

Procedure file

Basic information		
INI - Own-initiative procedure	2008/2074(INI)	Procedure completed
Addressing the challenge of water scarcity and droughts in the European Union		
Subject 3.70.04 Water control and management, pollution of waterways, water pollution 3.70.11 Natural disasters, Solidarity Fund		

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	ENVI Environment, Public Health and Food Safety		08/10/2007
		PPE-DE SEEBER Richard	
	Committee for opinion	Rapporteur for opinion	Appointed
	ECON Economic and Monetary Affairs	The committee decided not to give an opinion.	
	ITRE Industry, Research and Energy	The committee decided not to give an opinion.	
	REGI Regional Development		20/11/2007
		PSE GARCÍA PÉREZ Iratxe	
	AGRI Agriculture and Rural Development		31/03/2008
		PPE-DE HERRANZ GARCÍA Esther	
European Commission	Commission DG	Commissioner	
	Environment	DIMAS Stavros	

Key events			
18/07/2007	Non-legislative basic document published	COM(2007)0414	Summary
13/03/2008	Committee referral announced in Parliament		
09/09/2008	Vote in committee		Summary
22/09/2008	Committee report tabled for plenary	A6-0362/2008	
08/10/2008	Debate in Parliament		
09/10/2008	Results of vote in Parliament		
09/10/2008	Decision by Parliament	T6-0473/2008	Summary

09/10/2008	End of procedure in Parliament		
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Technical information	
Procedure reference	2008/2074(INI)
Procedure type	INI - Own-initiative procedure
Procedure subtype	Strategic initiative
Legal basis	Rules of Procedure EP 54
Stage reached in procedure	Procedure completed
Committee dossier	ENVI/6/52596

Documentation gateway					
Non-legislative basic document		COM(2007)0414	18/07/2007	EC	Summary
Document attached to the procedure		SEC(2007)0993	18/07/2007	EC	
Document attached to the procedure		SEC(2007)0996	18/07/2007	EC	
Committee draft report		PE405.955	05/05/2008	EP	
Committee opinion	REGI	PE404.481	02/06/2008	EP	
Amendments tabled in committee		PE407.761	10/06/2008	EP	
Committee opinion	AGRI	PE404.756	25/06/2008	EP	
Committee report tabled for plenary, single reading		A6-0362/2008	22/09/2008	EP	
Text adopted by Parliament, single reading		T6-0473/2008	09/10/2008	EP	Summary
Commission response to text adopted in plenary		SP(2008)6664	12/11/2008	EC	
Follow-up document		COM(2008)0875	19/12/2008	EC	Summary
Follow-up document		SEC(2008)3069	19/12/2008	EC	
Follow-up document		COM(2010)0228	18/05/2010	EC	Summary
Follow-up document		SEC(2010)0573	18/05/2010	EC	Summary
Follow-up document		COM(2011)0133	21/03/2011	EC	Summary
Follow-up document		SEC(2011)0338	21/03/2011	EC	
Follow-up document		COM(2012)0672	14/11/2012	EC	Summary
Follow-up document		SWD(2012)0380	14/11/2012	EC	

Addressing the challenge of water scarcity and droughts in the European Union

PURPOSE: to address the challenge of water scarcity and droughts in the European Union.

CONTENT: over the past thirty years, droughts have dramatically increased in number and intensity in the EU. The number of areas and people affected by droughts went up by almost 20% between 1976 and 2006. One of the most widespread droughts occurred in 2003 when over 100 million people and a third of the EU territory was affected. The cost of damage to the European economy was at least EUR 8.7 billion. The total cost of droughts over the past thirty years amounts to EUR 100 billion. The yearly average cost quadrupled over the same period.

While 'drought' means a temporary decrease in water availability, 'water scarcity' means that water demand exceeds the water resources

exploitable under sustainable conditions. At least 11% of the European population and 17% of its territory have been affected by water scarcity. In a context where changes in climate are foreseen in spite of significant EU mitigation efforts, this trend is expected to continue and even worsen. According to the Intergovernmental Panel on Climate Change, climate change would bring water scarcity to between 1.1 and 3.2 billion people if temperatures rose by 2 to 3° C. Drought affected areas are likely to increase in extent. In these circumstances, it has become an EU priority to devise effective drought risk management strategies.

