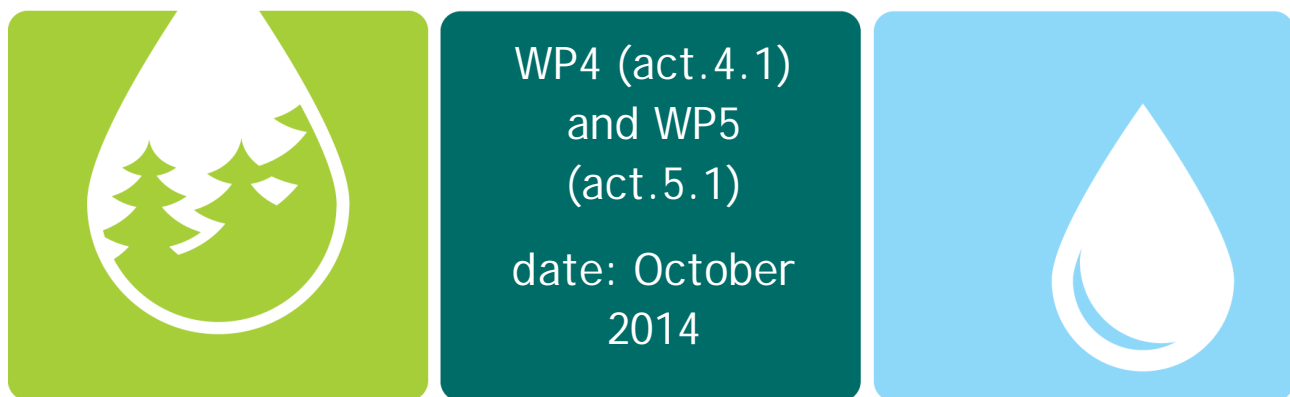


# CC-WARE

## **WP 4 (act.4.1) and WP 5 (act.5.1) JOINT REPORT**

Relevant legislation analyses for improvement of land use and water management regulation and policies within the scope of CC - WARE project



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## TABLE OF CONTENTS

<b>TABLE OF CONTENTS.....</b>	<b>1</b>
<b>CONTRIBUTORS.....</b>	<b>1</b>
<b>1. INTRODUCTION.....</b>	<b>2</b>
<b>2. OVERVIEW OF RELEVANT EU LEGISLATION.....</b>	<b>3</b>
<b>3. NATIONAL/REGIONAL LEGISLATION .....</b>	<b>11</b>
<b>4. LEVEL OF EU LEGISLATION IMPLEMENTATION .....</b>	<b>12</b>
<b>5. GAPS IDENTIFIED AND PROPOSALS / IDEAS FOR IMPROVEMENT .....</b>	<b>15</b>
<b>6. SYNTHESIS OF THE STAKEHOLDERS QUESTIONNAIRE.....</b>	<b>26</b>
<b>7. CONCLUSIONS .....</b>	<b>27</b>
<b>LIST OF REFERENCES .....</b>	<b>28</b>
<b>ANNEXES – NATIONAL LEGISLATION TEMPLATES.....</b>	<b>30</b>

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Contribution in the development of this report by Lead Partner and PPs is tremendous. They provided inputs and data in line with agreed Template for relevant information collection at transnational and national level. The main subjects addressed in templates are: Drinking water supply and drinking water sources protection, Land use legislation/ policies, Climate change legislation/policies, Water management legislation/policies, River Basin Management Plans and Other legislation/policies of relevance for CC - WARE project.

In addition, overview of EU legislation implementation at the national level and legislation/ policy gaps are identified, and for some of them the solutions are proposed by LP and PPs. Following experts contributed in the report development:

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## 1. INTRODUCTION

Various sectoral legislation and policies are of great significance for suitable drinking water supply (**DWS**) within the SEE (South East Europe) region. Hence, in this report relevant legislation and policy for drinking water supply and protection, land use, climate change and water management are analysed at the EU, national and regional level. This provides a concise overview of the legal settings and contributes to the enhancement opportunities identification. Necessity for improvement of the water related legislation with regard to protection, preservation and enhancement of ecosystem services (**ESS**), drinking water supply and climate change (**CC**) is identified at the national and regional level due to the lack of: harmonized sectoral legislation and policies, appropriate integration of cross-cutting issues, funding, cooperation among the sectors, etc.

