



Photo: Enric Badosa



## Planning for climate change:

# Society as a key player in river basin adaptation

## Key messages

- Climate change is expected to exacerbate the stress on Mediterranean water resources by reducing water supplies, posing a challenge for water management. Few water management initiatives around the world adequately address the impacts of climate change at the river basin level. There is an urgent need for adaptation plans to outline how individual river basins can prepare for climate change.
- Water management is a cross-cutting issue, which involves a multitude of stakeholders, interests and areas of expertise. Within a river basin, the strategies to cope with climate challenges must be applicable across multiple sectors and policy fields.
- To develop successful adaptation strategies, both regional and local stakeholders need to be involved. Their participation, coupled with a well-defined, science-based methodology, is the way forward towards robust and enriched decision-making, and the creation of awareness, trust and acceptance within river basin communities.

## Introduction

In the Mediterranean region, water resources are expected to be severely impacted by climate change. The resultant decrease in water supplies needs to be factored in to ensure a sustainable supply and use of high quality water resources in the future. However, a global screening of water management initiatives revealed that insufficient consideration is being given to climate change at the river basin level. Furthermore, given the cross-cutting nature of water management, it is crucial to involve society at large, stakeholders, experts and policy makers and address their interests, demands and concerns to ensure long-term effectiveness.

# 1 Overview

The BeWater project spurs proactive responses to water-related global challenges at the river basin level. BeWater fosters a dialogue between science and society, which deliberately extends beyond the mere inclusion of stakeholders in the process. Instead, BeWater has set up clear mechanisms of sustained stakeholder engagement, integrated in a science-based methodology, to develop river basin adaptation plans. Steps in this process to date have been:

- Screening best practices and experiences with adaptation plans at the river basin level;
- Developing a shared understanding of societal challenges in four Mediterranean river basins;
- Formulating and evaluating adaptive water management options to be included in the adaptation plans for these four river basins;
- Analysing the policy frameworks within which the plans would be positioned.

# 2 Findings

A screening of over 65 water management initiatives across the globe confirms the importance of involving stakeholders from the earliest development phase, establishing shared definitions and ambitions, and integrating risks and uncertainties in the planning process via an adaptive approach. Taking these lessons forward, BeWater defined a science-society approach to develop adaptation plans in four river basins across the Mediterranean, thereby representing a vital contribution to the current gap in basin level water management initiatives.

In each of the four river basins, a group of carefully selected stakeholders expressed their views on challenges faced in their river basins. Stakeholders also formulated and evaluated a range of options to tackle these challenges. While the four basins differ in environmental, socio-economic and political conditions, they share a number of challenges in the face of global climate change, in particular water quantity and water quality. Importantly however, the basins have identified different pathways to addressing these challenges. In total, the BeWater-dialogue between scientists and stakeholders led to the identification of 102 water management options. The developed approach generated enthusiasm and excitement in all four river basins, creating a momentum for cooperation.

As our understanding of climate change and its impacts deepens, cooperation and coordination between policy sectors becomes more important. To move from water management options to river basin adaptation plans requires the good understanding of the policy background. BeWater is looking at the interlinkages, overlaps and inconsistencies between sectoral policies if, and when, they address climate change. This allows the four river basins to anticipate opportunities and barriers to the implementation of river basin adaptation plans.

# 3 Next steps

BeWater will continue supporting stakeholders and society in knowledge co-production and in taking ownership of adaptive water management within their river basins and, ultimately, across the Mediterranean and beyond. By engaging local and national policy actors, BeWater will leverage opportunities for its results to be taken up in the evolving policy dialogue on water and climate change adaptation.