CONTENT: Against this background, this Communication presents an initial set of policy options at a European, national and regional level to address and mitigate the challenge posed by water scarcity and drought within the Union. It is also a response to a request for action on water scarcity and droughts from the Environment Council meeting in June 2006.

In this Communication the Commission sets out a list of challenges that need to be addressed. For each challenge a way forward is proposed and an example of 'good practice' given. In summary, the main challenges, faced by the EU include:

Progressing towards the full implementation of the Water Framework Directive (WFD): Implementation of this Directive (Directive 2000/60/EC) is given high priority in order to address the mismanagement of water resources.

Ineffective water pricing policies: The 'user pays' principle is hardly implemented beyond the sectors of drinking water supply and waste water treatment. Introducing this principle at an EU level would put an end to needless losses or waste, thereby ensuring that water remains available for essential use across Europe, including all parts of trans-boundary river basins. A more effective water pricing policy would encourage efficient water use.

Land use planning: This is also one of the main drivers of water use. Inadequate water allocation between economic sectors results in imbalances between water needs and existing water resources. A pragmatic shift is required in order to change policy-making patterns and to move forward effective land-use planning at the appropriate levels.

Water savings: There is a huge potential for water savings across Europe. Europe continues to waste at least 20% of its water due to inefficiency. Water saving must become the priority and all possibilities to improve water efficiency must therefore be explored. Policy making should be based on a clear water hierarchy. Additional water supply infrastructures should be considered as an option when other options have been exhausted, including effective water pricing policy and cost-effective alternatives. Water uses should also be prioritised: it is clear that public water supply should always be the overriding priority to ensure access to adequate water provision.

Improving drought risk management: at European level, the Commission proposes fostering exchanges of information and best practices on drought risk management; identifying methodologies for drought thresholds and drought mapping and developing recommendations by the end of 2008. At national level, by 2009, it proposes the drawing up of specific drought management plans to supplement WFD river basin management plans, where needed, in accordance with WFD provisions. It also recommends the creation of a drought observatory and a rapid alert system and to make use of the EU's Solidarity Fund and the Civil Protection Mechanism for these purposes.

Considering additional water supply infrastructures: there are several possible ways of developing additional water infrastructures, (e.g. the storage of surface or ground waters, water transfers, or use of alternative sources). The construction of new water supply dams and water transfers are subject to EU legislation. Alternative options like desalination or waste water re-use are increasingly considered as potential solutions across Europe.

Fostering water efficient technologies and practices: in addition to improving technologies, the upgrading of water management practices is a necessary instrument in all sectors where huge quantities of water are used (e.g. agriculture, manufacturing or tourism). The Commission suggests, among other things, the development of standards for water-using devices, such as irrigation systems and other energy-using farm equipment, as well as developing a new directive similar to the Energy Performance of Buildings Directive for the water performance of buildings.

Fostering the emergence of a water-saving culture in Europe: developing a responsible water-saving and efficiency culture requires an active awareness-raising policy in which all actors in the water sector need to be involved. Information, education and training are priority areas for action.

High quality knowledge and information: existing European and national assessment and monitoring programmes are neither integrated nor complete. Filling knowledge gaps and ensuring data comparability across the EU is therefore a precondition. In this context, research has a significant role to play for policy makers.

To conclude, the challenge of water scarcity and droughts needs to be addressed both as an essential environmental issue and also as a precondition for sustainable economic growth in Europe. As the EU seeks to revitalise and reinvigorate its economy and continue to take a lead on tackling climate change, devising an effective strategy towards water efficiency can make a substantial contribution.

The Commission has identified a first set of policy options with a view to opening up a wide-ranging debate on how to adapt to water scarcity and droughts – two phenomena that could potentially increase. The Commission is of the view that more has to be done in order to introduce these measures swiftly at an EU level. In future, it will review progress towards the set of orientations and will report on them to both the Council and Parliament. Any follow-up initiatives may be considered within the coming few years.

Addressing the challenge of water scarcity and droughts in the European Union

The Committee on the Environment, Public Health and Food Safety adopted the own initiative report by Richard SEEBER (EPP- ED, AT) in response to the Commission's communication entitled 'Addressing the Challenges of Water Scarcity and Droughts in the European Union'.

MEPs welcome the Communication and support the proposed first set of policy options for action, but regret that its scope is limited to the EU and Member State level only. They recall that water scarcity and drought is a problem with an international dimension and that action needs to be taken accordingly.