In addition, this report provides the basis for improvement of land use (WP4) and water management (WP5) regulations and policies. Since land use affects drinking water supply at various levels it can also positively contribute to it. It is well known that commonly applied agricultural practices may have adverse effects on sources for drinking water. Forestry practices may increase the level of water pollution or can in contrast positively influence water resources. The proper management of land use in wetlands is of great relevance for drinking water sources protection. Given all before mentioned, the land use legislation and policies should be in line with integrated water resources protection.

Existing legislations, regulations and policies analysed by LP and PPs at national and regional level provide comprehensive foundation for the proposal of improved land use legislations and regulations that would result in better functions of ESS for the safe drinking water supply. Gaps identified by project partners are broad with respect to CC - WARE project scope and objectives and might be very useful set of information for decision makers in the future legislation and policy development processes.

It was recognized that the joint report for WP4 and WP5 on legislation overview synthesis would provide better insight than two separate reports given the significance of the cross - cutting issues for drinking water supply at national and transboundary level.

Collected national data and information are appended to this report and the comprehensive summary is provided for national legislation and policies that address drinking water supply, land use practices, and other legislation and policies.

In addition to an overview on legislation and policies within the scope of CC - WARE project this report includes a short synthesis of answers provided by participants of Mid - Term Conference and the First

Knowledge Transfer. Based on these data and information, the scope, goal and objectives of CC-WARE project are of great relevance for transboundary cooperation and South East Europe.

Despite that information and data collected from PPs indicate the importance of drinking water management in majority of the countries (within the scope of CC - WARE project) the dedicated legislation is missing and is usually included in water management legislation, or other legislation as forest or agriculture ones. In generally, there is a need for improvement legislation and policies to sustain integrated water resources and land management given the Ecosystem services and Climate change interaction with drinking water supply.

Subsequent sections provide more details on particular topics and subjects evaluated in this report.

## 2. OVERVIEW OF RELEVANT EU LEGISLATION

### ***WATER FRAMEWORK DIRECTIVE -WFD (Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy)***

According to the WFD, all water bodies should have good water quality by 2015. The WFD is also focusing on pollution prevention and control, using a combined approach controlling pollutions at the source through the setting of emission limit values and of environmental quality standards. According to Article (7) Member States shall identify all bodies of water used for the abstraction of water intended for human consumption providing more than 10 m<sup>3</sup>/day as an average or serving more than 50 persons. Also bodies of water intended for such future use shall be identified. Furthermore, monitoring of bodies of water (in general) with an average discharge higher than 100 m<sup>3</sup>/day should be established. Member States shall ensure the necessary protection for the identified bodies of water with the aim of avoiding deterioration in their quality in order to reduce the level of purification treatment required in the production of drinking water. Member States may establish safeguard zones for those bodies of water (Water Framework Directive 2000/60/EC). According to the DWD, the quality of the drinking water supplied to their citizens as well as the water used in the food production industry has to be monitored with regard to microbiological and chemical parameters set in the directive. Sampling of drinking water is carried out straight from the tap at private and public premises. EU Member States may include additional or higher standards than those set in the Drinking Water Directive, but they are not allowed to lower the EU standards. To achieve the Drinking Water Directive's standards, large investments in water supply and drinking water infrastructure may be required, particularly in South East Europe. The WFD complements the DWD requirements by establishing drinking water protected areas where water for human consumption is abstracted. Drinking water is thus protected from the source where it is abstracted until the delivery at the tap.

