

Lipińska, Danuta

Article

European Union Water Policy: Key Issues and Challenges

Comparative Economic Research. Central and Eastern Europe

Provided in Cooperation with:

Institute of Economics, University of Łódź

Suggested Citation: Lipińska, Danuta (2012) : European Union Water Policy: Key Issues and Challenges, Comparative Economic Research. Central and Eastern Europe, ISSN 2082-6737, Łódź University Press, Łódź, Vol. 15, Iss. 3, pp. 123-141, <https://doi.org/10.2478/v10103-012-0020-z>

This Version is available at:

<https://hdl.handle.net/10419/259112>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/4.0>

DANUTA LIPIŃSKA*

European Union Water Policy: Key Issues and Challenges

Abstract

Water resources are among the most valuable resources of the natural environment. The sustainable and integrated management of these resources is the basis of European water policy. Pursuant to the Water Framework Directive, all waters in the European Union should achieve a state considered at least good by the year 2015. Just how this objective can be met continues to be a topic of discussions in some of the Member States. There exist serious problems and delays in performing and implementing the provisions of the Directive in most EU countries. What is more, the state of the water economy in several countries, including Poland, has been criticized by the European Commission. Many challenges stand before European water policy. They require solutions on a global and local level. This article presents current key problems and planned directions for EU water policy development, subjected to analysis and assessment. Note is taken on the newest initiative of the European Commission in the area of water policy, especially the plan for protecting Europe's water resources—the Blueprint to Safeguard Europe's Water Resources.

1. Introduction

Water is a vital resource and prerequisite for human, animal, and plant life as well as an indispensable resource for the economy. It also plays a fundamental role in the climate regulation cycle. Human activity is having an

* Ph.D., University of Łódź

enormous impact on water resources. Taking this into account, we need to protect water resources, manage water according to principles of sustainable development, and implement integrated water policy in the EU.

Protection of water resources, of fresh- and salt-water ecosystems, and of the water we drink and bathe in is therefore one of the cornerstones of environmental protection in Europe. The stakes are high and the issues transcend national boundaries. Concerted action at the EU level is necessary to ensure effective protection.

Water is a valuable resource that we must use properly and sparingly, making sure that we have enough for all of its uses, while avoiding polluting our rivers, seas, and oceans. Among all other natural resources, this is one of the most vital ones for our continued existence on this planet.

The Water Framework Directive (WFD)¹, which came into force in the year 2000, provides a framework for Member States to manage water resources in river basin districts across the European Union in an integrated way. All Member States have undertaken the commitment to protect and restore all bodies of ground and surface water (rivers, lakes, canals, and coastal water) so that all river basin districts achieve “good status”² by 2015 at the latest.

The 1st cycle of the WFD shows clear success stories, e.g. integration of the environmental perspective into water management, enhancement of international cooperation, public and stakeholder participation, growth in the knowledge base, and improvement of chemical water quality. However, we can see a long road ahead to meet the ambitious objectives of European water policy as well.

There are many problems in the water economy and sustainable management of water resources in Europe. The majority of Europeans are worried about both water quantity and quality. A recent European Commission survey shows that seven out of ten Europeans think that water-related problems are a serious concern³. Pollution from point and diffuse sources, over-abstraction of water, and alterations to rivers and lakes threaten efforts to achieve a good status for European waters by 2015. Moreover, droughts, floods, and chemical pollution are seen as significant challenges. Therefore, we need an integrated approach to the future of water resources in Europe. The various

¹ Directive 2000/60/EC establishing a framework for Community action in the field of water policy.

² “Good status” means both “good ecological status” and “good chemical status.” Read more at <http://www.eea.europa.eu/soer/europe/water-resources-quantity-and-flows>

³ European Commission (2012), *Attitudes of Europeans Towards Water – Related Issues*, Flash Eurobarometer, March 2012, http://ec.europa.eu/public_opinion/flash/fl_344_sum_en.pdf

European Union policies must be coordinated for the protection of water⁴. There is a need to maximize Europe's water-saving potential, where innovation and research can play a fundamental role in this respect. Water-related natural disasters such as droughts and floods have become more frequent and severe over large parts of our continent. Their severity and frequency is expected to increase as a result of climate change and changes in land use.

Water issues will all be considered by the European Commission in its new document—the “Blueprint to Safeguard Europe's Water Resources”—planned for November 2012. The Blueprint will identify current gaps and future priorities. It will propose measures to steer water policy development until 2020. It will be based on an analysis that integrates economic and climate modelling in the period up to 2050.

2. Setting the Scene in Water Policy and Management

According to the European Commission, more than 50% of European surface water bodies have less than good ecological status and the environmental objectives of the Water Framework Directive for 2015 will not be fully met⁵. The status of groundwater is also worrying. The main challenges in this context are in agriculture, climate change, hydromorphological pressure, and systemic challenges. Furthermore, a significant proportion of EU basins are currently scarce of water and this proportion will increase by 2030. Some measures are being implemented, but these will not be able to reverse the trend in the near future.

