

A Blueprint to Safeguard Europe's Water Resources



What is the Blueprint?

■ A policy response at European level

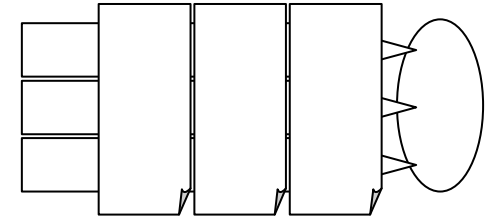
- to address the implementation issues related to the current EU policy framework with a focus on water quality
- to develop measures to tackle in particular water availability and water quantity problems

■ The Blueprint will:

- Look into gaps and shortcomings of the current policy and ways to address them
- Look at the evolving vulnerability of the water environment to identify measures and tools in several EU policy areas
- Examine the balance between water demand and supply, taking into account the needs of both human activities and natural ecosystems
- Explain how the Blueprint objective should be supported by data collection, scientific and technological development

Objective:
*to ensure
sufficient
supply of good
quality water for
sustainable and
equitable water
use*

3 types of action



■ Better Implementation

- The assessment of the River Basin Management Plans delivered by the Member States
- The Fitness Check of EU water policy

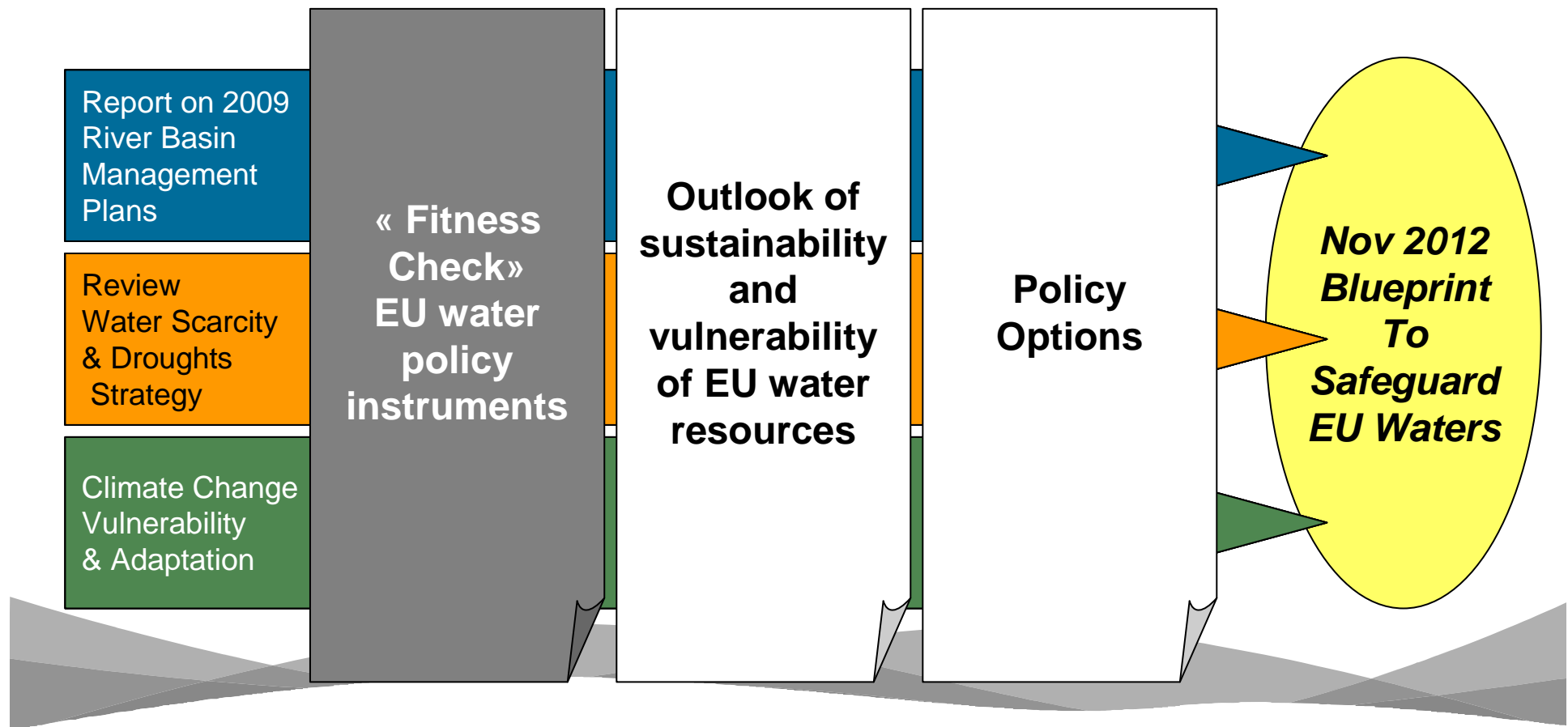
■ Better integration

- In particular: Agriculture, Energy , Regional and Cohesion policy, Research& Innovation, Transport

