

Introduction

Rivers and streams have key ecological properties, at ecosystem level, which affect the development of human culture, history, population distribution, demography and economics. Biodiversity and the goods and services derived from river ecosystems depend on the catchment area and the forces governing the exchange of nutrients, organic matter, waste waters, sediments, materials and species over a range of temporal scales across the land/water interface. These mechanisms inspired the traditional exploitation and adaptive management of river resources; nowadays however, increasing urbanisation, chemical pollution, power generation, fisheries and tourism are leading to a shift away from adaptive to unsustainable management strategies. In Mediterranean rivers, climate change is contributing significantly to increased disturbance of structures and functions due to summer drought. The management and conservation of ecosystem health in rivers and streams is a major ecological and environmental issue, as well as a socio-economic priority. In this context, the responsibility of the scientific community has increased and the integration of all components, i.e. institutional, administrative, managerial and scientific, is increasingly required. This was the main objective of the RiverNet Project, financed by the INTERREG IIIA Cross Border – Adriatic New Neighbourhood Programme, and this book represents the result of scientific cooperation between Italian and Albanian researchers and administrations. The themes of the chapters vary from the role of chemical pollution in benthic invertebrate community features, to the spatial variation of the abiotic and biotic characteristics of the main Albanian rivers, to ways of involving local communities in the decision-making processes of administrations regarding conservation strategies, and the use of software to define the chemical impact at catchment area level. This book is also the result of the work and contribution of many people. The editors would like to thank all the authors and Prof Llukan Puka, Dr Piacentino Ciccarese, Dr Vincenzo Mangialardo, Dr Simona Romiti and Dr Mimoza Frasheri for their enthusiastic approach to all the activities of the RiverNet project. Finally, the editors would like to thank all the staff of the Abruzzo Regional Authority involved in the RiverNet project for their support.

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