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WWDR4 – Regional Press Release – EUROPE AND NORTH AMERICA

Water quality remains a major challenge throughout Europe and North America, despite some encouraging improvements.

Marseille, France, March 12 2012

Surface and groundwater resources in Europe and North America often contain a mix of pollutants, such as nutrients, metals, pesticides, microbes, industrial chemicals and pharmaceutical products, all of which have adverse effects on freshwater ecosystems and human health, warns the United Nations.

According to the latest edition of the United Nations World Water Development Report (WWDR4), released today at the 6th World Water Forum in Marseille, “Pollution sources are extremely diverse and vary considerably over river basins in Europe and North America.” However, “agriculture and urban sources (e.g. industries, urban wastewater) contribute most of the freshwater pollution. Prevention, control and reduction of water pollution are of utmost priority.”

Agricultural practice in the region has changed considerably over the past decades: mechanization, increased use of fertilizers and pesticides, farm specialization, growth of farm size, land drainage and developments in animal husbandry have led to adverse impacts on the aquatic environment with some specific sub-regional differentiation of water use and water pollution.

“High applications of both mineral and organic fertilizer are used in the farming areas of Western Europe. Source apportionment studies indicate that agriculture generally provides 50–80% of the total nitrogen load, with wastewater providing most of the remainder. Nitrogen application rates had increased dramatically over past decades, but are now widely declining. However, it takes a long time for this to translate into reduction in the concentration of nitrogen compounds in water bodies.”

Agrochemicals have had a detrimental effect on water resources throughout the region as nitrogen, phosphorus and pesticides run into water courses. “In Eastern Europe, the Caucasus and Central Asia, these diffuse pressures are ‘widespread but moderate’ says the Report. “Since the 1950s, nitrate loads from agricultural runoff have increased enormously in the Mississippi River, which drains more than 40% of the land mass of the USA’s 48 contiguous states.”

Apart from the implementation of legal–regulatory, institutional and management measures, it is important to focus on education, training

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and advice to promote understanding of good agricultural practice and respect for existing legislation by various economic entities. The establishment of Nitrate Vulnerable Zones and the implementation of action programmes in areas where agricultural sources of nitrates have led to excessive concentrations in freshwater are other positive examples from Western Europe.

But agriculture is not the only water quality related challenge, according to the Report. Insufficient wastewater treatment and its adverse effects on sources of drinking water and recreational waters are further priorities for action. The health impact of floods and heat waves add to the burden of water-related diseases.

“While most point-source pollution from industrial and municipal effluent has been addressed in the most of the region’s developed countries, discharges of untreated or insufficiently treated wastewaters continue to exert pressures, especially in Eastern Europe, South-Eastern Europe, the Caucasus and Central Asia.”

Modern pollution abatement technologies have stemmed the most egregious pollution from large industrial processes in western Europe and North America. However, “recent concerns relate to modern chemicals, including new pharmaceuticals and hormones – which are difficult to eliminate in wastewater treatment processes. Pollution from the great number of small and medium-sized industries and small municipal wastewater treatment plants in eastern Europe, the Caucasus, Central Asia and several of the new EU countries, which do not operate according to standards, are still important sources of water pollution. Despite assistance from western Europe, the impact of economic decline in the 1990s remains visible as wastewater treatment is still inadequate and waters continue to be polluted with heavy metals, phosphorus, nitrogen and oil products.” Mining has an impact more locally in south-eastern Europe, in the Caucasus and some areas in northern Europe.

Perhaps surprisingly, coverage of drinking water and sanitation services remains incomplete in one of the World’s richest regions. “Some 120 million people in the European region do not have access to safe drinking water. Even more lack access to sanitation, resulting in the spread of water-related diseases. In North America, native peoples are often ill-served by piped water and sanitation facilities. For example, over 10,000 homes on reserves in Canada have no indoor plumbing, and the water or sewer systems in one reserve in four are substandard.”

Water-related institutions in countries in transition are still generally weak, with water competences spread among institutions with weak

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enforcement capacities. Supported by the EU on many fronts, new EU Member States have made better progress in building new institutional structures in comparison with other eastern European countries, the Caucasus and Central Asia. The Water Framework Directive (WFD), which was concluded in 2000 apart from some more recent directives on standards and groundwater, is the most important piece of EU water legislation.

Information Brief on the 4th edition of the United Nations World Water Development Report (WWDR4)

The United Nations World Water Assessment Programme (WWAP) is hosted by UNESCO and brings together the work of 28 UN-Water members and partners in the triennial World Water Development Report (WWDR).

This flagship Report is a comprehensive review that gives an overall picture of the state of the world's freshwater resources. It analyses pressures from decisions that drive demand for water and affect its availability. It offers tools and response options to help leaders in government, the private sector and civil society address current and future challenges. It suggests ways in which institutions can be reformed and their behaviour modified, and explores possible sources of financing for the urgently needed investment in water.

The WWDR4 is a milestone within the WWDR series. This 4th edition directly reports from the regions, highlighting hotspots, and has been mainstreamed for gender equality, which is addressed as a critical issue. It introduces a thematic approach – 'Managing Water under Uncertainty and Risk' – in the context of a world which is changing faster than ever in often unforeseeable ways, with increasing uncertainties and risks. It highlights that historical experience will no longer be sufficient to approximate the relationship between the quantities of available water and shifting future demands.

The WWDR4 also seeks to show that water has a central role in all aspects of economic development and social welfare, and that concerted action via a collective approach of the water-using sectors is needed to ensure water's many benefits are maximized and shared equitably and that water-related development goals are achieved.

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