### Metric 6.4



# Saint Louis University

strengthening water conservation, wastewater management, and safe sanitation systems across its campuses to ensure reliable, clean, and sustainable water services for the entire university community.





# Indicator 6.4.1

Saint Louis University
Water Reuse Policy



### Saint Louis University

# **Implements Water Reuse Policy**

Saint Louis University, Baguio City, fully meets SDG 6 through its formal Environmental Policy Statement, which mandates the maximization of water reuse across all university operations. This policy is implemented through rainwater harvesting and upgraded Sewage Treatment Plants (STPs) that collectively enable the treatment and repurposing of 100% of campus wastewater and harvested rainwater for non-potable purposes such as irrigation, cleaning, and sanitation. These initiatives have resulted in a >30% reduction in municipal freshwater demand.

"Saint Louis University is committed to maximizing water reuse across the university. Recognizing the increasing scarcity and intrinsic value of freshwater, SLU shall utilize water efficiently and responsibly, actively seeking opportunities to recycle and reuse this vital resource through innovative systems such as rainwater harvesting and upgraded STPs."

— SLU Environmental Policy Statement, ratified 2022, reviewed annually

The university's Sustainability and Environmental Management Office conducts regular system audits to ensure optimal performance and compliance with environmental standards. SLU also integrates SDG 6 into its 3-Year SDG Plan, embedding water stewardship in academic programs, campus operations, and community engagement.

These concerted actions reflect SLU's holistic commitment to responsible resource management and environmental leadership, demonstrating measurable progress toward sustainable water use and reuse in higher education.



# Saint Louis University

# **Implements Water Reuse Policy**

"Saint Louis University is committed and continuing in taking action for environment sustainability. The major activities on campus are ecologically sound, socially just, economically viable, and humane, and will continue to be so for future generations."

Rev. Fr. Gilbert B. Sales, CICM University President



Saint Louis University

#### **ENVIRONMENTAL POLICY**

#### **ENVIRONMENTAL POLICY STATEMENT**

Pursuant to the objectives of the CICM for the promotion of justice, peace, and integrity of creation, SLU commits to protect the environment.

#### AIMS AND OBJECTIVES

### ENVIRONMENTAL MANAGEMENT

SLU adheres to the principles of environmental preservation, management, and sustainable development. Towards these ends, the University commits to:

- Promote sound environmental management policies and practices in all of its units and campuses.
- Comply with all environmental laws, rules, and regulations.
- Encourage the academic community to be more pro-actively involved in environmental issues through programs that support ecologically sound projects and programs.
- Promote activities that will develop skills and understanding among students, faculty, and university administrators in initiating active responses and increasing awareness and involvement on environmental concerns such as but not limited to preventing pollution.

#### WASTE REDUCTION AND RECYCLING

- Implement sustainable resource management practices, based on the Reduce, Reuse, and Recycle principles.
- Minimize the adverse environmental effects of the transport and disposal of university assets
- Promote sustainable resource management practices in the procurement of goods and services.

#### WATER

 Aware of the scarcity and value of freshwater, SLU shall endeavor to efficiently and responsibly use water, including identifying opportunities to recycle or reuse it.

#### ENERGY AND CARBON MANAGEMENT

- SLU shall implement a low carbon footprint strategy including the use of clean renewable energy.
- Use low carbon technologies in buildings and equipment.
- Minimize the consumption of resources and reduce carbon emissions.

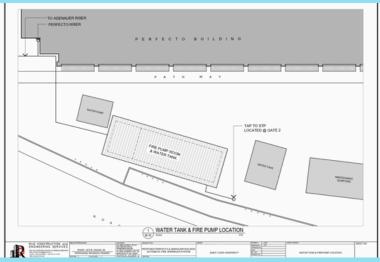
6 CLEAN WATER AND SANITATION

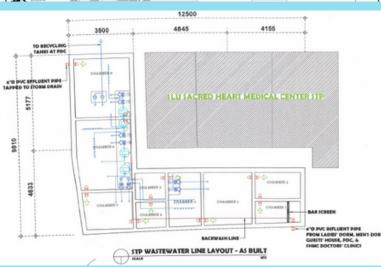
### Saint Louis University

### **Implements Water Reuse Policy**

Saint Louis University implements a comprehensive Water Recycling Program designed to maximize the reuse of treated wastewater, harvested rainwater, and recovered incidental water across its campuses. This system integrates multiple water-recovery technologies—mechanical, natural, and passive—resulting in a robust and multi-campus water reuse framework documented through engineering layouts, treatment-system photos, and volume-monitoring records.

SLU operates wastewater treatment plants (STPs) at the Main Campus, Maryheights Campus, Navy Base Campus, and Sacred Heart Medical Center. These facilities collect and treat wastewater that is subsequently reused for fire suppression systems, toilet flushing, landscape irrigation, facility cleaning, and general maintenance. STP photographs and system diagrams below show active, functioning reuse pipelines and discharge-to-reuse configurations. Many sites demonstrate consistent recycling performance, with several campuses reusing more than half of their treated effluent output.









Treated STP effluent is repurposed to supply sprinkler pipelines in multiple buildings, significantly reducing demand on freshwater resources. Engineering documentation shows the complete installation of reusewater pipelines and sprinkler networks in the Adenauer Building (3rd Floor) and Perfecto Building (6th Floor), including pipe layout plans, hydrostatic pressure tests, and on-site construction work



**Cistern tank for STP effluent** 

A dedicated treated-water storage tank serves as the buffer reservoir for the fire suppression network, ensuring adequate water pressure and supply during emergency operations.

This STP-to-fire suppression connection represents a closed-loop circular water system, where wastewater is treated, stored, and reused for a vital safety function. By substituting treated effluent for freshwater in a large-volume application, SLU not only strengthens campus fire readiness but also showcases a sustainable engineering solution that reduces resource extraction, promotes conservation, and advances institutional water security.

SLU's infrastructure-level commitment to wastewater reuse positions the University as a leader in green engineering and circular water management



In addition to wastewater reuse, SLU implements rainwater harvesting systems, particularly at the Navy Base Campus, where captured rainfall is stored and integrated into the non-potable water supply. The University also employs a micro-collection system that captures spilled water from "Water is Life" refill stations for cleaning and utility uses.







**Rainwater Harvesting System** 

Micro-Collection System at Water is Life stations

SLU operates a closed-loop water reuse system that prevents water from the Olympic-sized swimming pool from being wasted. Instead of discarding excess or used water, the system collects, redirects, and repurposes it for secondary applications on campus.

When the pool becomes full, overflow water is captured rather than discharged. This ensures that every litre of excess water is recovered and made available for reuse. In addition, the pool undergoes routine backwashing, a cleaning process that pushes water backward through the filtration system to remove accumulated dirt and debris. While most facilities discard this backwash water, SLU instead collects and stores it for later use.

The reclaimed overflow and backwash water are then utilized for several non-potable campus functions, including outdoor cleaning, landscape watering, toilet flushing, and other maintenance needs. By reusing this water, SLU significantly reduces its consumption of potable water and strengthens its commitment to sustainable, resource-efficient campus operations.



Closed-loop system in Aquatics facility for secondary use of pool water