

Towards sustainable management of Mediterranean river basins: policy recommendations on management aspects of temporary streams

Nikolaos P. Nikolaidis^a, Leeda Demetropoulou^{a,*}, Jochen Froebrich^b,
Claire Jacobs^b, Francesc Gallart^c, Narcis Prat^d, Antonio Lo Porto^e,
Claudia Campana^f, Vassilis Papadoulakis^g, Nikolaos Skoulikidis^h,
Thierry Davyⁱ, Giovanni Bidoglio^j, Fayçal Bouraoui^j, Mike Kirkby^k,
Marie-George Tournoud^l, Stefano Polesello^e, Gonzalo G. Barberá^m,
David Cooperⁿ, Rosa Gomez^o, María del Mar Sánchez-Montoya^o,
Jérôme Latron^c, Anna Maria De Girolamo^e and Jean-Louis Perrin^l

^a*Department of Environmental Engineering, Technical University of Crete, Kounoupidiana,
Building K1, Chania 73100, Greece*

^{*}*Corresponding author. E-mail: ldemetro@gmail.com*

^b*Centre for Water and Climate, Alterra, Wageningen, The Netherlands*

^c*Surface Hydrology and Erosion Group, IDAEA, CSIC, Spain*

^d*Department of Ecology, University of Barcelona, Spain*

^e*Water Research Institute, IRSA-CNR, Italy*

^f*Autorità di Bacino, della Puglia, Italy*

^g*Regional Unit of Laconia, Region of Peloponnese, Greece*

^h*Hellenic Centre for Marine Research, Greece*

ⁱ*Representative of French Water Agencies to the European Commission*

^j*Joint Research Centre, European Commission*

^k*School of Geography, University of Leeds, UK*

^l*Université de Montpellier 2, HydroSciences Montpellier, France*

^m*Department of Soil and Water Conservation, CSIC-CEBAS, Spain*

ⁿ*Centre of Ecology and Hydrology, CEH, Wallingford, UK*

^o*Department of Ecology and Hydrology, University of Murcia, Spain*

Abstract

In 2011, the European Council stressed the significance of water quality for sustainable development in Europe and emphasized the need for better integration of the water policy objectives into the Common Agriculture Policy

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reform in rural areas. Since 2000, the Water Framework Directive (WFD) has required the EU Member States to target good ecological status for their water bodies. However, the implementation of the Directive for the numerous Mediterranean temporary streams has been delayed indicating the need for elaboration of the tools and methods that address the special characteristics of such water bodies. This requirement has been addressed by the recently completed MIRAGE project. In the context of the recent publication of the European Commission's Blueprint to Safeguard Europe's Waters, the MIRAGE-proposed framework for the characterization of the eco-hydrological dynamics and the systematic description of the measured impact for temporary rivers could bring considerable added value to the EU revision of all relevant water policies. The project recommends additions to WFD articles including an explicit definition of temporary rivers, adaptation of environmental objectives to their peculiarities and establishment of a proper method to determine the initial status and specific actions in River Basin Management Plans.

Keywords: Blueprint to Safeguard Europe's waters; Ecological status; Temporary rivers; WFD

Introduction

Water has been a keystone in European Union (EU) environmental policy. The various water Directives¹ can be viewed as typical examples of the 'different phases of environmental policy evolution, from an emphasis on public health protection to environmental protection per se and from 'end-of-pipe' solutions to preventative and integrated management approaches' (Kallis & Butler, 2001: 125). By the mid-1990s more than nine water-related Directives were in force². However, since 1988 the need for the development of more comprehensive European water legislation had been identified by the European Council. The difficult equilibrium between subsidiarity and uniformity of water standards meant that 10 years were needed for the European Commission (Commission) to publish its first proposal in 1997 and three more years were required for the final adoption of the Water Framework Directive (WFD)³ and its entry into force on 22 December 2000.

The WFD has greatly changed the environmental management of water resources and promoted the reorganization of water management by hydrological and ecological rather than administrative criteria. It has also been an important incentive towards the harmonization of classification and monitoring methods across Europe, precipitating a fundamental reorientation in management objectives from pollution control to ecosystem preservation (Hering et al., 2006). With the WFD, the EU water policy adopted an integrated approach that promoted the concept of river basin management as a component for the achievement of good ecological status of all EU waters by 2015. Today, the achievement of this policy goal seems over ambitious (in 2012 good ecological status was achieved in 43% of the reported freshwater bodies⁴) as a result of numerous challenges. To respond to these challenges the Commission has recently published 'A Blueprint to Safeguard Europe's Waters' (Blueprint) to address the

¹ A Directive is a legislative act of the European Union that requires Member States to achieve a particular result within a given deadline without specifying the form or methods of implementation, which are left at the discretion of the Member State.

² 75/440/EEC, 76/160/EEC, 76/464/EEC, 78/659/EEC, 79/923/EEC, 80/68/EEC, 80/778/EEC, 91/271/EEC, 91/676/EEC.

³ Directive 2000/60/EC.

⁴ A Blueprint to Safeguard Europe's Water Resources COM (2012) 673.