



Navoi State University Water Conservation and Sustainable Water Management Strategy (2025–2030)

1. Introduction

This Strategy establishes Navoi State University's long-term commitment to sustainable water management and resource efficiency for the period 2025–2030. The document is developed in accordance with the Presidential Resolution No. PQ-5 of 5 January 2024, *“On Measures to Improve the Water Resources Management System at the Lower Level and Increase the Efficiency of Water Resource Use”*, and Presidential Decree No. PF-37 of 21 February 2024 on the implementation of the *Uzbekistan–2030 Strategy*. These national policy documents identify water conservation, environmental protection, and efficient resource utilization as strategic priorities for sustainable development.

Recognizing the water scarcity challenges of Navoi region, the University is committed to reducing water consumption, improving water-use efficiency, expanding sustainable infrastructure, and promoting environmental responsibility among students, faculty members, and staff. The Strategy provides a framework for integrating sustainable water management into campus operations, academic programs, research activities, and community engagement initiatives.

2. Strategic Vision

By 2030, Navoi State University aims to become a leading example of sustainable water management among higher education institutions in Uzbekistan. The University seeks to achieve this vision through the modernization of water infrastructure, expansion of efficient irrigation systems, protection of water resources, enhancement of rainwater absorption capacity, and the promotion of a campus culture that values responsible water consumption.

3. Water Efficiency and Infrastructure Development

During the implementation period, the University will prioritize the modernization of water-related infrastructure across academic buildings, administrative facilities, laboratories, and student dormitories. Water-efficient sanitary technologies,



including low-flow taps, automatic sensor-operated faucets, and low-flush toilet systems, will be gradually expanded and maintained throughout the campus. Through these measures, the University seeks to reduce overall potable water consumption by at least **20 percent by 2030 compared with the 2024 baseline**.

Particular attention will be given to improving the operational efficiency of water supply systems, pumping facilities, and internal distribution networks. Regular inspections and maintenance programs will be conducted to minimize water losses and ensure the effective use of available resources.

4. Sustainable Irrigation and Green Campus Management

The University recognizes that landscaping and green space management represent important components of campus water consumption. Therefore, efficient irrigation technologies, including drip irrigation and modern sprinkler systems, will continue to be expanded in landscaped areas. Drought-resistant and climate-adapted plant species will be prioritized in future planting programs to reduce irrigation demand while maintaining the ecological and aesthetic value of campus green spaces.

By 2030, the University aims to ensure that the majority of landscaped areas are maintained using water-efficient irrigation technologies and climate-resilient vegetation. The existing stock of approximately **1,392 trees** will continue to be protected and expanded through sustainable landscape management practices.

5. Stormwater Management and Rainwater Absorption

Navoi State University will continue strengthening its stormwater management system through the maintenance and expansion of permeable surfaces, infiltration areas, drainage channels, roof gutter systems, and water absorption infrastructure. Currently, **87,234 m²**, representing approximately **31 percent of the total campus area of 281,400 m²**, is dedicated to water absorption and natural infiltration functions.

Throughout the Strategy period, these areas will be preserved and enhanced to support groundwater recharge, reduce surface runoff, prevent localized flooding, and improve climate resilience. The University will seek to maintain a minimum water



absorption ratio of 31 percent while expanding rainwater collection and infiltration opportunities where feasible.

6. Education, Awareness, and Community Engagement

Water conservation awareness shall remain a central component of the University's sustainability agenda. Educational campaigns, seminars, workshops, environmental competitions, student-led initiatives, and annual events such as World Water Day activities will continue to promote responsible water consumption practices across the university community.

The University aims to engage at least **80 percent of students** in water-related awareness and sustainability activities by 2030. Through initiatives such as *Every Drop Counts* and other environmental campaigns, students will be encouraged to become active participants in sustainable resource management both on campus and within their communities.

7. Research, Innovation, and Knowledge Transfer

In alignment with national priorities for science and innovation, Navoi State University will strengthen research activities related to water conservation, efficient irrigation technologies, climate adaptation, environmental sustainability, and resource management in arid regions. Academic staff, researchers, master's students, and doctoral candidates will be encouraged to develop practical and innovative solutions addressing regional water challenges.

The University will also expand cooperation with research institutions, government agencies, and international partners to facilitate knowledge exchange and support evidence-based approaches to sustainable water management.

8. Monitoring and Evaluation

The implementation of this Strategy will be monitored annually through sustainability performance assessments, infrastructure audits, and institutional reporting mechanisms. Progress indicators will include water consumption levels, water efficiency improvements, irrigation system coverage, participation in



awareness activities, research outputs, and the maintenance of water absorption infrastructure.

Annual reviews will ensure that the Strategy remains aligned with institutional priorities, national sustainability objectives, and emerging environmental challenges.