Integrated approach: MEPs regret that the Communication limits itself to promoting general objectives, proposing only a limited number of precise measures and no concrete timetable for their implementation. The Commission is called upon to present an ongoing programme, in

particular a progress report in 2009 and the review and development of the European Union's strategy. MEPs stress the need to mainstream the issue of water into all policy areas and to create a truly integrated approach when addressing it, including all of the financial and legal instruments of the EU. They underline that all political levels (national, regional and local) should be involved in the process.

Coordinated action: the report stresses that the cross-regional and trans-border nature of river basins can have a serious cross-border impact on upstream and downstream regions, and that it is thus indispensable for the Member States, as well as regional and local authorities, to cooperate on the issue of water scarcity and drought, ensuring sustainable and fair use of water resources. MEPs consider that the specificity of the water scarcity and droughts issue requires coordinated action at EU and Member State level as well as at regional and local government level.

The role of regions: the report highlights the importance of the regions as a driving force behind technological innovation in the field of water, the report calls on regional and local authorities to take advantage of the great opportunities offered by the Structural Funds and invest in the improvement or renewal of existing infrastructure and technology including, notably, clean technologies that facilitate the efficient use of water. MEPs maintain, in this context, that infrastructure funding should be allocated with a view to implementing measures to improve the management and supply of high-quality water, in keeping with existing needs.

Demand-side measures: the report recalls that a demand-side approach should be preferred when managing water resources. Supply-side measures should also be considered, with a view to achieving the most economically and environmentally efficient solution, optimising the balance between supply and demand, and ensuring an uninterrupted public water supply including during drought conditions. MEPs stress, however, the construction of diversions to transport water over large distances should not be the solution to the problem of water scarcity.

Climate change: recalling the link between climate change, water scarcity and drought, MEPs call for account to be taken of the impact on water resources when policies to combat climate change are drawn up. They stress that the revision of Community budget priorities should accord a higher ranking to environmental measures and, in particular, to policies designed to combat the effects of climate change, which include drought and water scarcity, ensuring that the necessary additional resources are available. The Commission and Member States are urged to acknowledge that deforestation and unrestrained urban development are contributing to growing water scarcity. MEPs call on the Member States and the authorities concerned to pay heed to water-related considerations in their land-use planning, especially in connection with the development of economic activities in sensitive river basins.

Water quality: the report acknowledges the importance of the WFD as a framework for achieving "good status" for all European waters, promoting inter-regional cooperation, sustainable water use and protection of available water resources while contributing to mitigating the effects of floods and droughts. MEPs call upon the Commission and all the Member States to implement fully its provisions and to ensure that water scarcity and drought measures have no negative effects on water quality objectives.

Water saving potential: recalling that almost 20% of water in the EU is lost due to water inefficiency, the report underlines the need for major investments in order to improve technical progress in all economic sectors. MEPs stress that any supply of water regardless of the purpose of its consumption must comply with the principle of fair water tariffication, thereby encouraging companies especially to use water more efficiently. Welcoming the fact that water saving is the Commission's first priority in response to water scarcity and droughts, MEPs urge the Commission in this connection to ensure that use of Structural Funds does not run counter to this priority, to incorporate sustainable water management as a criterion that projects must satisfy, and to obtain evidence of the utilisation by local and regional authorities of water savings and of their compliance with the requirements of the WFD, before granting them funding from the Structural Funds.

Combating waste: stressing that 40% of the water used in the EU could be saved, MEPs call for concrete measures and financial incentives to promote a more efficient and sustainable use of water. They call, likewise, for the widespread installation of metering devices to measure water consumption in order to encourage saving, re-use and the efficient and rational use of water. They call for the widespread installation of metering devices to measure water consumption in order to encourage saving, re-use and the efficient and rational use of water. Bearing in mind that losses owing to leakages in the public water supply network in urban centres may exceed 50%, MEPs ask the Commission to look into the possibility of promoting a network of cities to encourage sustainable water use with the aim of exchanging good practices such as re-use, saving and improved water efficiency and jointly carrying out pilot demonstration projects. The European Union is called on to support measures to improve water management in agriculture, promoting a modernisation of irrigation systems to reduce water consumption and boosting research in this field.