Freshwater resources are of major environmental and economic importance. Their distribution varies widely among and within countries. In arid regions, freshwater resources may at times be limited to an extent such that demand for water can be met only by going beyond sustainable use, leading to reductions in terms of freshwater quantity.

Access to good quality water in sufficient quantity is fundamental to the daily lives of every human being and to most economic activities. Water scarcity and droughts have now emerged as a major challenge and climate change is expected to make matters worse. This is a worldwide problem. The European Union has not been spared. Water scarcity and droughts are not just a matter of

⁴ Environment Council – informal meeting: *Europe Needs an Integrated Water Policy*, March 2011, Budapest, <http://www.eu2011.hu/news/europe-needs-integrated-water-policy>

⁵ European Commission (2012), *3rd European Water Conference, Summary Report*, Brussels, <http://waterblueprint2012.eu/conference-documentation>

concern for water managers. They have a direct impact on citizens and economic sectors that use and depend on water—agriculture, tourism, industry, energy, and transport. In particular, hydropower heavily depends on water availability. Water scarcity and droughts have broader impacts on natural resources at large through negative side-effects on biodiversity, water quality, increased risks of forest fires, and soil impoverishment as well.

Existing European and national assessment and monitoring programmes on water scarcity and droughts are neither integrated nor complete. Filling knowledge gaps and ensuring data comparability across the EU is now a big problem. In this context, research has a significant role to play in providing knowledge and support for water policy making.

Freshwater abstractions, particularly for public water supplies, irrigation, industrial processes, and the cooling of electric power plants, exert major pressure on water resources, with significant implications for their quantity and quality. Main concerns relate to the inefficient use of water and to its environmental and socio-economic consequences—low river flows, water shortages, salinization of freshwater bodies in coastal areas, human health problems, loss of wetlands, desertification, and reduced food production.

Europe continues to waste at least 20% of its water due to inefficiency (*Ecologic* 2007). The potential for water efficiency is not exploited to the fullest extent in the EU. Even though they are cost-effective, a number of measures are not taken owing to unaffordability. Integration achievements at EU, national, and regional levels vary widely from one sector to another. In general terms, there is a lack of consistency and, in some cases, even counter-productive effects on water resource protection.

To address the problem of illegal water abstraction, river basin authorities and managers need more leverage in identifying illegal abstraction and penalizing it. Compliance mechanisms applicable to all river basins are needed. In some parts of Europe, the rigidity of the water concession system is still a major problem, limiting the ability of river basin authorities to register the amount of water that is abstracted.

The subject of water and food security is part of a broader nexus between water, energy, and food. While food production is based on the availability of clean water, it also has considerable impact on water quality and quantity. For this reason it has to be sustainable if it does not want to be self-defeating. Similarly, energy production involves considerable quantities of water and may negatively impact on water quality. Finally, water transport, provision, and treatment require considerable amounts of energy. It is therefore essential to develop integrated sustainable policies that make coherent choices in these three fields. This is all the more necessary as worldwide water availability cannot be

taken for granted. Unfortunately, we are witnessing extremely serious droughts in 2012 in many parts of the world, notably the United States, but also in Southern and Eastern Europe (Potočnik 2012b).

Since its adoption, the WFD has been the main driver for improvement in governance in European water management. Public participation, cross-border cooperation, and the knowledge base have improved. The implementation of water policy has sometimes been difficult due to a fragmentation of institutions. Taking cooperation and coordination to a higher level requires the defining of common objectives.

Of importance is the fact that currently Member States have difficulty in implementing cross-sectorial activities between the WFD and other sectors. This is because water policy makers have no jurisdiction to intervene in other sectors such as agriculture and energy. Moreover, coordination between water quality and hydromorphological aspects as well as between water policy and nature protection has so far not been sufficient. Cooperation between the water and agricultural sector is where governance is most deficient. This is mainly due to the difficulty in setting up a dialogue and because of the system of subsidies in the agricultural sector. Political will is needed to push further cooperation between the Common Agricultural Policy (CAP) and the WFD.

Extensive consultations on Water Framework Directive River Basin Management Plans (RBMP) have been available since 22 December 2009 in all River Basin Districts across the EU. The deadline for publishing and the deadline for reporting these plans to the Commission has expired (22 March 2010). However, there were serious delays in Spain, Belgium and Greece in 2012, where the RBMP have not yet been developed (consultation has not started or is on-going). In Portugal, consultations have been finalised, but are waiting for adoption. In other EU countries, River Basin Management Plans have been adopted⁶.

Article 8 of the EU's Water Framework Directive obliges Member States to gauge the health of their surface and groundwater by way of national monitoring programmes. This way the status of the waters can be established and any corrective measures can be properly targeted. For example, Poland has as of 2012 not complied with EU legislation on water protection, including the monitoring of water quality⁷. Thus, the European Commission sent an additional reasoned opinion asking Poland to implement the Directive correctly. Poland's

⁶ Read more: http://ec.europa.eu/environment/water/participation/map_mc/map.htm

⁷ European Commission (2012), *EU law: Commission acts to ensure that European legislation is fully and properly implemented*, MEMO/12/134, 27/02/2012: <http://europa.eu/rapid/searchResultAction.do>

deadline for transposing the Directive expired in May 2004. However, at that time it had not yet adopted laws to meet the Directive's requirements in a number of areas, including water quality monitoring.

