



BATANGAS STATE UNIVERSITY'S (BATSTATEU'S) POLICY GUIDELINES FOR SUSTAINABLE DEVELOPMENT



landscaping projects of the university to encourage local biodiversity.

1.1.2.8 The University shall encourage establishment and protection of botanical gardens and arboretums whenever feasible.

1.1.2.9 Indiscriminate introduction of plants and animals as in the case of, but not limited to, random dispersal of seeds and release of animals within the campus shall not be permitted.

1.2. Water Usage and Care

The following are the specific policy guidelines for better wastewater management on the different campuses of the University:

1.2.1 Water Usage and Conservation Management

1.2.1.1 Inspection and monitoring of the water distribution system (faucets, bidets, water closets, toilet flush and pipes) shall be ensured so that no unused water leakage is wasted. Metering and other measures to detect water leakage shall be used to ensure water conservation. Reporting of leakage to the Project and Facilities Management Office (PFMO) must be done immediately for prompt action.

1.2.1.2 Regular monitoring of water consumption per building and reporting the total water usage of different campuses shall be practiced.

1.2.1.3 In the procurement of plumbing fixtures and fittings, buying water-efficient ones (water closet with dual flush, low-flow faucets or bidets, etc.) shall be prioritized.

1.2.1.4 High-pressure but low-volume spray nozzles on spray washers for cleaning the University vehicle, driveways, pathways, or pavements shall be installed.

1.2.1.5 A rainwater harvesting facility to maximize the use of available water shall be established.

1.2.1.6 The use of treated wastewater, harvested rainwater and the water from fountains for cleaning, flushing purposes and car washing shall be maximized.

1.2.1.7 Insofar as practicable, non-toxic bricks or plastic containers shall be placed in a toilet tank to reduce the amount of water used per flush. A toilet dam that creates a reservoir of water when the toilet flushes shall also be utilized in place of the displacement device.

1.2.1.8 A water efficiency management plan for the plumbing and piping system of the water being released in the water retention facility shall be developed.

1.2.2 Water Quality Monitoring

1.2.2.1 The number and location of university-wide water sampling stations based on the proximity of the campuses and possible sources of contamination shall be established. The sampling stations shall include university deep wells, artesian wells, aquifers, water districts and similar bodies of water.

1.2.2.2 A regular sampling and analysis of environmental water quality parameters using the approved and/or Standard Methods for Examination of Water and Wastewater shall be conducted.

1.2.3 Wastewater Treatment Facility

1.2.3.1 Wastewater generated from buildings shall be collected. *Provided, however, That* applicable treatment prior to its disposal through the Sewage Treatment Plant (STP) whose effluent complies with general effluent standard set by Department of Environment and Natural Resources through DENR AO 2016-08 is in place.

1.2.4 Discharging of Wastewater

1.2.4.1 Generated wastewater from the comfort rooms shall be directly discharged in a septic tank and regularly siphoned by a DENR Accredited TSD Facility.

1.2.4.2 Generated liquid waste from the laboratory in terms of liquid shall be properly stored, collected, and managed through EMU Office, then it shall be transported, and treated by a DENR-approved Treatment facility.

1.3. Wildlife Protection

1.3.1 An ecosystems-based approach to campus development shall be pursued by the University to ensure healthy and sustainable coexistence of the University population with the biodiversity on campus.

1.3.2 Conservation and protection of wildlife species and their habitats shall be paramount to promote ecological balance and enhance biological diversity.



BATANGAS STATE UNIVERSITY

The National Engineering University

WATER CONSERVATION MEASURES: INSTALLATION OF WATER-EFFICIENT FIXTURES

Batangas State University, The National Engineering University, is committed to integrating sustainability into its operations, particularly regarding the water fixtures installed across its campuses. In line with the university's Sustainability Plan, Policy, and Guidelines, water-efficient fixtures, such as dual-flush tanks for water closets, throttled water valves for faucets, angle valves for sinks and urinals, and water-efficient urinals, are utilized to conserve water and support sustainable practices.



WATER-EFFICIENT WATER CLOSET FLUSH TANKS WERE INSTALLED IN COMFORT ROOMS WITHIN THE UNIVERSITY

Inventory of Water-Efficient Fixtures in Use across the University

Appliance	Total Number	Total number water Efficient appliances	Percentage
Water Toilet	772	380	49.22%
Faucet	861	830	96.4%
Urinals	494	440	89.07%
TOTAL	2,127	1,650	Average = 77.6%

These fixtures help reduce water consumption while supporting the university's sustainability goals. Looking forward, Batangas State University - The National Engineering University, plans to upgrade all of its water supply fixtures to more water-efficient and environmentally friendly models. The table below provides an inventory of the water-efficient fixtures currently in use across the university.



WATER-EFFICIENT FAUCET INSTALLED IN COMFORT ROOMS

Water-efficient fixtures installed in the campus like dual flush water closets and innovative faucets with up and down or left and right controls allow students and staff to manage and reduce their water consumption. These fixtures provide user-customizable options that let users decide how much water they need for a particular operation, helping to significantly increase water saving efforts.

Installing water-saving fixtures on campus serves as a demonstration that sustainability is not merely a theoretical concept, but can be implemented into everyday life.

The continuous monitoring and improvement of these fixtures not only helps the campus to lower its water consumption and utility cost, but also maintains its standards in terms of sanitation practices and aligning it to some of the sustainable goals, particularly in SDG 6: Clean Water and Sanitation. Ultimately, the university's commitment to sustainable practices not only addresses current demands but also ensures that water resources are preserved for the entire Red Spartan population, reinforcing its role as a leader in environmental management.

Source: Environmental Management Units