■ Completion

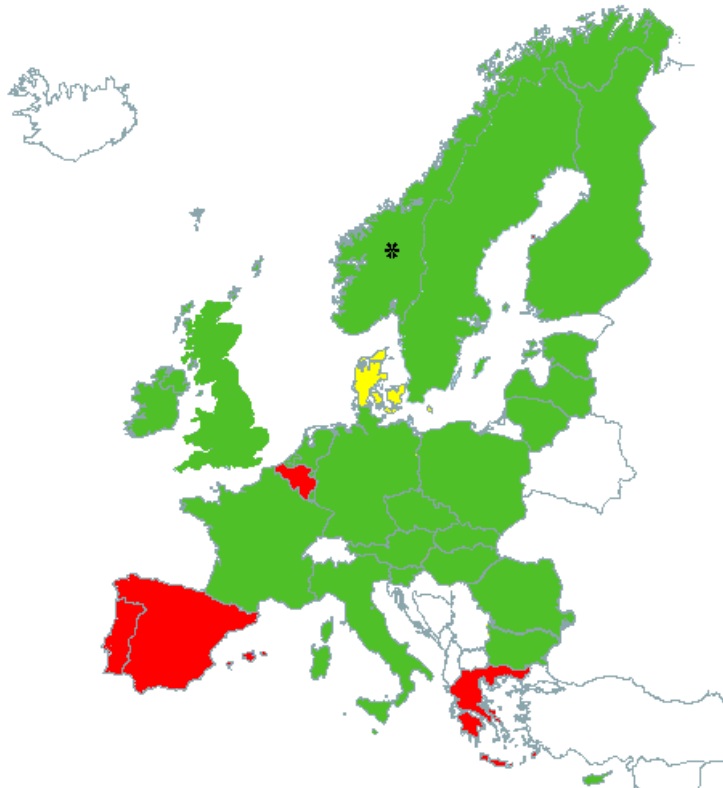
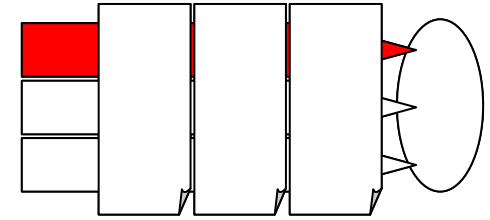
- The review of the EU policy on Water Scarcity and Drought
- The assessment of the vulnerability of water resources to climate change and other man made pressures

Synthesis of policy recommendations building on on-going assessments





River Basin Management Plans (RBMPs) 2009-2015

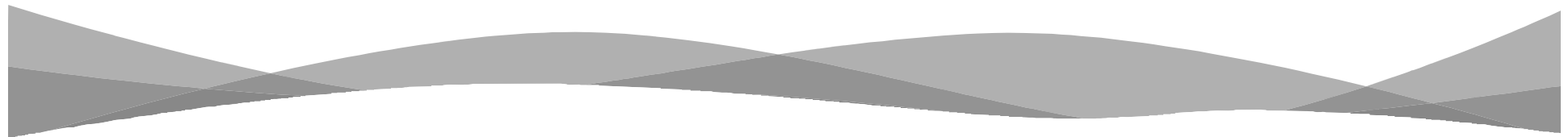
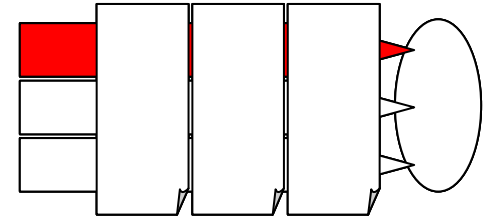


(In red, MS that have not yet delivered their plans, updated 1/09/2011)

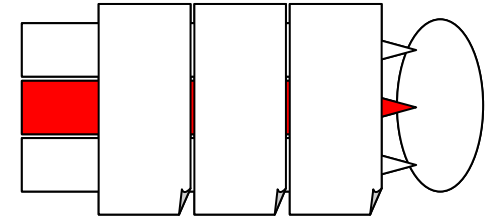
■ In-depth assessment topics include:

- Governance (administrative arrangements, public participation, international cooperation)
- Characterisation of the river basin district
- Monitoring of surface waters and groundwater
- Classification of surface water status
- Designation of heavily modified water bodies and definition of good ecological potential
- Assessment of groundwater status
- Environmental objectives and exemptions
- Programme of measures
- Strategy to deal with water scarcity and droughts
- Adaptation to climate change in RBMP

