University of University

Basin Management Strategy

September 2024

Objective

The purpose of this strategy is to develop ***management*** practices ***based on the location and diversity of aquatic species*** in the water basins located on the Girne University campus and research areas; to protect basin ecosystems and ensure sustainable water management.

Scope

This strategy covers rivers, lakes, wetlands and coastal ecosystems located throughout Girne University's campuses and research areas, as well as watershed management activities in field research, laboratory work, internships and practical courses.

Legal Basis

National and International Legislation:

- *TRNC Water Management and Protection Legislation*
- *European Union Water Framework Directive (2000/60/EC)*
- *IMO and STCW standards (related to research and measurement activities in water)*

Girne University Environment and Sustainability Policy

Local Watershed Ecosystem Studies and Biodiversity Data

Definitions

Basin

The entire water catchment and ecosystem area of a river, lake or wetland.

Aquatic Species

All flora and fauna species living in freshwater and saltwater ecosystems.

Biodiversity

The variety and abundance of aquatic species.

Basin Management

The sustainable protection and management of water resources and ecosystems.

Responsibility

Rectorate

Ensures the implementation of the basin management strategy and resource allocation.

Sustainability and Quality Coordination

Conducts monitoring, data analysis and reporting processes.

Faculty of Maritime Sciences and Water Sciences Research Unit

Conducts fieldwork, species identification and data collection activities.

Laboratory Supervisors

Ensures the measurement of physical, chemical, and biological parameters.

Student Council

Contributes to the organisation of awareness campaigns and field activities.

Policy Principles

Basin management is planned based on the location and diversity of aquatic species.

Water quality, physical and chemical parameters, and biodiversity are monitored regularly.

All activities carried out in watershed areas must be consistent with ecosystem health and sustainability goals.

Students and staff are made aware of watershed management through education and awareness programmes.

Data collection and monitoring results are shared with all relevant units and incorporated into the policy development process.

Implementation and Action Plan

Basin-Based Species Monitoring Programme

The distribution and density of aquatic species are determined in each basin.

Basin-Based Water Quality Monitoring

Physical and chemical parameters are measured regularly.

Biodiversity and Habitat Assessment

The habitats of aquatic species and ecosystem health are analysed.

Education and Awareness

Students and staff are informed about basin management and ecosystem conservation issues.

Database and Reporting

Monitoring data is stored in a central database and annual reports are prepared.

Corrective and Preventive Measures

Action plans are implemented based on monitoring results.

Monitoring and Evaluation

Basin ecosystem indicators and aquatic species diversity are assessed at least once a year. Monitoring reports are prepared by the Sustainability and Quality Coordination Unit.

Issues and improvement recommendations are shared with all relevant units.

Training and Awareness

Seminars, field studies and online modules are organised on watershed management and the protection of aquatic species.

Students and staff are informed about ecosystem health protection, data collection and monitoring techniques.

Implementation and Revision

This policy shall enter into force on the date it is approved by ***the Girne University Senate***. The policy shall be reviewed every three years and necessary updates shall be made.

Implementation

This policy is implemented by ***the Sustainability and Quality Coordination Office***.

Appendices

Appendix–1: Basin Risk Assessment Table

- Assessment of risks such as pollution, erosion, loss of biodiversity, etc., identified in watersheds
- Risk level, potential impacts, responsible unit, measures to be taken

Appendix–2: Water Quality and Biodiversity Monitoring Form

- Sampling points, measurement parameters (pH, dissolved oxygen, salinity, nitrate, etc.)
- Species diversity observations and population data
- Measurement dates and responsible researchers

Appendix 3: Watershed Mapping and Conservation Areas Plan

- Boundaries of water basins in the region where the university is located
- Areas sensitive in terms of species diversity
- Visual map of priority conservation areas (e.g. GIS-based)

Appendix 4: Education and Awareness Programme Content

- Awareness modules for students and academic staff
- Fieldwork implementation plan and training materials
- Participation schedule and evaluation methods

Appendix 5: Annual Monitoring and Evaluation Report Format

- Monitoring results, measures taken, performance indicators
- Changes in species numbers, water quality trends
- Revision recommendations and update notes

Appendix 6: Action Plan and Implementation Schedule

- The order of implementation of the steps outlined in the strategy
- Responsible units and timeline
- Revision dates and progress indicators

Risk Source	Potential Impact	Risk Level (Low/Medium/	Responsible Unit	Preventive Measures	Monitoring Frequency
Agricultural waste discharge	Water quality deterioration	High	Environmental Management Unit	Monitoring of agricultural areas, Buffer	Every 3 months
Urban surface runoff	Sediment accumulation	Medium	Building Works Department	Maintenance of rainwater drainage systems maintenance	Every 6 months
Waste water leakage	Disruption of the ecosystem balance disruption	High	Technical Services	Wastewater systems control	Every 3 months
Plastic pollution	Decrease in species diversity Decrease	Moderate	Campus Sustainability Office	Increasing recycling areas Increasing	Continuous

Appendix 1: Watershed Risk Assessment Table

Appendix 2: Water Quality and Biodiversity Monitoring Form

Dateh	Locon	pH	Dissolved Oxygen (mg/L)	Nitrate (mg/L)	Species Number	Observed Types	Responsible Staff	Notesar

Appendix 3: Basin Mapping and Conservation Areas Plan

This appendix is a visual document showing the regional basin map and priority conservation areas.

It should include the following elements:

- Delineation of basin boundaries
- Marking of sensitive aquatic habitats
- Distribution of protected species
- Coordinates of protected areas, buffer zones, and monitoring stations

Additional file: *GIS-based map and coordinate list (can be added as a visual document)*

Appendix–4: Training and Awareness Programme Content

Training Title	Target Audience	Implementation	Duration	Responsible Unit	Training Material
Aquatic Ecosystems	Students	Seminar + Field Trip	2 day	Maritime Faculty	Presentation + Field Guide
Basin Management Applications	Academic Staff	Online Training	1 week	Quality Unit	Training Module
Waste Management and Water Pollution	Technical Personnel	Practical Training	1 day	Environmental Management Unit	Guidance Document

Appendix 5: Annual Monitoring and Evaluation Report Format

General Information

- Report Period:
- Prepared by:
- Basin Name / Code No.:

Monitoring Findings

- Water quality indicators
- Changes in species diversity
- Assessment of Potential Risks

Measures and Actions Taken

- List of preventive and corrective activities
- Impact assessment

Conclusions and Recommendations

- New actions recommended based on monitoring results
- Revision requirements

Appendix 6: Action Plan and Implementation Schedule

Activity	Responsible Unit	Beginning Date	End Date	Status	Revision Note
Basin-based risk analysis to be carried out	Environmental Management Unit	January 2025	March 2025	Ongoing on	-
Water quality monitoring installation	Technical Services	February 2025	May 2025	Planned	-
Training Implementation of programmes	Quality Unit	April 2025	June 2025	Pending	-
Preparation of the annual monitoring report Preparation	Research Team	December 2025	January 2026	Scheduled	-