Unfortunately, this is not the only infringement procedure against Poland instituted by the European Commission with respect to poor water management. Separate proceedings have also been launched in the matter of work referred to as "maintaining rivers and restoring flood damage" in the Podlaskie Voivodeship. At the same time, charges of breaking EU law in connection with the water economy were filed against Poland in March 2012. The claims relate to the maintaining of rivers in a way that causes damage to their nature values as well as without any environmental impact assessments. The Commission is of the view that work conducted on Polish rivers under the heading of "maintenance" is not restricted to maintenance, but also often results in the permanent modification of the riverbed and its riverbank zone. Pursuant to European Union law, such transformations necessitate a prior environmental impact assessment as well as an assessment regarding Natura 2000 areas. This is not done in Poland.

According to the current assessment of the European Commission, the problem behind water management and flood control in Poland rests with the fact that it is based on antiquated solutions that often forget that a river is a living ecosystem. Many of the actions taken, such as the hydrotechnical encasing of rivers, the simplified shaping of channel cross-sections, and increasing the throughput of riverbeds and the areas between levees, do not bring the assumed effects. Usually, they increase the flood hazard and destroy the valuable natural environment of the rivers, their valleys, and lead to the drying of wetlands. The European Commission also charges that Poland, in planning projects relating to water management, often ignores environmental impact assessment procedures.

In 2011 the European Commission was asking the public for its views on the most appropriate actions to improve water management in Europe. The poor assessment of water management as implemented not only in Poland, but in many EU countries, has been issued by not only the European Commission, but by the citizens themselves. According to a Eurobarometer survey published by the EC on 22 March 2012⁸, close to three-quarters of Europeans think that the EU should propose additional measures to address water problems in Europe. This survey was carried out in all twenty-seven Member States of the European

⁸ European Commission (2012), *Environment: Europeans Call for Stronger EU Action on Water*, IP/12/289, 22/03/2012, Brussels, <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/12/289&format=HTML&aged=0&language=EN&guiLanguage=en>

Union in March 2012. Some 25,524 respondents from different social and demographic groups were interviewed in their mother tongue on behalf of the European Commission.

A sizeable majority (68%) of Europeans think that water-related problems are serious. Droughts are a greater concern in the Mediterranean countries. Floods are seen by a large majority of Europeans (79 %) as a serious problem. A total of 61% of interviewees felt that they were not doing enough to protect water resources, but they also think that more efforts are needed on the part of industry, agriculture, and energy producers. When asked about solutions to the water challenges, 67% of Europeans are of the view that providing more information on the environmental consequences of water use would be most helpful. They see awareness-raising as the most effective means of reducing water-related problems. Indeed, even though citizens are taking small individual actions to save and protect water, including limiting the amounts used or using less pesticide in their gardens, a majority of 61% feel they are not doing enough to protect our water resources.

Citizens wish to do more to protect water resources and to be better informed in order to do so. However, to tackle these water issues, Europeans ask for the introduction of heavier fines for polluters, a fairer pricing policy, and financial incentives (tax breaks or subsidies) as well. A majority support water pricing based on volumetric use. They agree that prices should increase as environmental impact grows.

A total of 73% of Europeans think that the EU should propose additional measures to address water problems in Europe. This trend is confirmed all over the continent as the majority of citizens in all Member States think this issue should be addressed at the EU level. Europeans are of the view that the main focus of such measures should be on water pollution from industry, agriculture, the overuse of water, floods, and droughts⁹.

3. Challenges for the Future

Analysis of recently published legal acts, documents, official press releases of the European Union as well as articles make it possible to formulate several key challenges and directions of action in the area of EU water policy and management up to the year 2030. These are presented below.

⁹ Ibid.

First place involves the creation of economic incentives fostering more efficient management of water resources. Economic instruments will only work if the necessary background data (e.g. information on environmental flows) and preconditions (e.g. abstraction licenses) are present. Mandatory metering is needed for the implementation of water pricing policies in Europe. In spite of the WFD's specific requirements (Article 9), economic instruments have not been widely used by Member States thus far. Pricing policies that may appear to be very well designed can prove totally ineffective if most water abstraction is neither metered nor registered by the authorities. The WFD (Article 11) requires the implementation of systematic control over water abstraction. Illegal water abstractions need to be controlled.

The putting the right price tag on water is a very important issue. Water pricing needs to be implemented in combination with other policy tools. Regarding the application of social water tariffs, the EC has argued that everybody should pay the same price for their water use. This would ensure consistency. Governments can use other policy tools to support low-income groups. Water pricing should be accompanied by education and awareness-raising related to water demand management. There is a need to strengthen the application of a "polluter pays" principle. For example, remediation costs are not borne by the polluter at present. According to a recent OECD report¹⁰, these costs are very significant.

