


Template for Evidence(s) UI GreenMetric Questionnaire

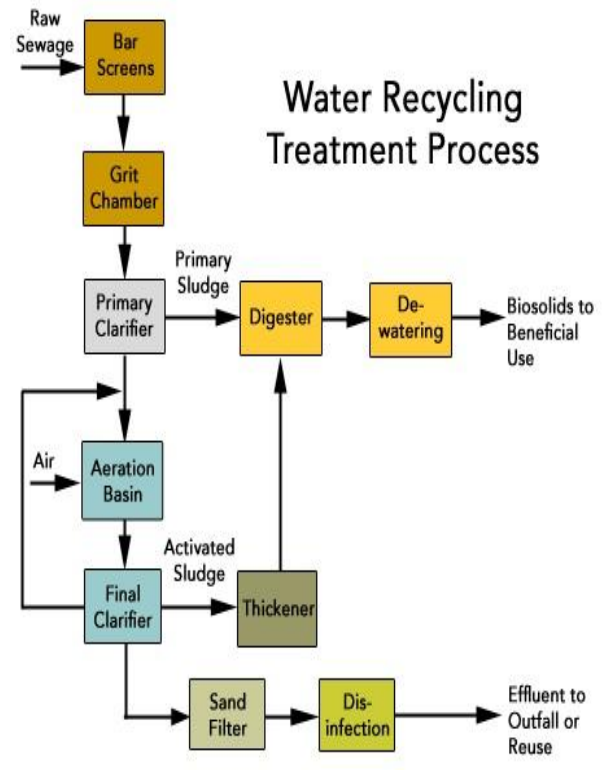
University : Samarra
 Country : Iraq
 Web Address : www.uosamarra.edu.iq

[4] Water (WR)

[4.2] Water Recycling Program Implementation

SAMPLE





Water Recycling Treatment Process

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      graph TD
        RawSewage[Raw Sewage] --> BarScreens[Bar Screens]
        BarScreens --> GritChamber[Grit Chamber]
        GritChamber --> PrimaryClarifier[Primary Clarifier]
        PrimaryClarifier --> Digester[Digester]
        PrimaryClarifier --> AerationBasin[Aeration Basin]
        Digester --> DeWatering[De-watering]
        DeWatering --> Biosolids[Biosolids to Beneficial Use]
        AerationBasin --> FinalClarifier[Final Clarifier]
        FinalClarifier --> Thickener[Thickener]
        Thickener --> Digester
        FinalClarifier --> SandFilter[Sand Filter]
        SandFilter --> Disinfection[Dis-infection]
        Disinfection --> Effluent[Effluent to Outfall or Reuse]
        Air[Air] --> AerationBasin
        AerationBasin --> AerationBasin
        AerationBasin --> FinalClarifier
        FinalClarifier --> AerationBasin
    
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Water Recycling Program (University of Samarra)

Description:

The University of Samarra implements integrated water recycling and wastewater management systems to support sustainable campus operations and environmental protection in accordance with the UI GreenMetric 2026 sustainability framework.

Water Recycling and Treatment Program

The university utilizes advanced wastewater treatment systems based on physical, biological, and chemical treatment processes to improve water quality and promote water reuse practices.

The water recycling system includes:

- Primary wastewater treatment using mechanical separation systems.
- Secondary biological treatment processes.
- Tertiary and advanced purification systems.
- Filtration and disinfection technologies.
- Rainwater and wastewater drainage infrastructure.



- Wastewater collection and lifting stations connected to treatment facilities.

The university sewerage infrastructure is connected to the Samarra Sewerage Project under the supervision of the General Directorate of Sewerage.

Water Reuse Applications

The recycled and treated water is reused for several non-potable applications, including:

- Irrigation of green spaces and landscaping.
- Campus cleaning and maintenance operations.
- Environmental sustainability activities.
- Support for groundwater recharge systems.

These initiatives reduce freshwater demand and improve sustainable water resource management.

Environmental Sustainability Impact

The implementation of water recycling systems contributes to:

- Reduction of water waste and wastewater discharge.
- Protection of local water ecosystems.
- Improvement of campus environmental quality.
- Enhancement of operational sustainability.
- Support for Sustainable Development Goals (SDGs).
- Reduction of environmental pollution risks.

Monitoring and Infrastructure Management

The university continuously monitors wastewater treatment systems and drainage infrastructure through technical inspections, environmental assessments, and maintenance programs in cooperation with local authorities and engineering departments.

Recommended Supporting Evidence for GreenMetric 2026

To strengthen the GreenMetric evaluation score, the following real supporting evidence is recommended:

- Real photographs of wastewater treatment units.
- Drainage and sewerage infrastructure images.
- Water recycling operational activities.
- Sustainability and environmental management activities.
- Official news links from the University of Samarra website.

Official Supporting Links

<https://uosamarra.edu.iq>.

<https://uosamarra.edu.iq/sustainable-dev>.