

**ASSESSMENT OF THE WATER SUPPLY SYSTEM OF  
PALOCPOC I AND II, MENDEZ, CAVITE**

**THESIS**

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PALOCPOC I AND II, MENDEZ, CAVITE**

Undergraduate Thesis  
Submitted to the Faculty of the  
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Bachelor of Science in Agricultural Engineering



*Assessment of the water supply system of  
Palocpoc I and II, Mendez, Cavite*  
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## ABSTRACT

**BAEL, LIZETTE P. Assessment of the Water Supply System of Palocpoc I and II, Mendez Cavite.** Undergraduate Thesis. Bachelor of Science in Agricultural Engineering. Cavite State University, Indang, Cavite. May 2017. Adviser: Dr. Leyma L. Cero.

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

One water supply system exists in Barangay Palocpoc, Mendez, Cavite which is the Palocpoc Waterworks and Sanitation Association and it has three pump stations. The Pumps 1 and 2 has four functional elements: source, storage, treatment and distribution. Pump 3, on the other hand, has two functional elements which include the source and distribution elements. The water supply system utilizes the groundwater as the main source with a measured discharge of 4.95 L/s (427,248 L/day).

Water flows directly to distribution pipes and relies on gravitational force. The entire service area of Palocpoc has a total water demand 427,212.55 L/day with over 658 connections. Although the present water supply is still sufficient for the Year 2016, it will not meet the projected demand this year onwards assuming that the water supply remains at the same discharge. Water samples collected passed the physical, chemical, and microbiological analysis requirements of the Philippine National Standards for Drinking Water (PNSDW).

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# **ASSESSMENT OF THE WATER SUPPLY SYSTEM OF PALOCPOC I AND II, CAVITE**

**Lizette P. Bael**

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## **INTRODUCTION**

Water affects all aspects of life, directly or indirectly. Keeping the environment healthy and people's bodies, water should be valued and protected as the precious resource it is. Actually, almost 97 percent of water in the world is in the ocean and 2 percent is in the form of polar ice and glaciers. Only 1 percent of the world's water is usable to us. Thus, water supply is a precious commodity necessary for our survival.

Most of us are aware of the importance of water in our lives, specifically the drinking water. As water is being threatened by misuse, overuse, and pollution, it can contain harmful elements which can affect our body. It is not only devastating to the environment, but also to human health. Thus, the quality of water is directly linked to the quality of our lives so water must be conserved for us to survive.