Progressing towards full implementation of the Water Framework Directive is a priority in order to address mismanagement of water resources. This issue is often a result of ineffective water pricing policies that generally do not reflect the level of sensitivity to water resources at local level. The "user pays" principle is hardly implemented beyond the sectors of drinking water supply and wastewater treatment. Introducing this principle at the EU level would put an end to needless losses or waste, ensuring that water remains available for essential uses across Europe, including all parts of cross-border river basins. In other words, it would encourage efficient water use.

The next challenge is allocating water and water-related funding more efficiently—improving land-use planning and financing water efficiency. Land-use planning is one of the main drivers of water use. Inadequate water allocation among economic sectors results in imbalances between water needs and existing water resources. There is a need to impose conditions on the use of EU funds (Rural Development, Cohesion Policy). A pragmatic shift is required in order to

¹⁰ OECD (2011), *OECD Factbook 2011–2012, Economic, Environmental and Social Statistics, Water consumption*, OECD Publishing, http://www.oecd-ilibrary.org/economics/oecd-factbook-2011-2012_factbook-2011-en

change policy-making patterns and to move effective land-use planning forward at the appropriate levels.

Drought affected areas are likely to increase in extent. In the face of such circumstances, it has become a European Union priority to devise effective drought risk management strategies. All EU Members States need to develop drought risk management plans, an observatory, and an early warning system on droughts. It is also necessary to optimize the use of the EU Solidarity Fund and European Mechanism for Civil Protection, improving knowledge and data collection, e.g. a water scarcity and drought information system throughout Europe¹¹.

The EU's policy action on water scarcity and droughts needs to be based on high-quality knowledge and information on the extent of the challenge and projected trends. Existing European and national assessment and monitoring programmes are neither integrated nor complete. Therefore, filling knowledge gaps and ensuring data comparability across the EU is a precondition. In this context, research has a significant role to play in providing knowledge and support for policy making. The challenge of water scarcity and droughts needs to be addressed both as an essential environmental issue and also as a prerequisite for sustainable economic growth in Europe. The existing legal framework in the WFD offers ample room for tackling both water scarcity and droughts through market-based instruments.

Sustainable water policy promotes the formation of a water-saving culture. Further integration of water-related concerns into water-related sectorial policies is paramount in order to move towards this kind of culture. Water saving must become the priority and all possibilities to improve water efficiency must therefore be explored. As the EU seeks to revitalise and reinvigorate its economy and to continue to lead in tackling climate change, the devising of an effective strategy towards water efficiency can make a substantial contribution. In this regard, the fostering water efficient technologies and practices is of great importance.

At present, there are many effective and modern methods of protection against flooding and water management. However, if undertaken actions do not take into account natural conditions, then not only will the risk of floods and droughts as well as damage to property and the environment increase, but there

¹¹ European Commission (2007), Communication from the Commission to the European Parliament and the Council - Addressing the challenge of water scarcity and droughts in the European Union (COM/2007/0414 final), Brussels:
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0414:FIN:EN:PDF>

will also be growing losses in agriculture, tourism, and other sectors of the economy dependent on water.

Extreme weather situations trigger extreme hydrologic phenomena (such as floods, inland water, and droughts) more frequently. We must be ready for these situations with green solutions, as opposed to investments in infrastructure. We must understand that floods constitute a part of nature's way. It is not protection against them that we need, but rather co-existence with floods¹².

The Water Framework Directive is Europe's key tool for protecting its waters. The monitoring of surface waters covers the chemical composition of water, a number of key biological elements, and the physical shape of water bodies, in order to provide a comprehensive overview of the health of Europe's waters. Groundwater monitoring programmes will cover water quality and water quantity. For the protection of water ecosystems, there is a need to further promote win-win measures, such as wetland restoration. More attention should also be given to strategic approaches such as green corridor strategies at river basin level.

Another challenge for the future is further action and European regulation on pharmaceutical substances in water. In addition to discussions in the context of the Environmental Quality Standards Directive, further steps should be taken: firstly, implementing stringent legislative criteria, and secondly, looking at ways to reduce pharmaceuticals at source (upstream) and working on hotspot management (e.g. hospital discharges).

Stronger policy integration is needed among water, agricultural, and energy policy as well as key relevant policy reforms (e.g. in the CAP). The European Commission can play a key role in further promoting integration and providing further instruments and practical guidance on the improvement of water management at a local level. It is essential to have a good set of both mandatory and voluntary measures for the agricultural sector. At the same time, we should not rely on regulation only to reinforce policy. Reliable funding (public and private) is fundamental for implementing measures. The objectives of the WFD should be included in cross-compliance requirements under the CAP. Agreements between farmers and water companies are a successful concept and should be further promoted. Water policy also needs a "greener" common agricultural policy or greater emphasis on environment protection in agricultural policy.