Insert slides on preliminary results assessment RMBP



Water Scarcity & Droughts (WS&D) Policy Review 2012



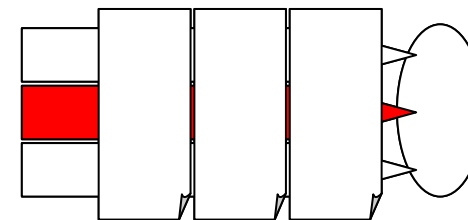
■ Communication 2007 and follow-up:

- Council conclusions - review & further develop WS&D policy by 2012
- EP report – new initiatives incl. pilot projects and preparatory actions
- Annual follow up reports

■ GAP Analysis

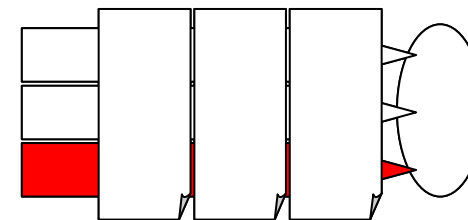
- Overview of problem & existing measures
- Identification of gaps
- Proposal of new measures
- Assessment of impact of new measures

Water Efficiency Building blocks



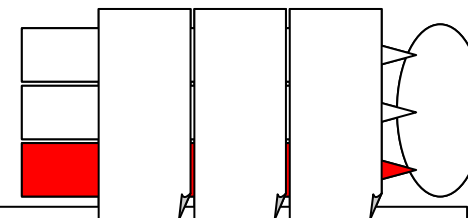
- **All sectors: possibilities for re-use & recycling of waste water**
- **Water Supply Infrastructure**
 - Estimate water & economic loss caused by leakage + impact
 - Study best practices for minimising water-losses
 - Provide recommendations on the possibilities to reduce losses
- **Buildings**
 - Up to 30% of the volume of water consumed in buildings could be saved
 - Analysis of available information & identification of gaps
 - Identification & analysis of regulatory and non-regulatory options for water performance requirements for buildings – link with energy consumption
 - Assessment of the social, economic and environmental impacts
- **Agriculture**
 - How can agriculture contribute to water savings and to reducing unsustainable water abstraction
 - Water pricing in agriculture
- **Industry**
 - further introduction of low-water use industrial processes (e.g. in energy production)

Water & Climate Change Adaptation

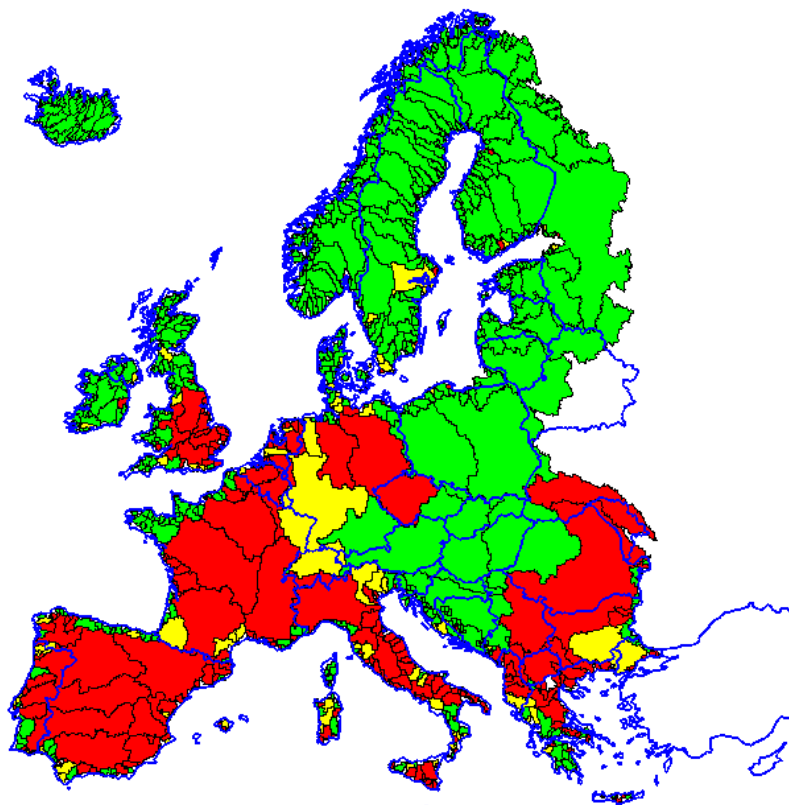


- **Objective: contribute to 2013 EU adaptation strategy (lead DG CLIMA)**
- **First building block, ClimWatAdapt project:**
 - Building of **vulnerability indicators**, integrating **socio-economic** and **climate scenarios**
 - Catalogue of adaptation measures: identification of priority action at EU level
 - Final report still being drafted
 - Integration results into EU Clearinghouse on CC Impacts Vulnerability and Adaptation
- **Next steps**
 - Filling gaps: input from FP7 research projects
 - Focus on Water Efficiency and on Natural Water Retention Measures

