



MARIANO MARCOS STATE UNIVERSITY

Off-campus Water Sources of MMSU

1. To ensure the safety of MMSU community, the university has entered into agreement with different drinking water facilities in the city for the sustainable supply of purified drinking water.
2. MMSU is slowly establishing its own water treatment systems that are used in the operations of servicing units of the university such as the Food Innovation Center, Auxilliary, National Bioenergy Research and Innovation Centers and Laboratories.
3. A portion of MMSU's water supply comes from the local water utility (government) in joint venture with a private company (partner), PrimeWater Infrastructure Corporation. The company gets its supply in two ways, i.e., surface and groundwater. Surface water is sourced from the Paoay Lake and Pasuquin Springs. PrimeWater uses ultrafiltration, microfiltration, and chlorination (groundwater) processes to treat the water collected. **One hundred percent (100%) of the treated water is then supplied to the communities that the company serves, including MMSU.**
4. MMSU develops and maintains its own water supply primarily through groundwater extraction. To balance supply and demand (extraction/consumption), the University contributes to the recharging of aquifers through small farm reservoirs (SFRs) and cascading pond systems. **The MMSU utilizes market available distillation equipment/method to treat groundwater (100%) conveyed through taps, particularly for its laboratory activities.** The University is exploring prospects for establishing its own surface water treatment facility.
5. The University has adopted and has been implementing the MMSU Water Sustainability Road Map. This is a comprehensive guide which addresses water sustainability in the University through water assessment, conservation, innovation/research, and sustainability practices. It covers the design, management and use of MMSU campus water infrastructure in three (3) areas: drinking water, rainfall harvesting, and wastewater management. The roadmap is structured based on the National Water Code (Presidential Decree 1067). The Road Map also articulates the following:

- a. **Strategies and conservation activities**, such as: i) prioritizing installation of low-flow fixtures in cases of plumbing repairs/replacement; ii) prioritizing WaterSense appliances, where applicable; iii) Eco-challenge among units to encourage/promote water conservation initiatives/interventions; iv) timely detection and reporting of leakages; and v) information and dissemination.
- b. **Policies**, particularly: i) at the college/unit level – using smart irrigation systems that reduce water use by 40 percent; using “leftover” water from bottled waters/drinking glasses; reporting leaking faucets and running toilets or urinals that are not operating ‘on demand’ through a maintenance request (by unit); half flush in the toilet; turning off taps between wetting, soaping (20 seconds) and rinsing hands; and ii) at the field level – watering plants in the early morning/late evening to decrease the amount of evaporation.



Treated drinking water supplied by the different water-refilling stations near MMSU.



There are units that started to installed and use water treatment facilities to ensure sanitation sanitation and safety of the products they produce.

(Photo: Reverse Osmosis System of FIC)



Raw Water Source and Intake Structure of Prime Water Company



Feed Tank, Circulation Pump and Main Control Panel



Pre-filter Modules



Ultrafiltration and Microfiltration Membranes

Evidences:

MMSU Water Sustainability Road Map - https://mmsu.edu.ph/resources/1izcnajQ-fevWTtutXdr7u4L6BHISX_M1/view?usp=sharing&fbclid=IwAR1zVaiYIdHA7oY33oC579f4tdSpBsbpz b4e9XoX6mMqOp5sGO4lrZrsR94

Water Resources Sustainability/Conservation Plan - <https://www.mmsu.edu.ph/about/sustainability>

PrimeWater Infrastructure Corporation Profile - <https://primewatercorp.com/who-we-are/>