJ's Waterworks*. The water supply system of Harasan Waterworks and Services and EJ and TJ's Waterworks has three functional elements: source, storage and distribution. Both water supply systems utilize groundwater by using a submersible pump with a measured discharge of 1.18 L/s (101,952 L/day).

Water flows directly to distribution pipes by gravitational force. The entire service area of Harasan has a total water demand of 95,311.00 L/day with over 231 connections. Although the present water supply is sufficient for 2016, it will not meet the projected water demand this year onwards assuming that the water supply remains with the same discharge. Water samples collected passed the physical and chemical quality requirements of the Philippine National Standards for Drinking Water (PNSDW). Latest microbiological test of water quality for water samples from the EJ and TJ's Waterworks also passed the requirements of the PNSDW.