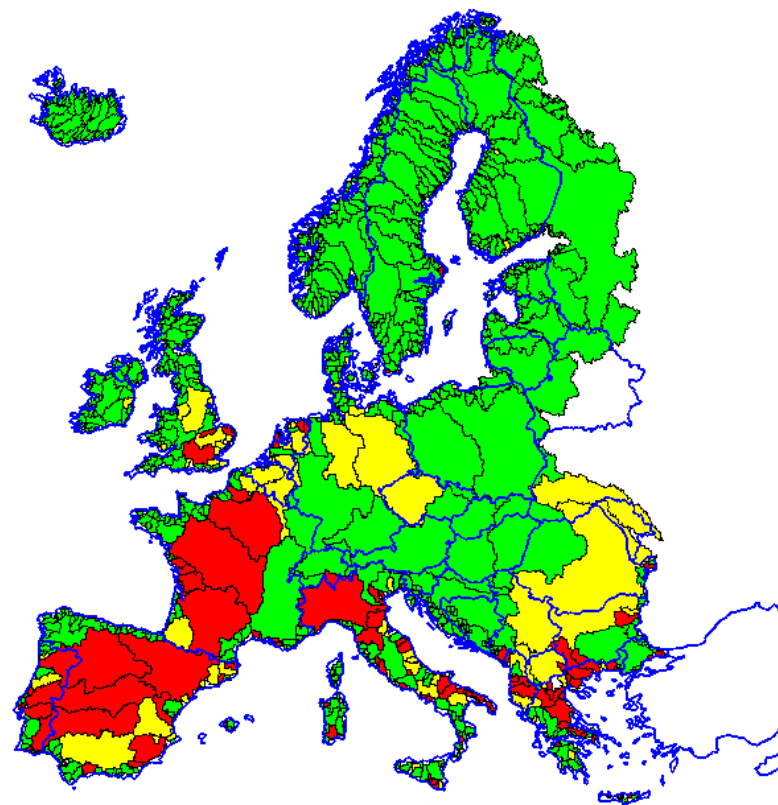
Example of ClimWatAdapt results: Summer Water Exploitation Index (excl. cooling water)






FP6 SCENES Scenario
«Economy First» 2050



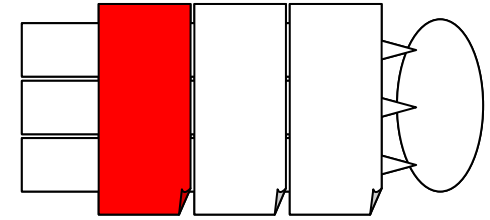
FP6 SCENES Scenario
«Sustainability Eventually» 2050



Source: DG Environment,
ClimWatAdapt database, 2011

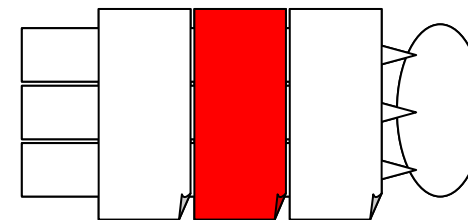
-  Low stress (WEI < 20%)
-  Medium stress (20% < WEI < 40%)
-  High stress (WEI > 40%)

