



# BeWater:

Making society an active participant in  
water adaptation to global change

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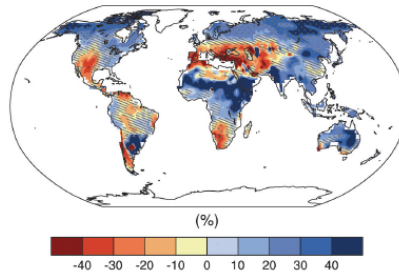
[www.bewaterproject.eu](http://www.bewaterproject.eu)



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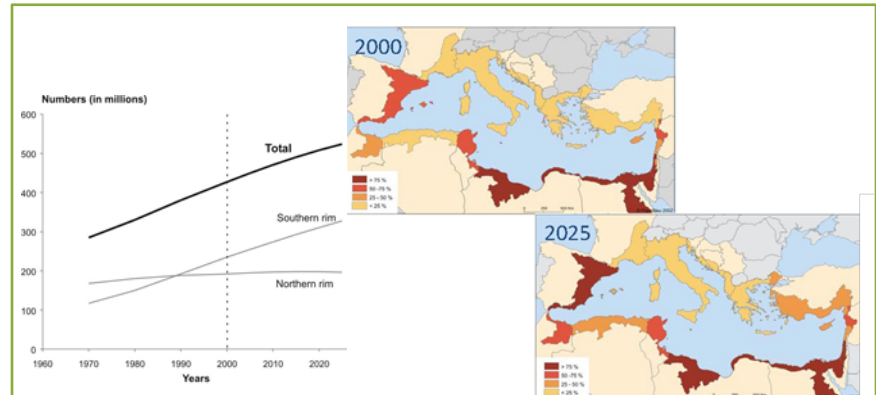
# A collaborative response to Global Change

Runoff by the end of the 21st Century (RCP8.5: 2081-2100)



Source: IPCC Technical Summary AR5, WG1 2014

Global change threatens the whole society



Particular risk in Mediterranean region: increasing pressure on water resources

## ADAPTATION

Dialogue and collaboration between science and society  
Social awareness, empowerment and joint responsibility

Bottom-up approach

# BeWater



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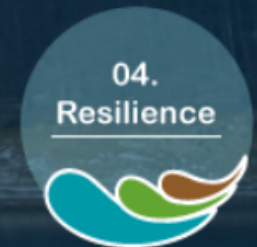
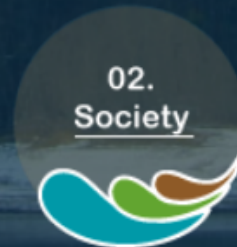
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# BeWater Project

Society Adapting to Global Change

The BeWater project promotes dialogue and collaboration between science and society for sustainable water management and adaptation to the impacts of global change in the Mediterranean.



# Science in Society: BeWater Project

- Duration 42 months
- Starting 01/10/2013
- Consortium 11 countries
- Coordinator  
Anabel Sánchez  
CREAF

## 13 Partners



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# BeWater Project: 4 Pilot Cases

Includes an **innovative, stakeholder-driven method** of societal transition towards a more **sustainable, resilient and adaptive river basin management**

Promotes the **transfer** of BeWater results **into management and adaptation policy**

Promotes **mutual and multi-directional learning** among partners, entities and actors within and between the river basins and with the broader society

Enhances **social participation** and builds **societal resilience**



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# BeWater: Adaptive water management

**Stakeholder-driven method**, of societal transition towards a more **sustainable, resilient and adaptive river basin management**.