¹² European Commission (2007), Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks, Brussels: http://ec.europa.eu/environment/water/flood_risk/key_docs.htm

Water policy in the EU should be based on a lucid water hierarchy. Additional water supply infrastructures should be considered as an option when other ways 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.

Over 90% of the projected population growth by the year 2050 will be in developing countries, often in regions that already are water scarce. In 2030, a half of the world's population will be living in areas of high water stress. Looking towards 2050, according to the OECD¹³, there will be increased competition between water users to access water resource. Farmers and the environment will have to compete with cities, energy suppliers, and several industries, to get the water they need. This creates new risks. If any water user does not have access to the volume and quality of water that user needs. Another question is that of trade-offs. How should water be allocated among competing users?

Taking a mix of measures to address European water challenges is critical. The EC expects the need to “unlock” measures that give answers to different problems in a coordinated way, since no single measure will be able to solve the problems at hand.

4. Blueprint to Safeguard Europe's Water Resources

As of the year 2000, EU water policy has made steps to change by taking an integrated approach based on the concept of river basin management aimed at achieving good status for all EU waters by 2015. However, as pointed out by the European Environment Agency's 2010 State of the Environment Report¹⁴ the achievement of EU water policy goals appears far from certain due to a number of old and emerging challenges. The Blueprint to Safeguard Europe's Water will be the EU policy response to these challenges. It will aim to ensure good quality water in sufficient quantities for all legitimate uses.

¹³ OECD (2012), *OECD Environmental Outlook to 2050: The Consequences of Inaction*, OECD Publishing, Paris:
<http://www.oecd.org/environment/environmentalindicatorsmodellingandoutlooks/oecdenvironmentaloutlookto2050theconsequencesofinaction.htm>

¹⁴ EEA (2010), *Synthesis. The 2010 State of the Environment and Outlook Report*, Report No. 1/2010, Copenhagen, <http://www.eea.europa.eu/soer/>

The time horizon of the Blueprint is 2020 since it is closely related to the EU 2020 Strategy¹⁵ and, in particular, to our planned Resource Efficiency Roadmap¹⁶. The Blueprint will be the water milestone on that Roadmap. However, the analysis underpinning the Blueprint will cover a longer time span, up to 2050, and will drive our policy for a longer period.

To achieve this ambitious objective, the Blueprint will synthesise policy recommendations building on four on-going assessments¹⁷:

1. The assessment of the River Basin Management Plans¹⁸ delivered by the Member States under the Water Framework Directive,
2. The review of the EU action on Water Scarcity and Drought¹⁹
3. The assessment of the vulnerability of water resources to climate change and other man made pressures, and
4. The Fitness Check, which will address the whole of EU water policy in the framework of the Commission Better Regulation approach.

The outputs of these four reviews, together with a large number of studies launched by DG Environment²⁰, DG Research, the Joint Research Centre, the European Environment Agency (EEA)²¹, and others, will provide the knowledge base to develop the policy options that can deliver better implementation, better integration, and completion of EU water policy.

These options will be subject to a thorough impact assessment in order to understand their potential environmental and socio-economic impacts. Action is envisaged in seven specific areas. Focus will be given to land management to see what measures could be widely implemented in the EU and what policy instruments that can accelerate their implementation, in particular water-related green infrastructure measures²². In addition to integration of such measures into the Common Agricultural and Cohesion Policies, the European Commission will develop a methodological framework for the wider application of payments for ecosystem services. This is a key tool that is missing that can alleviate the failure

¹⁵ EUROPE 2020, COM(2010)2020 final.

¹⁶ Roadmap to a Resource Efficient Europe, COM(2011) 571 final:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:DKEY=615217:EN:NOT>

¹⁷ See more about the Blueprint at website: <http://ec.europa.eu/environment/water/blueprint/>

¹⁸ http://ec.europa.eu/environment/water/participation/map_mc/map.htm

¹⁹ http://ec.europa.eu/environment/water/quantity/eu_action.htm

²⁰ DG Environment website at http://ec.europa.eu/dgs/environment/index_en.htm

²¹ European Environment Agency (EEA) website at <http://eea.europa.eu>

²² Water-related green infrastructure measures mean reforestation, floodplain restoration, soil management, and sustainable urban drainage systems. Read more: EPA website at: <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>

of the market to duly account for such services. Its application can create important economic incentives for water and biodiversity protection.

In the second area, the Blueprint will develop a consistent approach for the internalisation of costs from water use and water pollution. The objective of the Blueprint will be to foster the recovery of environmental costs through the application of a portfolio of economic and communication instruments, complementing regulatory instruments. The options to be developed include criteria for pricing, taxation, removal of harmful subsidies, public procurement, and the setting up of water allocation schemes (including tradable permits) in water scarce areas²³.