“Fitness Test” EU Water policy framework



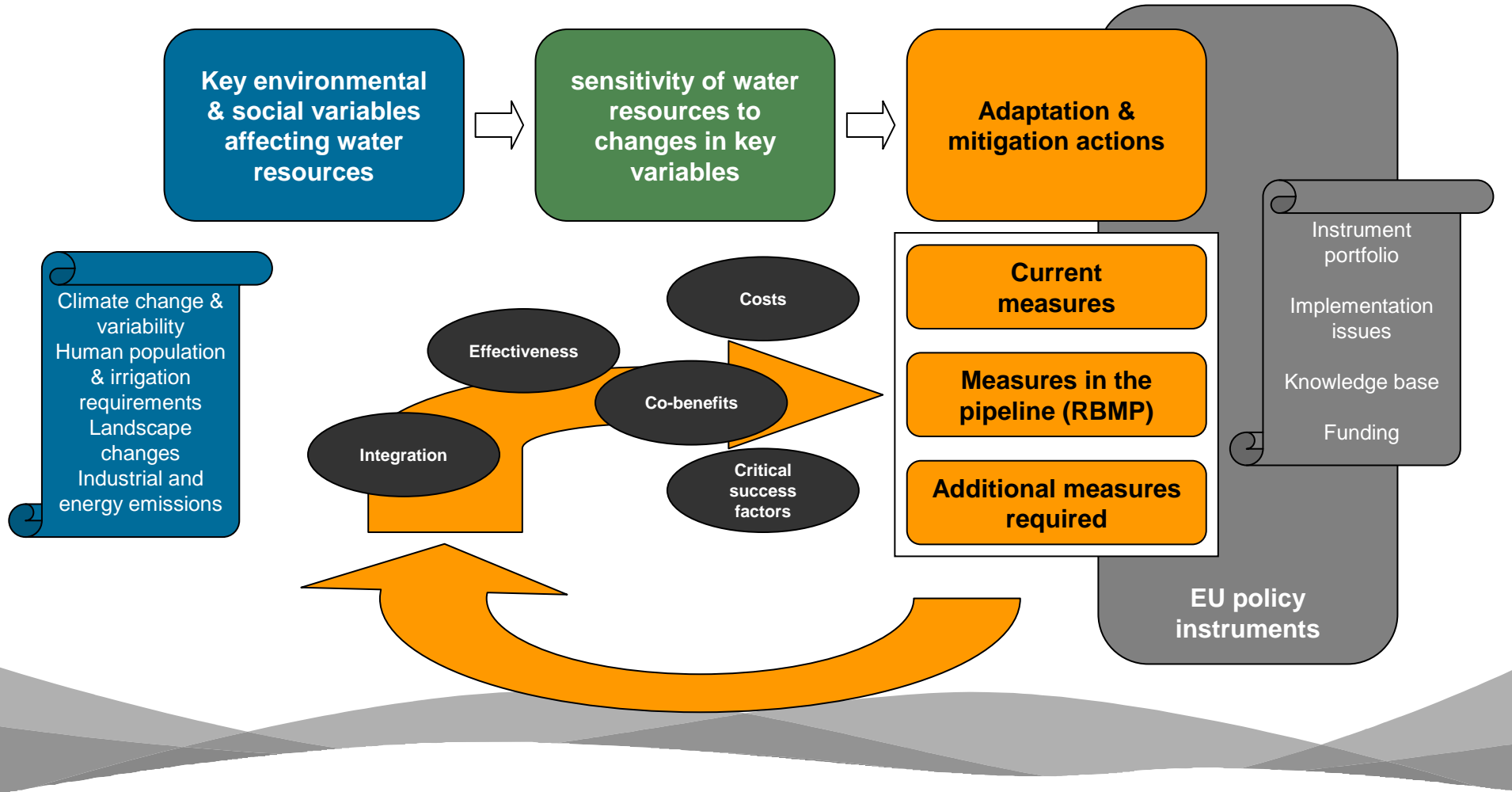
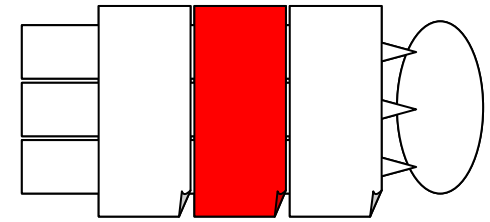
- **Part of European Commission Smart Regulation policy**
 - identify excessive burdens, overlaps, gaps, inconsistencies and/or obsolete measures which may have appeared over time
- **Objective:**
 - Assess the relevance, coherence, effectiveness and efficiency of the EU freshwater policy.
 - Scope: Water Framework, Groundwater, Priority Substance, Floods, Urban Waste Water and Nitrates Directives + Water Scarcity & Droughts policy
- **Preliminary findings for public consultation and discussion with stakeholders**
 - http://ec.europa.eu/environment/water/blueprint/pdf/safeguard_fitness_freshwater.pdf
- **Stakeholder workshop in January 2012.**
- **The Commission will publish a final report, early 2012**

Outlook for EU water resources

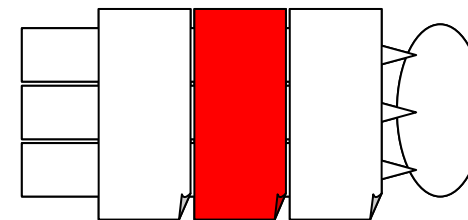


- **The Blueprint impact assessment identify the broad range of pressures on water resources:**
 - ➔ Organic/Nutrient pollution, dangerous substances
 - ➔ Hydromorphology/ Sediments
 - ➔ Disruption water cycle, droughts, floods
 - ➔ Over-exploitation water resources
- **It will build on the EEA State Of the Environment Report (SOER 2010), complemented by the EEA « State of Water » report to be published at the same time as the Blueprint**
- **Cross-sectoral / cross-policies assessment (drivers, responses)**
- **Common baseline, medium (2020-30) and long-term (2050) scenarios, sensitivity analysis.**

Impact Assessment Framework



From problem description to objectives



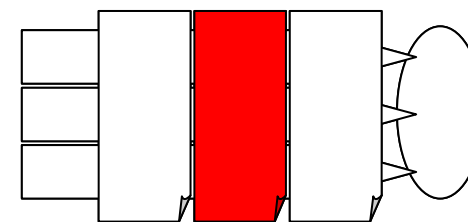
■ Problem description

- Identification of the **key challenges**
- Which **measures** are needed as a **priority**
- Analysis of the need to act at EU level: **policy options**

■ Objectives

- **General:** A water (and resources) efficient society (link to Europe 2020)
- **Specific:** Indicative targets at EU level on natural water retention, water savings, water reuse/recycling, water quality
- **Operational:** link to policy options

Scenarios and targets for the protection of water resources



Water resource balances (quantity, quality) for relevant European river basins - SEEAW framework - monthly resolution - ECRINS reference system

Disaggregated information on the **use of water** for the base year by the different economic activities, including estimates on its environmental impact.