Consumer awareness: the report recalls that consumers have a major role to play if a sustainable use of water resources is to be achieved in the EU. MEPs call on the EU to launch a public information and education campaign to make people aware of the water issue and encouraging them to take concrete actions. The Commission is invited to encourage the exchange of good practice among regions, cities and civil society organisations, focusing on measures to save water (including the purification of rain and waste water), improve water efficiency and manage the risk of droughts. MEPs take the view that a labelling system for the water consumption of products, which already exists for energy efficiency, would be an appropriate tool for achieving a more sustainable water consumption. They point out that devising an efficient water pricing policy which reflects the true value of water may encourage consumers to be more sparing in their use of water.

Addressing the challenge of water scarcity and droughts in the European Union

The European Parliament adopted by 594 votes to 45, with 12 abstentions, a resolution in response to the Commission's communication entitled "Addressing the Challenges of Water Scarcity and Droughts in the European Union".

The own-initiative report had been tabled for consideration by Richard SEEGER (EPP- ED, AT) on behalf of the Committee on the Environment, Public Health and Food Safety.

MEPs welcome the Communication and support the proposed first set of policy options for action, but regret that its scope is limited to the EU and Member State level only. They recall that water scarcity and drought is a problem with an international dimension and that action needs to be taken accordingly.

Integrated approach: MEPs regret that the Communication limits itself to promoting general objectives, proposing only a limited number of precise measures and no concrete timetable for their implementation. The Commission is called upon to present an ongoing programme, in particular a progress report in 2009 and the review and development of the European Union's strategy. MEPs stress the need to mainstream the issue of water into all policy areas and to create a truly integrated approach when addressing it, including all of the financial and legal instruments of the EU. They underline that all political levels (national, regional and local) should be involved in the process.

Coordinated action: the resolution stresses that the cross-regional and trans-border nature of river basins can have a serious cross-border impact on upstream and downstream regions, and that it is thus indispensable for the Member States, as well as regional and local authorities, to cooperate on the issue of water scarcity and drought, ensuring sustainable and fair use of water resources. MEPs consider that the specificity of the water scarcity and droughts issue requires coordinated action at EU and Member State level as well as at regional and local government level.

The role of regions: the resolution highlights the importance of the regions as a driving force behind technological innovation in the field of water, the report calls on regional and local authorities to take advantage of the great opportunities offered by the Structural Funds and invest in the improvement or renewal of existing infrastructure and technology including, notably, clean technologies that facilitate the efficient use of water. MEPs maintain, in this context, that infrastructure funding should be allocated with a view to implementing measures to improve the management and supply of high-quality water, in keeping with existing needs.

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The Parliament calls on the Commission to consider financing in 2009 a pilot project intended to cover research, surveying and monitoring for the development of prevention activities to halt desertification and steppe formation in Europe. It is also called upon to promote the entry into operation of the European Drought Observatory within the framework of the European Environment Agency to enhance sound, strategic decision-making.

Addressing the challenge of water scarcity and droughts in the European Union

The Commission presented a follow-up Report to the [Communication](#) on water scarcity and droughts in the European Union. In October 2007, the Council supported the options identified at European and national levels in the Communication and invited the Commission to review and further develop the evolving strategy for water scarcity and droughts by 2012.

This report is the first follow-up report based on the progress made in putting into effect the options of the Communication. It specifies the progress needed in relation to the different strategic options and presents a work programme for the medium and long term. It identifies some encouraging policy initiatives at both EU and national levels that have contributed to these results, although there is a great deal still to be done.

The document specifies the progress needed on the seven key challenges which must be tackled if Europe is to move towards a water efficient and water saving economy. These challenges are as follows:

1. the need to fully implement the Water Framework Directive: in this context, setting water pricing policies in a manner consistent with water availability remains a challenge at all levels of governance;
2. moving towards sustainable land use planning and the need to improve the financing of water efficiency within the framework of existing sectoral policies;
3. the need to develop operational drought management plans in order to efficiently prevent and mitigate drought impacts on environment, society and economy;
4. assessment of water supply infrastructures: additional water supply infrastructures (such as storage of water, water transfers or use of alternative sources) should be considered as an option when other options, including effective water pricing policy and cost-effective alternatives, have been exhausted;
5. the promotion of water efficient technologies and practices (specific standards for water-using devices; sustainable consumption and production; implementing the current Ecodesign Directive; steps to reduce leakages in water networks, etc.);
6. the development of a water-saving culture in Europe, including by developing actions for communication and education in order to increase public awareness on water quantity issues;
7. the improvement of knowledge and data collection.