At present, the EC does not know the size of the gap in Europe between water demand and water availability in 2020 or 2050. In this respect, the water and ecosystem accounts developed together with the EEA will quantify how much water flows in and out of the river basins. This is the basic essential information that is largely missing today, but which is needed to optimize water use at river basin level and look at alternatives, in particular considering the material and virtual water flows between catchments. On this basis, the Blueprint will tackle water efficiency. It will provide first indications for water efficiency targets at EU level, taking into account the great variety of situations across economic sectors and geographic areas. It will also aim at fostering the development of targets for water efficiency (and quality improvement) in the Member States at sectorial and river basin level. In addition, it will look at ways to improve the water efficiency in both buildings and in distribution networks.

In the next area, the Blueprint will identify the main financial, technological, organisational, and sociological barriers to innovation in the realm of water resource management as well as ways to overcome them. The importance of innovation in the field of water management is recognized by the EU Member States²⁴. In 2011, the Council of the European Union invited the Commission to “investigate an innovation partnership on water in close cooperation with the Member States, with a view to achieving sustainable and efficient use of water”²⁵.

²³ *Environment for Europeans, Are we doing enough for Europe's waters?*, Magazine of the DG for the Environment, No 47, Brussels, <http://ec.europa.eu/environment/news/efe/pdf/efe47/EN-EFE47.pdf>

²⁴ European Commission (2012), *EU Water Initiative, Annual Report*, Brussels: http://www.euwi.net/files/EUWI_AnnualReport_Web.pdf

²⁵ Council of the European Union Conclusions of 21 June 2011 (doc. 11308/11), *Protection of water resources and integrated sustainable water management in the European Union and beyond - Draft Council conclusions*, <http://register.consilium.europa.eu/pdf/en/11/st11/st11308.en11.pdf>

Worth mentioning at this point is a valuable European initiative—Water Innovation Europe (WIE). This is an innovation partnership between ACQUEAU²⁶ and the Water Supply and Sanitation Platform (WssTP), the European Water Platform²⁷. It aims to push forward the central initiative of the European water sector—innovative collaboration for sustainable and competitive results through active discussion and debate. Water Innovation Europe 2012, which took place in Brussels in May²⁸, was a platform for a large number of stakeholders from all background and sectors and from various kinds of organisations and industries to contribute to the on-going drive towards a more innovative and competitive European water sector²⁹.

The fifth concerns ways for improving the governance system stemming from EU water policy, including the administrative setup and the potential to reduce the administrative burden, while providing the reactive capacity needed to face emerging challenges such as climate change adaptation.

It is also important that the Blueprint will develop options to improve the quality of the knowledge base for water policy making. These could include an improvement of statistical information on the pressures of economic activity on water resources, increased use of satellite and land GMES observations to monitor status and pressures, enhancing the Water Information System for Europe (WISE)³⁰ to include policy relevant indicators, and developing a roadmap for water research under the next Framework Programme.

Implementation of the Blueprint is also coupled with one of the latest initiatives of the European Commission on water management—the European Innovation Partnership on Water (EIP on Water)³¹. The European Commission envisages the start of implementation of the EIP from early 2013. This

²⁶ACQUEAU is an industry driven EUREKA Cluster dedicated to water related technologies and innovation. It aims at promoting innovation and market driven solutions to develop new technologies in the European water sector. The ultimate aim of a EUREKA Cluster is to facilitate the generation of market-driven, pan-European collaborative water research and technological development R&D projects for the benefit of the European Water Industry. Read more: <http://www.iwa-pia.org/> and <http://www.eurekanetwork.org/acqueau/about>

²⁷ <http://www.wsstp.eu/content/default.asp?PageId=688&LanguageId=0>

²⁸ <http://www.wsstp.eu/content/default.asp?PageId=944>

²⁹ The water sector and its drive towards innovative development faces challenges that span across various sectors, users, and approaches, such as governance, ICT, water management, communication, agriculture, industry, utilities, private companies providing water services, and other sectors.

³⁰ WISE is a partnership between the European Commission (DG Environment, Joint Research Centre and Eurostat) and the European Environment Agency, known as “the Group of Four” (Go4). Read more: <http://water.europa.eu/>

³¹ The European Innovation Partnership on Water, COM/2012/216 final.

Partnership is an opportunity to find new solutions to the water challenges we face. It is also a chance for the EU water industry to become more competitive and to translate the ideas of the European water sector into marketable solutions.

Initiative as well as the task facing Europe to engage in the sustainable management of water as a key resource is underlined in the Europe 2020 Resource efficient Europe flagship initiative³². The Roadmap to a resource efficient Europe highlights the efficiency gains that can be made. A Blueprint to safeguard Europe's waters is the water milestone on the resource efficiency Roadmap. The Blueprint will present the policy response to the challenges of the implementation issues and gaps related to the current framework of EU water resource management policy. The Blueprint and the EIP on Water will be developed in close coordination to ensure integration of innovative approaches and innovation demand side measures in developing and realizing EU water resource management policy. Furthermore, the EIP on Water will build on the Eco-Innovation Action Plan³³, which focuses on boosting innovation that results in or aims at reducing pressures on the environment and on bridging the gap between innovation and the market. The European Commission supports research to help to manage our water resources sustainably and achieve the shift towards an internationally competitive, water-efficient economy in Europe³⁴.