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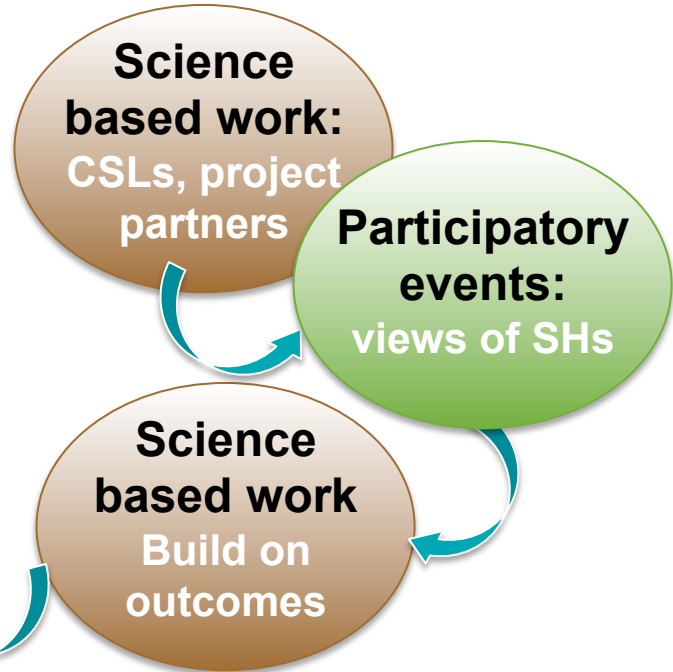
# BeWater: building resilience

Dialogue and collaboration between science and society

## Participatory methodology



## Iterative approach



## Co-creation of specific Adaptive River Basin water management plans



## Outscaling results to other areas

**PRESENT STATE & CHALLENGES (diagnosis)**

**FUTURE STATE (objectives)**


**WATER MANAGEMENT OPTIONS (solutions)**




**FIRST WORKSHOP**



**NARRATIVE OF THE BASIN**



**Text**



**Fuzzy Cognitive Map**

**ADDITIONAL INFORMATION**



**WATER MANAGEMENT OPTIONS**



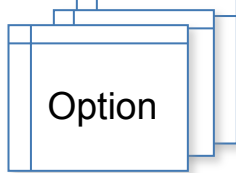
**Option**



**SECOND WORKSHOP**



**ANALISIS MULTICRITERIA (MCA)**



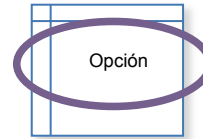
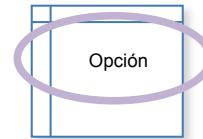
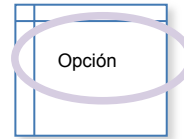
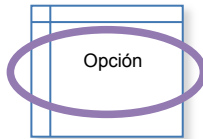
**Option**

**SIMPLIFIED COST ANALYSIS**



**ANALYSIS OF RESULTS**

**SET OF VALIDATED  
OPTIONS**



**FIRST DRAFT  
RIVER BASIN  
ADAPTATION PLAN**



**BUNDLING**



**POLICY AND STAKEHOLDER BASIS OF WMOS  
ASSESSMENT OF SYNERGIES & CO-BENEFITS  
DRAFT ADAPTATION PATHWAYS**

**THIRD  
WORKSHOP**


**RIVER BASIN  
ADAPTATION PLAN**



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# BeWater methodological protocols/ information on:

- Data gathering 
- Water Management Option formulation & evaluation
- Stakeholder engagement
- Policy analysis
- River Basin Adaptation Plans
- Handbook of lesson learnt & best practices
  
- Recommendations to policy makers



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# BeWater proposals for freshwater availability and access



## Supply management:

- Improvement of water regulation infrastructure
- Enhancing water reuse
- Rainwater harvesting
- Unconventional water production



## Demand management:

- Water saving technologies and best practices
- Water entitlement regulation
- Water user associations
- Economic instruments

Pedieos



Vipava



Tordera



Rmel



# BeWater proposals for freshwater availability and access



## Health of water ecosystems:

- Implementation of environmental flow regime
- River space recovery
- Restoration of wetlands and hydrologic connectivity
- Protection of groundwater recharge areas



## Protection of water quality:

- Improvement of water treatment plants and sewage systems
- Reduction of diffuse pollution
- Reduction of salt intrusion in groundwater

Pedieos



Vipava



Tordera



Rmel



# Conclusions



**Global change exacerbates challenges** which are currently already experienced, therefore it is crucial to **engage society in building a sound diagnosis of the basin.**



An iterative approach between **science and society allows to** enrich and consolidate relevant information to **develop solutions and envision opportunities.**



Water management for adaptation to global change calls for **better cooperation between competent authorities** for a truly integrated approach.



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Thank you.



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