Adaptation to climate change has likewise become a top priority for the EU agenda, and the challenge of water scarcity should be considered in this broader context.

In conclusion, the follow-up report shows that, while progress has been made, a great deal still needs to be done in order to improve water demand management more widely across Europe and to avoid mismanagement of water resources, especially in water-scarce areas. The priorities set by the Commission remain valid and continued attention needs to be paid to implementation in all priority areas.

As announced in the 2007 Communication, the Commission will provide from 2009 onwards an annual European assessment on water scarcity and droughts that will make it possible to monitor the evolution of the issue across Europe on a regular basis.

The implementation of the work programme will be monitored and will be part of the review of the strategy for water scarcity and droughts mentioned in the Council Conclusions of 30 October 2007 and planned for 2012.

Addressing the challenge of water scarcity and droughts in the European Union

This Commission Staff Working Document which accompanies the second follow-up report to the Communication on water scarcity and droughts in the European Union presents additional information to the report.

In particular, it sets out, in tabular form, a timetable as regards the timing and the state of play of each of the seven key areas which must be tackled if Europe is to move towards a water efficient and water saving economy. These areas are summarised in the follow-up document dated 18/05/2010 under the same procedure reference.

Addressing the challenge of water scarcity and droughts in the European Union

[The Commission presented the second follow-up Report to the](#) Communication on water scarcity and droughts in the European Union.

The aim of the report is to present the progress that has been achieved across Europe over the last year.

In April 2009 the European Commission presented a [White Paper](#) which sets out a framework for climate adaptation measures and policies to reduce the EU's vulnerability to the impacts of climate change. It stressed the need for further measures to enhance water efficiency and to increase resilience to climate change. 22 December 2009 was a milestone in European water policy. This is the date by which the implementation of the Water Framework Directive (WFD) required River Basin Management Plans (RBMPs) to be adopted for all river basins across the EU. This will give a clearer overview of what Member States are planning in the respective river basins for tackling water scarcity and drought problems.

However, by December 2009, several of the Member States where water scarcity and drought is expected to be most severe had not adopted their plans.

The document specifies the progress made in the seven key areas which must be tackled if Europe is to move towards a water efficient and water saving economy. These areas may be summarised as follows:

1. Full implementation of the Water Framework Directive: in this context, setting water pricing policies in a manner consistent with water availability remains a challenge at all levels of governance;

moving towards sustainable land use planning and the need to improve the financing of water efficiency within the framework of existing sectoral policies.

2. Allocating water and water-related funding more efficiently: large-scale development of economic activities such as tourism or farming could lead to over-abstraction of waters which can cause significant problems, particularly in water-scarce areas. Several activities linked to land-use

planning are ongoing across the EU both at European and at national level. In particular, as regards agriculture, to respond to new challenges, the Common Agricultural Policy (CAP) Health Check agreed in 2008 resulted in the inclusion of better water management objectives relating to cross-compliance. From 2010 Member States will have to define standards applying at farm level for compliance with existing national authorisation procedures when using water for irrigation. The Commission will carefully monitor the application of the cross-compliance rules resulting from the Health Check during the implementation phase. The tourism sector needs attention. A key challenge identified is to reduce water demand in the peak season and minimise resource use to reduce the ecological footprint and stress on water.

3. Improving drought risk management: as regards the development of drought risk management plans, the document considers that moving from 'crisis response' to 'risk management' in the context of water management is the way to improve society's resilience to water scarcity and droughts. The document states that the prototype of the European Drought Observatory (EDO) for drought forecasting, detection and monitoring in Europe is currently engaged in pre-operational production of drought indices using meteorological information.

It is also considered to further optimise the use of the EU Solidarity Fund and the European Mechanism for Civil Protection.

4. Considering additional water supply infrastructures: in those regions where water demand still exceeds the availability of resources, despite having exhausted all possible options to reduce water demand in line with the water hierarchy, new water supply infrastructures for the mitigation of drought effects could be considered. A study carried out for the Commission in December 2008 assessing the risks and impacts of four alternative water supply options (desalination, wastewater re-use, ground-water recharge, and rainwater harvesting) revealed that it is not possible to provide an EU-wide set of best available mitigation options. The documents highlights that the role of alternative water supply options will grow in the future due to climate change and the reduction of water availability, so particular attention should be paid to their implementation and the continuous improvement of knowledge in the field.

