



Last Updated: March 5th, 2023

Subject: Water Policy on Jadara's Campus

Purpose

Jadara University is water self-sufficient and has a water conservation system through:

- Rainwater (Reserved in a Ground Tank at Campus-Measured)
- Groundwater (Naturally reserved and pumped from an Artesian Well at Campus-Measured)
- Treated Grey Water in a facility (station) owned by Jadara University & measured and recycled for special usages.

The purpose of this policy is for:

- Maximizing the reuse of recycled water and encouraging these green practices on Campus.
- Water quality control of Treated / Recycled / Extracted Water and encouraging a safe use of recycled water or /and drinking water.
- Water Security and sustainable application.
- Measuring volume of water extracted from the Artesian Well (Ground Water) at the Campus of Jadara University, as well as measuring Water Treated from Rain and Sewage.

This policy is found also on Jadara's Sustainable Development page:

http://jadara.edu.jo/eng/main.php?type=mod_gmetric

Policy

1. Water Reuse

Volume of treated water collected from sewage is recycled and distributed for beneficial use in the following:

- Agricultural Irrigation (mainly for Olive Trees Field)
- Landscape Irrigation (2 green pitches, sidewalks, common areas on campus, water-drought flowers, Palm trees, Forest trees)
- Car Wash (Buses and Cars owned by Jadara University)
- Fire Protection
- Toilet Flushing



Last Updated: March 1st, 2022

2. Water Quality, Analysis and Security

2.1 Drinking water is provided free to campus population (including Staff, Students & Visitors) through water fountains inside buildings and coolers. The quality of drinking water is to be tested regularly as required (in this policy). Knowing that the resource is Groundwater pumped from Jadara's artesian well and filtered. It is clean and drinkable.

2.2 The recycled water **producer** shall submit the quality assurance data every month in writing. Analysis and Quality of water results shall be reported to the Engineering Office at the campus. In case of any issue or certain objects are not met, further actions must be taken after the approval of the board in writing.

2.3 Recycled water quality used for irrigation must guarantee that water absorbed doesn't affect Groundwater in the long run.

2.4 Spelling toxic and medical waste from laboratories in sinks and drainage systems is prohibited to avoid water pollution and therefore a bad impact on recycled water that might affect the quality of water absorbed from irrigation and affect soil too.

2.5 Pumping Technology from Artesian Well must ensure keeping a balance between Water feeding from rain and consumption. Jadara University pumps water when it is overdraft; usually this is the case as provided by the company which built the Artesian Well in the Campus.

2.6 All Water appliances installed must be water efficient appliances in WCs, Kitchens, faucets, and showers in the Arena and irrigation sprays.

2.7 Conscious water usage & sustainability must be promoted through posters and awareness workshops on campus or off campus to local community held by the Deanship of Student Affairs, designed and published by Public Relations and Media department.

3. Water Measurements

3.1 Water extracted from Artesian Well (Ground Water) must be done by the Engineering Office regularly and reported following these steps to measure the flow rate of a well:

1. Turn off all water sources that are connected to the well.
2. Remove the well cap or cover and lower a tape measure into the well until it touches the water level.
3. Record the depth of the water level on the tape measure.
4. Wait for a few minutes to allow the water level to stabilize.
5. Lower a flow meter into the well until it reaches the bottom.
6. Turn on the flow meter and record the flow rate in gallons per minute (GPM).
7. Multiply the flow rate by 60 to get the flow rate in gallons per hour (GPH).

3.2 Water Collected & reserved in a ground tank at the campus from Rain must be measured and reported by the Engineering Office in Rain season (3 months/year) taking into account the roof area and the amount of precipitation to estimate the amount of rainwater that can be collected.

3.3 Water Consumption must be measured and reported by the Engineering Office regularly for monitoring water reduction plan.

3.4 Treated water must be measured and reported by the Engineering Office regularly for monitoring water supply, water reuse and water sustainability.

Assessment & Policy Review

The Data in this policy is to be assessed and evaluated by Stakeholders mainly University Board and Engineering Office every 3 years. Updating some clauses in this policy document based on needs and input from reports by the Engineering office can be added prior specified Revision Date. Any updates on policy must be approved and shared electronically with staff and students via the Sustainable Development page on Jadara's Website as well as emails.