Information on technical, non technical or structural **measures** affecting water availability and water use by the different economic activities, including estimates on their environmental impact.

Scenarios for land-use changes, hydrological parameters and use of water by the different economic activities

optimisation model, maximization of net social benefits from the use of water by economic sectors

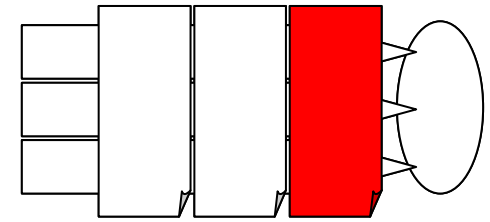
baseline scenario / sensitivity analysis

Selection of measures

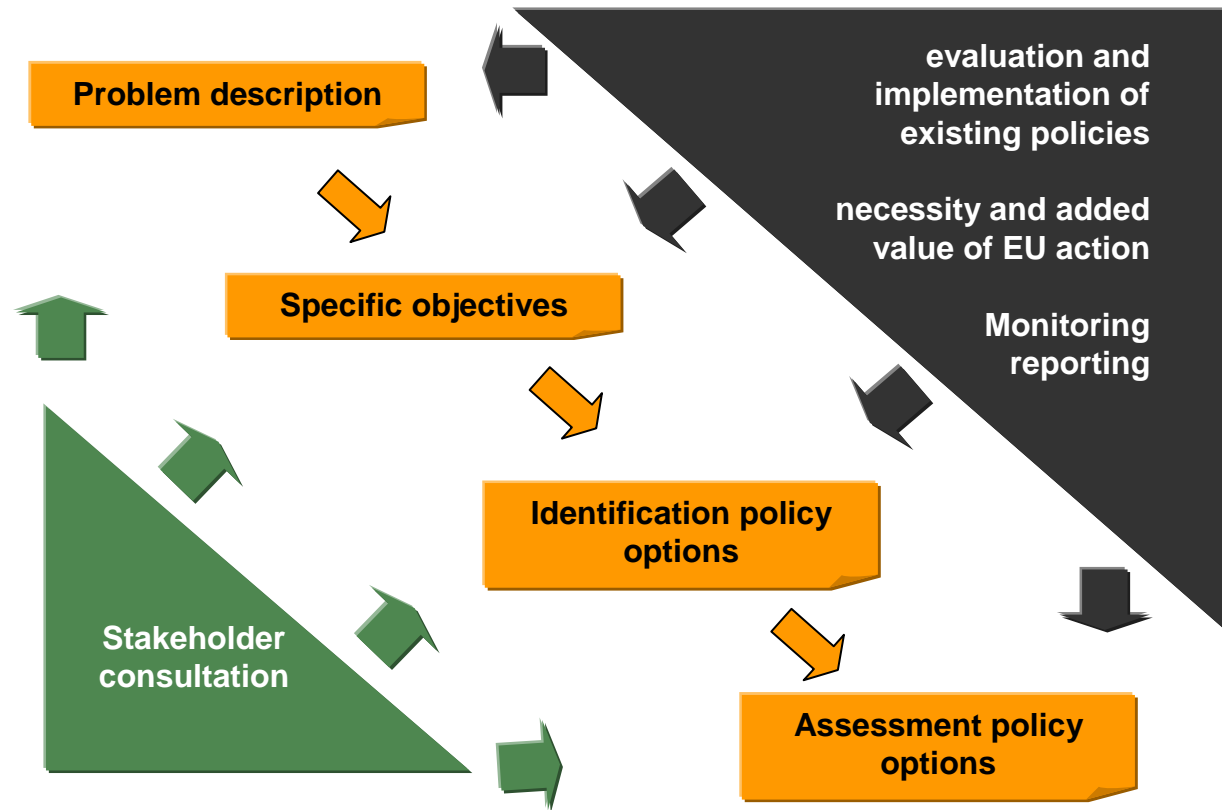
Blueprint Specific Objectives

indicative targets at EU level for reducing the vulnerability of water resources

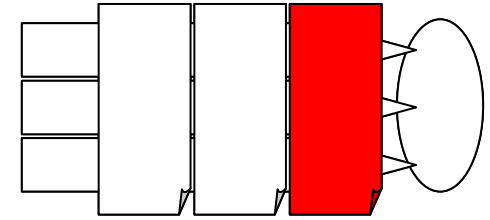
Policy options



- Land-use management
- Economic Incentives
- Target to protect water resources
- Governance of water policy
- Knowledge Base
- Innovation
- Global Dimension