5. Fostering water-efficient technologies and practices: in July 2009 an assessment was finalised for the Commission showing that the introduction of mandatory requirements on water using devices under the extended Eco-design Directive could induce significant savings.

6. Fostering the emergence of a water-saving culture in Europe: following the adoption of the [revised EU Ecolabel Regulation](#) in November 2009, it is expected that the Ecolabel will play an increasingly important role in helping consumers buy environmentally friendly products, including those produced with lower water consumption and those that use less water. The Greening of Public Procurements is a major opportunity to stimulate the market for environmentally friendly products and technologies and to give priority to water-efficient products and technologies. The Commission strongly urges Member States to increase their level of green public procurement. The water footprint is increasingly used to raise consumers' awareness of water consumption. The Commission will consider whether it has a role to play in the future policy on water scarcity and droughts.

7. Improving knowledge and data collection: indicators are being produced under the Common Implementation of the WFD in co-ordination with the European Environmental Agency (EEA) and the Joint Research Centre (JRC). Research and development projects at both national and international level are playing a key role in seeking synergies between water scarcity and drought management policies. Following the request of the European Parliament the Commission will initiate pilot projects that could contribute to the work on tackling water scarcity and droughts.

Conclusion: the priorities of the 2007 Communication on water scarcity and droughts remain valid. Many measures have been implemented and actions carried out in response to the policy options identified in the Communication of 2007 but much more effort is needed to stop and reverse the process of over-exploitation of Europe's precious but limited water resources.

In 2010 the focus will be on water efficiency and in particular the potential for savings in domestic water use. The Commission will consider the options for EU measures on water savings that could be achieved by buildings (and will present them to stakeholders in 2011) and leakage reduction. The Commission's policy review on water scarcity and droughts in 2012 will focus on assessing what is being achieved and whether more action is needed.

The Commission is concerned that implementation of the Water Framework Directive in the Member States which are most affected by water scarcity is delayed. The Water Framework Directive requires the Commission to publish, by 2012, a report on its implementation which will review how Member States have tackled their river basin management planning. This policy review will contribute, together with a review of the vulnerability of environmental resources, to the Commission Blueprint for safeguarding Europe's water resources planned for 2012. The Blueprint will examine the effectiveness of current policies and the need for further policies or measures necessary to strengthen the resilience of EU water policy to the impacts of climate change. In particular, the Blueprint will look into the need for improved implementation and additional legislation, funding, incentive measures and the establishment of the necessary support for data collection, and scientific and technological development.

Addressing the challenge of water scarcity and droughts in the European Union

The Commission presents the third follow up report to the Communication on water scarcity and droughts (WS&D) in the EU which identified seven policy areas that had to be addressed if Europe was to move towards a water-efficient economy. In June 2010, the Council recognised that WS&D are already serious problems in many European regions and invited the Member States to promote more efficient and sustainable water use and recalled that trustworthy data would be needed on WS&D events to support further policy development.

This report covers the period May 2009 to May 2010 and is based upon the responses of 21 countries to the Commission's annual questionnaire. It is focused on the building blocks of the future WS&D policy - water efficiency, better planning and adequate implementation instruments ? which are key elements of the establishment of a water efficient economy that meets the challenge of the [EU 2020 strategy](#).

The situation concerning water scarcity was as follows:

- three Member States reported that they faced continuous water scarcity (CZ, CY, MT);
- five Member States reported that they faced droughts or rainfall levels lower than the long term average (FR, PT, HU, ES, UK); and
- four Member States experienced local limited water scarcity occurrences (FR, NL, RO and SE).

Consequently, mitigation actions were developed and restrictions were applied in order to restrict water use (FR), irrigation (RO, SE, CY) and shipping (NL) in some of the affected Member States. Six Member States reported that they did not experience drought or water scarcity situations (AT, BE, EE, IE, LU, SK), and the same applied to Switzerland (CH). The report gives further details on the extent of WS&D in the

EU and the measures which are being put in place to address both situations. It also sets out the activities to be implemented by the Commission in preparation for the 2012 review of WS&D policy.

