



## Manipal University Jaipur Measures Water Reuse Across Campus

Manipal University Jaipur is embracing the practice of reusing water to promote sustainability and contribute to a more water-conscious future. Water reuse, also known as water recycling or reclaimed water, involves treating and repurposing wastewater for non-potable purposes such as irrigation, cooling, and toilet flushing. Implementing water reuse measures on campus has several advantages. It reduces the demand for potable water, easing the burden on local water supplies. Water reuse aligns with sustainability goals and contributes to reduced water-related environmental impacts. Water reuse initiatives provide educational opportunities for students, fostering a culture of environmental responsibility.

## **Measuring Water Reuse Across Campus**

Assessing Current Usage: Manipal University Jaipur began by assessing its current water usage patterns, identifying areas where water reuse can be implemented effectively. This involves understanding the sources of wastewater, such as greywater from sinks and showers and rainwater runoff from rooftops. Establishing water reuse systems requires the implementation of appropriate infrastructure and technologies. Manipal University Jaipur invested in treatment facilities, distribution networks, and storage solutions that ensure the treated water is safe and suitable for non-potable applications. Monitoring is a critical aspect of measuring water reuse. Universities employ sensors, meters, and data analytics to track water usage and the performance of its reuse systems. This data helps identify trends, optimize operations, and ensure compliance with water quality standards. Manipal University Jaipur prioritizes transparency sharing water reuse data with the campus community and stakeholders. Regular reports on water savings, system performance, and maintenance activities promote awareness and accountability. The university uses advanced monitoring systems to measure the efficiency of its water reuse systems, ensuring that they meet water quality standards and perform optimally. Regular reports on water savings and system maintenance are shared with the campus community, fostering transparency and accountability. University initiatives to measure water reuse across campus reflect a commitment to sustainability and responsible water management. By assessing current water usage, implementing infrastructure and technology, and tracking performance, Manipal University Jaipur plays a pivotal role in conserving water resources and inspiring future generations to prioritize environmental stewardship.





## Water Conservation Facilities available in the Institution

The integrated water management plans at Manipal University Jaipur are created and put into practice for the campus with a primary focus on the triple bottom line benefits, i.e., social, economic, and environmental benefits. As a result, MUJ moved closer to becoming water neutral by creating a flexible, robust water infrastructure. Manipal University Jaipur has a strength of 1150 people, according to the design requirements for the MUJ university campus, 220 LKD of groundwater supply is needed. The total amount of water needed is divided into three categories: residential consumption, toilet flushing needs, and irrigation needs for landscaping. The groundwater supply meets the needs of the university. A water meter is an ingenious way of measuring how much water is consumed so that each unit is billed based on its usage. From an economic, engineering, and management standpoint, sub-metering benefits MUJ, which all help promote sustainability.

The University blocks at MUJ use 25,893 kl/year of water, while the MUJ uses the sewage treatment plants (STP) processed water for flushing and gardening needs. The rainwater from the Rainwater Harvesting (RWH) tanks is also used by MUJ for landscaping needs. The STP's dry sludge is further processed into manure that is used for on-site landscaping. 80 percent of residential and flushing wastewater is PROCESSED, and this recycled water is used for watering landscapes. The hostel blocks use 440,500 kl/year. Overall, the campus uses 513,754 kl/year of water.

Wastewater is treated to speed up the natural process of purifying water, Aiding Nature so That Nature can Aid us. Manipal University Jaipur (MUJ) is treating the wastewater not just for our family of students, faculties, and staff members but also for our family of Flora and Fauna, with the Savage Treatment Plant of Capacity 1850 KLD. Wastewater from the buildings is collected through gravity by underground drainages and treated in the STP at desired parameter.

The treatment plant purifies water, it eliminates harmful contaminants in the most economical manner, and provides a healthier environment. MUJ has a qualified team who always endeavors to improve our Sewage Treatment Plant, benefits along with water production make wastewater treatment a sustainable short and long-term solution to the world water crisis, MUJ thinks with a Global vision.



Recycling wastewaters bolster local water supplies, improves water quality, saves energy, and reduces discharge and disposal costs of wastewater. Manipal University Jaipur provides alternatives to the current water supply, reusing water which enhances water security, sustainability, and resilience. The Manipal University in Jaipur has a zero-discharge policy for wastewater. Therefore, all on-site wastewater is treated to tertiary standards and reused on-site for a variety of uses, including flushing, cooling tower makeup, horticulture, etc.