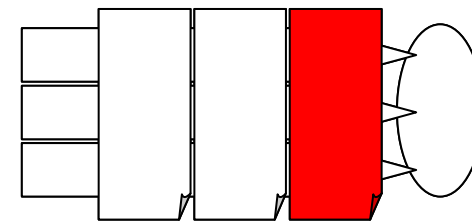


Policy options (1/7): Develop a positive role for land-use



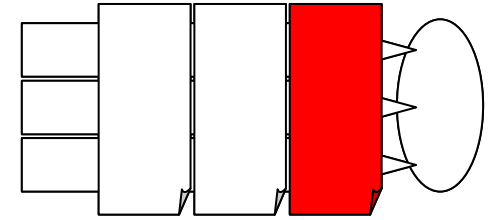
- **Land use change is one of the main drivers of the degradation of water resources and vulnerability to extreme events**
- **Identify and analyse natural water retention measures that could be widely implemented at EU level**
 - Reforestation, soil management, sustainable urban drainage systems, floodplain restoration, etc.
 - Assessment of co-benefits and barriers to implementation
- **Define the policy instruments that can accelerate the implementation of those measures**
 - Guidelines for RBMP
 - Integration into territorial management instruments (CAP, Cohesion Policy, local planning)
 - Payment for Ecosystem Services

Policy options (2/7): Economic incentives for a more efficient water resources management



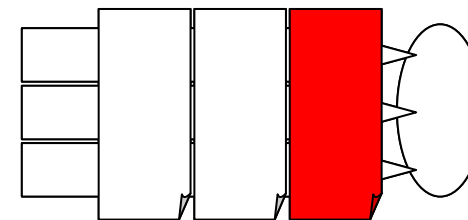
- **Develop a consistent approach for the internalisation of costs from water use and water pollution**
- **The options to be developed include:**
 - ➔ More concrete criteria for pricing, taxation, removal of harmful subsidies, etc.
 - ➔ Setup of water allocation schemes (including tradable permits) in water scarce areas
 - ➔ Payment for ecosystem services
 - ➔ Certification schemes
 - ➔ Water efficiency in buildings and distribution networks

Policy options (3/7): Water efficiency targets and measures to protect water resources



- **Water accounts developed by the European Commission and EEA**
 - As support for a policy aiming at a more resource efficient use of water (quantity + quality)
 - As support for a policy promoting implementation of ecosystem based approaches for water provision
 - As a tool for demand management at river basin level
- **Policy Options:**
 - Development of targets for water efficiency (and quality improvement) in the MS at sectoral and river basin level
 - Provide a framework for the development of water efficiency measures, in particular reuse and recycling

Policy options (4/7): Governance



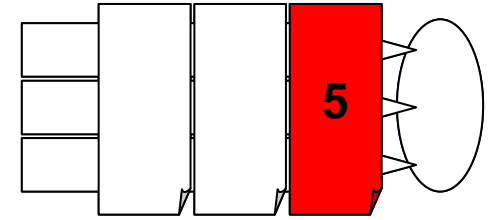
■ Input from the Fitness Check:

- A set of specific suggestions to improve the governance system stemming from EU water policy

■ On that basis, and building on the RBMPs assessments, options to be developed will aim at:

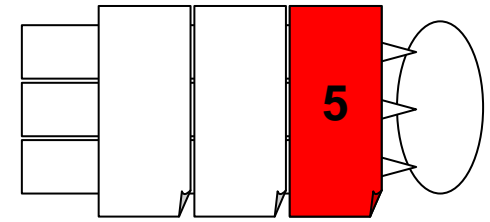
- Improving the **administrative setup** (at both national and trans-boundary level, e.g. enhancing the role of River Basin Authorities)
- Improve the **efficiency of the implementation** (e.g. reporting requirements) while providing the reactive capacity needed to face emerging challenges (e.g. climate change adaptation)

Policy options (5/7): Knowledge base



- On-going knowledge mapping
- Fitness Check / Assessment RBMP: Identification of gaps, administrative burden, areas for improvement
- Trans-boundary river basins: need for coherence/transparency on water allocation
- Possible options
 - Stronger statistics activity on pressures on water resources
 - River basin, seasonal focus
 - Increased use of satellite and land GMES observations
 - Enhanced Water Information System for Europe (WISE) to include policy relevant indicators
 - Development of a roadmap for water research under the next Framework Programme

« Water Science meets Policy » : Key research needs identified (1/2)



■ Ecological Status, Hydromorphology:

- new bio-assessment tools: fill the gaps, extrapolation
- Interaction sediments / flow / connectivity + links with biodiversity and ecosystem services

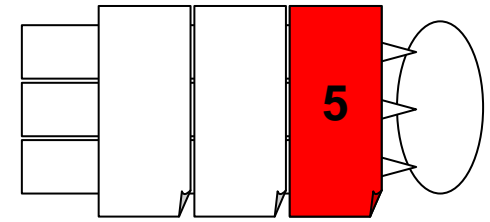
■ Groundwater

- fate and behaviour of pollutants
- Groundwater dependent ecosystems and groundwater as an ecosystem
- impacts of climate change
- interactions between energy policy

■ Chemicals:

- Improvement/development of chemico-analytical methods consistent with EQS Directive
- Evaluation interactions between substances and effects on environment

« Water Science meets Policy » : Key research needs identified (2/2)



■ Floods

- Ecosystem-based approach
- Climate change adaptation.