Blueprint: the Commission intends to adopt a "Blueprint" to safeguard Europe's waters by the end of 2012 based on assessments of the implementation of Directive 2000/60/EC (the Water Framework Directive or WFD), WS&D policy and the vulnerability of water resources to climate change and other man-made pressures. This evaluation has a twofold purpose:

- it will look back and assess the implementation and achievements of policies and measures in place to ensure the protection and availability of EU water resources, while identifying gaps and shortcomings;
- it will look forward at the evolving vulnerability of the water environment to identify measures and tools that will be needed in several EU policy areas in order to ensure a sustainable use of water in the EU in the long term;

The Blueprint will synthesise policy recommendations and will be accompanied by a number of new initiatives, including of a legislative nature if appropriate. It will also examine the needs for additional funding, incentives, measures and the establishment of the necessary support for data collection, scientific and technological development. It will consider the links between the various aspects of water policy, including those relating to quality and availability. The Blueprint will be developed in close consultation with stakeholders.

Financing: with regard to financing at EU level, the report notes that Member States plan to spend 26.9% of CAP Health-Check and European Economic Recovery

Plan (EERP) funds on water management. Of these funds, for the remainder of the current period, the various rural development programmes set out planned spending of EUR 184 million for water storage, EUR 568 million Euros on water savings technologies and EUR 119 million for wetland restoration. In the coming years rural development policy will remain an indispensable tool for improving care for the EU's precious water resources.

The next milestone of the WS&D policy is its review which will be published in 2012, in the Year of Water, as part of the Blueprint for Europe's waters.

In the next months, the Commission will focus on filling knowledge and data gaps and conducting an impact assessment for the review. The report notes that important knowledge gaps still exist as regards WS&D in the EU and trustworthy and comparable data are needed about the temporal and spatial distribution of water scarcity and droughts events, the expected impacts of climate change on water resources and the vulnerability of ecosystems, as well as the associated socio-economic aspects. As a part of the Common Implementation Strategy for the WFD period 2010-2012, an Expert Group is working on defining water scarcity and drought indicators. The Commission is also developing a set of vulnerability indicators for water related impacts under a set of climate change and socio-economic scenarios, and performing an inventory of potential adaptation measures and assessment of their impact, which gives a strong emphasis to WS&D issues.

The Commission has started an assessment of natural water retention measures and their potential impact i.e. on WS&D prevention. An upcoming Commission Communication will address the multiple benefits of green infrastructure including its role in water retention and mitigating the effects of extreme events.

The Commission's work on the review will be supported by the outcomes of the assessment of the River Basin Management Plans, the modelling of water vulnerability to man-made pressures, the cost-benefit analysis of natural water retention measures, the inputs from the Environmental Agency, the JRC and Eurostat and the forthcoming Communication on a road map towards a resource efficient economy.

Addressing the challenge of water scarcity and droughts in the European Union

The Commission presents a report reviewing the European Water Scarcity and Droughts Policy. It recalls that, following one of the most widespread droughts in 2003 affecting over 100 million people, with a cost of at least EUR 8.7 billion, the Commission adopted the [Communication on water scarcity and droughts in the EU](#). This laid down a water hierarchy under which water demand management should come first, with alternative supply options only when the potential for water efficiency has been exhausted. This report assesses the 7 main policy options identified in that Communication and also reviews whether the policy on water scarcity and droughts has achieved its objectives of reducing water scarcity and vulnerability to droughts. It also looks into whether action taken in the implementation of the Directive 2000/60/EC (Water Framework Directive - WFD) has contributed to addressing water scarcity and droughts. This assessment is based on a number of studies launched by the Commission and on the assessment of the Member States river basin management plans (RBMPs).

Generally, the Commission considers that overall objective of the water scarcity and droughts policy - to reverse the water scarcity and droughts trends - has not been achieved, although there has been progress in implementing the 7 policy instruments identified in the Commission's 2007 Communication. The report highlights certain points.

1. Integration of Water Scarcity and Droughts measures in the RBMPs: water scarcity and droughts are recognized as relevant issues by RBMPs across the EU. Water scarcity is reported for the whole Mediterranean area, and for some areas in Central, Eastern and Northern Europe but 41% of the RBMPs do not consider water scarcity as a relevant concern. Drought is reported for a wide range of River Basin Districts across Europe but 40% of the RBMPs do not consider drought relevant.