As a step in the preparatory process for the Blueprint to Safeguard Europe's Water Resources, the European Commission organised Green Week 2012, the biggest annual conference on European environment policy, which took place from the 22 to 25 May 2012 in Brussels³⁵. This year's theme was "Water," under the banner "The Water Challenge – Every Drop Counts." Green Week 2012 presented an overview of water-related EU policies and considered how they should evolve to meet the challenges ahead and to look for solutions to key water problems, like how to safeguard the availability of good quality water against a backdrop of rapid population growth and ever more apparent climate change (Gammeltoft, Buckova 2012).

Green Week also hosted the 3rd European Water Conference³⁶ - a platform for consultation and debate among a large number of water

³² Resource Efficient Europe, COM(2011)21 final.

³³ Eco-Innovation Action Plan COM(2011) 899 final.

³⁴ European Commission (2012), *World Water Day – EU research on water*, MEMO/12/203, 22/03/2012, Brussels, <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/12/203&format=HTML&aged=0&language=EN&guiLanguage=en>

³⁵ European Commission website at: <http://www.3water.euhttp://ec.europa.eu/environment/greenweek/>

³⁶ European Commission (2012), *3rd European Water Conference...*, op.cit.

stakeholders, Member States, and the European Commission. Environment Commissioner Janez Potočnik said during the Conference: “Progress has been made towards developing a water policy fit to face the challenges ahead. But policy-making can only be as good as the knowledge it is based on. Numerous studies and assessments have helped boost our knowledge and understanding of the current trends, emerging problems and existing gaps in the implementation of our water policy. The 2015 deadline set by the Water Framework Directive to achieve good water status in the EU is just round the corner.” Commissioner Potočnik concluded that since: Every drop counts, we should count every drop indeed³⁷. Green Week 2012 and particularly the 3rd Water Conference will feed into the Blueprint scheduled for November 2012.

5. Conclusion

The EU’s Water Framework Directive makes the maintaining or recreating a good environmental status for river ecosystems mandatory. It does this simultaneously taking into account the need for flood and drought risk management and the use of water for various purposes. However, its complete implementation will have to change the water economies of many EU countries, including the water management of Poland, where these changes are in fact an opportunity to have clean and natural rivers.

There is a long road ahead to meet the ambitious objectives of European water policy, e.g. not all River Basin Management Plans have been submitted, low ambition of these Plans, lack of concreteness and comparability, and dressing up “business as usual” as WFD implementation. The integrated water policy requires cooperation among EU Member States. Moreover, the water aspect must also be reflected in the international development cooperation of the EU. The EC must discuss the possible role of water in other EU policies, including the difficulties of integrating water policy into other policies and ways to reach improved mobilisation of financial resources available in multi-annual budgets for the benefit of water management.

The Blueprint to Safeguard Europe’s Water Resources, which has the long-term objective of ensuring the availability of good quality water for sustainable and equitable water use, will form the new EU policy response to the challenges surrounding water as a resource. The European Commission expects the Blueprint to aim to ensure good quality water in sufficient quantities for all

³⁷ Ibid.

legitimate uses. It will be based on an evaluation of the implementation and achievements of current EU water policy.

Bearing in mind the multitude of problems, needs, and complexity of challenges in the area of the water management in the European Union, it must be stated that the existing water policy framework and the WFD Common Implementation Strategy process should be continued. All relevant actors (agriculture, industry, and households) need to collaborate in achieving water policy objectives, underlining the need for an integrated water management policy that sets medium- and long-term objectives.

References

European Commission (2000), Water Framework Directive of the European Parliament and of the Council (2000/60/EC), Brussels:

http://ec.europa.eu/environment/water/water-framework/index_en.html

Ecologic (2007), Report on EU water saving potential, Ecologic Institute for International and European Environmental Policy:

http://ec.europa.eu/environment/water/quantity/pdf/water_saving_2.pdf

European Commission (2007), Communication from the Commission to the European Parliament and the Council - Addressing the challenge of water scarcity and droughts in the European Union (COM/2007/0414 final), Brussels:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0414:FIN:EN:PDF>

European Commission (2007), Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks, Brussels:

http://ec.europa.eu/environment/water/flood_risk/key_docs.htm

European Commission (2010), EUROPE 2020 - A strategy for smart, sustainable and inclusive growth, COM(2010)2020 final, Brussels:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF>

European Commission (2011), A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy, COM(2011) 21 final, Brussels:

http://ec.europa.eu/resource-efficient-europe/pdf/resource_efficient_europe_en.pdf

European Commission (2011), Roadmap to a Resource Efficient Europe, COM(2011) 571 final, Brussels:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0571:FIN:EN:PDF>

European Commission (2011), Commission Staff Working Paper Research Joint Programming Initiative on Water, Commission Recommendation on the research joint programming initiative 'Water Challenges for a Changing World' (doc. SEC(2011) 1250 final), Brussels:

[http://www.europarl.europa.eu/RegData/docs_autres_institutions/commission_europeenne/sec/2011/1250/COM_SEC\(2011\)1250_EN.pdf](http://www.europarl.europa.eu/RegData/docs_autres_institutions/commission_europeenne/sec/2011/1250/COM_SEC(2011)1250_EN.pdf)

European Commission (2011), Environment Council – informal meeting: Europe Needs an Integrated Water Policy, March 2011, Budapest, <http://www.eu2011.hu/news/europe-needs-integrated-water-policy>

European Commission (2012), Environment for Europeans, Are we doing enough for Europe's waters?, Magazine of the Directorate-General for the Environment, No 47, Brussels: <http://ec.europa.eu/environment/news/efe/pdf/efe47/EN-EFE47.pdf>

European Commission (2012), Attitudes of Europeans Towards Water – Related Issues, Flash Eurobarometer, March 2012, http://ec.europa.eu/public_opinion/flash/fl_344_sum_en.pdf

European Commission (2012), Environment: Europeans call for stronger EU action on Water, IP/12/289, 22/03/2012, Brussels,

<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/12/289&format=HTML&aged=1&language=EN&guiLanguage=en>

European Commission (2012), EU Water Initiative, Annual Report, Brussels: http://www.euwi.net/files/EUWI_AnnualReport_Web.pdf

European Commission (2012), World Water Day – EU research on water, MEMO/12/203, 22/03/2012, Brussels,

<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/12/203&format=HTML&aged=0&language=EN&guiLanguage=en>

European Commission (2012), 3rd European Water Conference, Summary Report, Environment Directorate General of the European Commission, Brussels,

<http://waterblueprint2012.eu/conference-documentation>

European Commission (2012), Communication From The Commission on the European Innovation Partnership on Water, COM(2012)216 final, Brussels, 10.05.2012, http://ec.europa.eu/environment/water/innovationpartnership/pdf/com_2012_216.pdf

European Commission (2012), EU law: Commission acts to ensure that European legislation is fully and properly implemented , MEMO/12/134, 27/02/2012:

<http://europa.eu/rapid/searchResultAction.do>

Gammeltoft P., Buckova B. (2012), *Outcomes of Green week 2012, The Green Week - an unmissable event*, 'CountrySide', European Landowners' Organization, Brussels, No 139, http://www.europeanlandowners.org/files/cside/139_MAYJuin/105399%20CS%20139%20GB%20LR.pdf

<http://www.europeanlandowners.org/>

European Environment Agency (EEA) (2010), The European environment – state and outlook 2010: EEA Report No 1/2010, Copenhagen: <http://www.eea.europa.eu/soer/>

OECD (2011), OECD Factbook 2011-2012, Economic, Environmental and Social Statistics, *Water consumption*, OECD Publishing

http://www.oecd-ilibrary.org/economics/oecd-factbook-2011-2012_factbook-2011-en

OECD (2012), OECD Environmental Outlook to 2050. The Consequences of Inaction, OECD Publishing, Paris:

<http://www.oecd.org/environment/environmentalindicatorsmodellingsandoutlooks/oecdenvironmentaloutlookto2050theconsequencesofinaction.htm>

Potočník J. (2012a), *Results of the Eurobarometer on Water – what are Europeans' expectations?*, Water Intergroup meeting (European Parliament), Brussels, SPEECH/12/210, 22 March 2012, <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/12/210&format=HTML&aged=1&language=EN&guiLanguage=en>

Potočník J. (2012b), *Message on World Water Week*, Brussels, 27 August 2012, MEMO 12/628

<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/12/628&format=HTML&aged=0&language=EN&guiLanguage=en>

Streszczenie

POLITYKA WODNA UNII EUROPEJSKIEJ: KLUCZOWE PROBLEMY I WYZWANIA

Zasoby wodne należą do najcenniejszych zasobów środowiska naturalnego. Zrównoważona i zintegrowana gospodarka tymi zasobami stanowi podstawę Europejskiej polityki wodnej. Zgodnie z Ramową Dyrektywą Wodną do 2015 roku wszystkie wody w Unii Europejskiej powinny osiągnąć co najmniej dobry stan wód, co jest nadal przedmiotem dyskusji w niektórych państwach członkowskich, w jaki sposób osiągnąć ten cel. Istnieją poważne problemy i opóźnienia w realizacji i wdrażaniu zapisów Dyrektywy w większości krajów członkowskich UE, a w kilku krajach, w tym także i w Polsce, stan gospodarki wodnej został krytycznie oceniony przez Komisję Europejską. Przed Europejską polityką wodną stoi wiele wyzwań, które wymagają rozwiązania na szczeblu globalnym oraz lokalnym. W artykule przedstawiono aktualne kluczowe problemy oraz planowane kierunki rozwoju polityki wodnej UE, poddając je analizie i ocenie. Zwrócono uwagę na najnowsze inicjatywy KE w zakresie polityki wodnej, a w szczególności na plan ochrony zasobów wodnych Europy.