■ Water Scarcity and droughts

- Indicators
- Impacts of climate change and adaptation

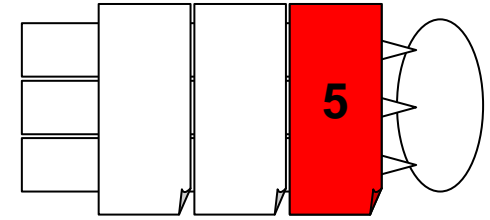
■ Agriculture

- evaluation cost-effectiveness of water resources protection measures
- up-tacking of measures by farmers

■ Horizontal needs for RB managers:

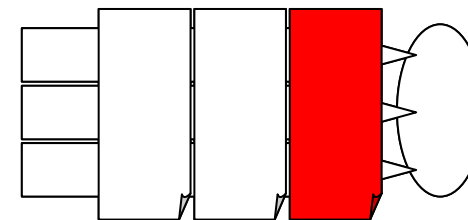
- Scale-specific indicators (e.g. river basin-wide indicators)
- Social approach with uncertainties and model inputs
- Ecosystem services (e)valuation
- Water Cycle/ Land use
- Measures
- Synergy between Directives

The Blueprint will just be the starting point.



- **The Blueprint will :**
 - make use of all relevant scientific knowledge
 - identify the gaps and set a research agenda for the next 10 years,
 - facilitate the implementation of an integrated and adaptive management approach for water resources.
- **Interaction with policy making should happen both:**
 - at EU level to support a strategic vision for EU Water policy,
 - at river basin level, for the next generations of RBMP (2015, 2021).
- **Need to improve the interaction, not only between science and policy makers, but also with end water users:**
 - Need for targeted communication of scientific evidence, as they will have to implement and bear the cost of the measures.
- **Transform WISE in a real knowledge sharing platform**
 - Access to results of research projects, demonstration studies, etc. in a structured way
 - Link with data from monitoring and indicators, and guidelines for policy making.

Policy options (6/7): Innovation



■ Plans for an Innovation Partnership (IP) on Water Efficiency:

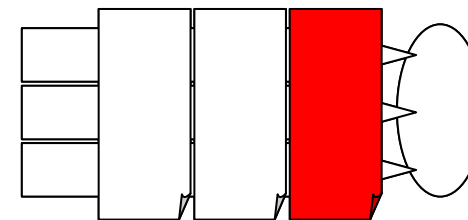
- To identify barriers to innovation in water resource management and ways to overcome them
- Multidisciplinary and multi-stakeholder approach to develop innovative solution for water challenges

■ The IP is being defined with stakeholders

■ 3 work packages: Urban areas, Rural areas and Industrial users

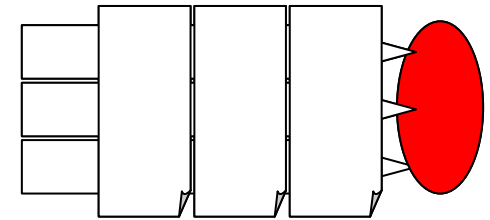
- Up to 30 Innovation sites to be established across Europe to test innovative solutions (technology, management practices, etc.)
- Focus on disseminating solutions and integrating the gradual output of the partnership into DG ENV policy development and implementation cycle

Policy options (7/7): Global aspects



- Millennium Development Goals (MDGs) on access to drinking water and sanitation
- Relevant outcomes of the Rio+20 Conference
- Supporting integrated water management in developing countries
- Trade implications (water footprint)

Calendar towards Blueprint adoption in November 2012



	2011-III	2011-IV	2012-I	2012-II	2012-III	2012-IV
	Assessment RBMP – Pressures & Measures					
	Water Efficiency in Buildings					
	WSD Gap Analysis					
	ClimWatAdapt					
	Natural water retention measures					
		Fitness Check 2				
		Water resources balances				
		Scenarios & Targets				
		Impact Assessment Policy options				
Public Consultations		FC		Options		
Key Events			FC	WWF	GW	END
Adoption				IAB	ISC	15/11

Thank you for your attention!

More information:

http://ec.europa.eu/environment/water/blueprint/index_en.htm