The analysis of water quantity aspects lacks adequate foundation in many RBMPs: quantity data are insufficient and water scarcity is often not clearly distinguished from droughts and vice-versa. Water demand scenarios are presented for only 35% and water availability scenarios for less than 25% of the RBMPs. 80% of the plans do not assess the uncertainty of data and 90% do not specify the sources of funds to implement the relevant measures.

Measures to ensure the achievement of the WFD objectives by enhancing the resilience of the ecosystems are included in 45% of the RBMPs. Only in a few basins that face water scarcity, restrictions to new water-consuming developments are envisaged as a high priority in the RBMPs.

The influence of other sectoral policies on the reduction of water scarcity and the mitigation of drought effects is not sufficiently covered: for only 12% of the RBMPs, the pressures on water resources by the different sectors are identified.

2. Gaps in the current Water Scarcity and Droughts policy: the Commission's assessment shows a diversity of inter-linked policy gaps in addressing water scarcity and droughts in Europe. These include:

- conceptual gaps: the understanding of the causal relationships between drivers, pressures, states and impacts that would help identifying the most cost-effective measures for addressing water scarcity and droughts is still not sufficient. Water scarcity and droughts are often not distinguished and indicators to illustrate the two phenomena have so far been insufficient. Newly agreed indicators need to be calculated for the entire EU at appropriate geographical and time scale. This requires a coherent dataset at EU level;
- information gaps: the RBMPs include only limited data on current and future water demand and availability as well as on measures that target water scarcity and drought, availability of funding and their expected impact on WS&D. The absence of robust information hampers a proper assessment of the effectiveness and socio-economic impacts of measures;
- policy, governance and implementation gaps: overall, most support actions and measures proposed by Member States target pressures, state and impacts, giving priority to measures to increase water supply. Measures that target key drivers at the origin of water scarcity and drought, or the implementation of accompanying measures such as metering, pricing/subsidies and restriction of water consumption are proposed in a few RBMPs only. Responsibilities for and financing of the proposed measures is unclear. Adequate coordination with other planning processes and availability of financial resources is not satisfactory. Lastly, the links between water scarcity and ecological flows are not well established.

3. Tools for improving water quantity management: in addition to the [European Innovation Partnership on Water](#) and the [European Innovation Partnership Agricultural Productivity and Sustainability](#), the review highlights a number of tools to improve water quantity management in the next RBMPs. These include the following:

- Defining and implementing ecological flows: this requires the adaptation of current water allocation to consider the ecological needs of water-dependent ecosystems. If water allocations reflect ecological flow requirements, it will be possible to prevent or mitigate the effects of water scarcity and droughts.
- Defining and implementing targets for water efficiency: targets are best set at local level by stakeholders who have full knowledge of the different water use sectors and components of the hydrological cycle and who can ensure that targets are coherent and that efficiency measures are implemented where the socio-economic costs are the lowest.
- Promoting economic incentives for efficient water use: widening the scope of current economic instruments will provide incentives for sustainable water abstraction and use.
- Guiding land use to respond to water scarcity: ensuring that new economic development is coherent with the water availability is the basis for long-term sustainability, and specific attention on land use is required. This re-emphasises the need for proper integration between RBMPs and other economic and physical planning processes.
- Enhancing drought management in Europe: further development of the European Drought Observatory to operate as an early-warning system should be combined with an effective adaptation of the EU Solidarity Fund to cope with damages that could not be avoided.
- Promoting resilience to climate change: climate change is expected to worsen the impacts of already existing stresses on water, as changes in precipitation, combined with rising temperatures, will cause significant changes in the quality and availability of water resources. A combination of adaptation measures must be included in the policy answers to water scarcity and drought.

The report considers that the water scarcity and droughts policy has to some extent been considered as self-standing by Member States and a stronger focus on quantity issues in the implementation of the Water Framework Directive is critical. In the next implementation cycles of the Directive, this needs to be ensured along with further integration of water quantity issues into sectoral policies.

The policy gaps and concrete options to address them are considered in the [Commission Communication 'Blueprint to Safeguard Europe's Water Resources'](#) with a view to integrating water quantity issues more fully into the overall policy framework. Where relevant, further policy measures may be addressed in the Adaptation to climate change Strategy foreseen for spring 2013.