Another important instrument under the WFD is, that Member States are required to ensure that the prices charged to water consumers for services, such as the delivery of fresh water and the collection and treatment of wastewater, reflect the full costs of extracting, treating and transporting it to consumers. However, the WFD also allows certain derogations for less favored areas or to ensure affordability of basic services.

***DRINKING WATER DIRECTIVE - DWD (Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption)***

This directive concerns the quality of water intended for human consumption and is aiming to protect human health from the adverse effects of any contamination of water by ensuring that it is wholesome and clean. Quality standards for drinking water quality at the tap (microbiological, chemical and organoleptic parameters) are defined (Annex I). Monitoring (sampling frequency and extent) is described in Annex II. Remedial action and restrictions in use are listed in Article 8.

***GROUNDWATER DIRECTIVE - GWD (2006/118/EC of the European parliament and of the council of 12 December 2006 on the protection of groundwater against pollution and deterioration),***

The main goals of it are to achieve groundwater quality so the pollution trend studies ("baseline level" data obtained in 2007-2008) are needed. Rising pollution trends have to be reversed and measures should be applied in order to prevent or limit inputs of pollutants into groundwater.

***ENVIRONMENTAL QUALITY STANDARDS IN THE FIELD OF WATER POLICY (directive 2008/105/EC of the European parliament and of the council of 16 December 2008)***

It complements the WFD framework with specifications for groundwater protection and chemical objectives through harmonized environmental quality standards for substances in surface waters.

***FLOOD RISK DIRECTIVE (Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks)***

The Directive aims at preliminary flood risk assessment of river basins and associated coastal zones. For areas where real risks of flood damage exist, flood hazard maps and flood risk maps shall be developed by 2013 (areas with a medium likely hood of flooding (at least a 1 in 100 year event) and extreme events or low likelihood events). Flood risk management plans (by 2015) shall be established with measures to reduce the probability of flooding and its potential consequences, which is a crucial component of climate change adaptation.

***GREEN PAPER: Adapting to climate change in Europe - options for EU action (SEC (2007) 849)***

It examines climate change impacts in Europe, which will heavily affect Europe's natural environment and nearly all sections of society and the economy. Climate change will further reduce access to safe drinking water. Glacier melt water currently supplies water to over a billion people. Once it disappears, populations will be under pressure and are likely to migrate to other regions of the world, causing local or even global upheaval and insecurity.

***WHITE PAPER - Adapting to climate change: Towards a European framework for action (SEC (2009) 386, 387,388)***

It is a framework for adaptation measures and policies to reduce the EU's vulnerability to the impacts of climate change. It promotes strategies which increase the resilience to climate change of health, property and the productive functions of land, inter alia by improving the management of water resources and ecosystems. Guidance document (River basin management in a changing climate, no 24) on adaptation to climate change in water management was established in order to ensure that the River Basin Management Plans (RBMP) will be climate-proofed.

***BLUEPRINT to Safeguard European Water aim to ensure good quality water in sufficient quantities for all legitimate uses.***

The time horizon of the Blueprint is 2020 since it is closely related to the EU 2020 Strategy and in particular to the planned Resource Efficiency Roadmap in particular. 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 synthesize policy recommendations building on four on-going assessments: the assessment of the River Basin Management Plans delivered by the Member States under the Water Framework Directive, the review of the EU action on Water Scarcity and Drought, the assessment of the vulnerability of water resources to climate change and other man made pressures and the Fitness Check which will address the whole EU water policy in the framework of the Commission Better Regulation approach.

#### ***SEWAGE SLUDGE DIRECTIVE (Directive 86/278/EEC)***

The directive seeks to encourage the use of sewage sludge in agriculture and to regulate its use in such a way to prevent harmful effects on soil, vegetation, animals and humans. To this end, it prohibits the use of untreated sludge on agricultural land unless it is injected or incorporated into the soil. Treated sludge is defined as having undergone "biological, chemical or heat treatment, long-term storage or any other appropriate process so as significantly to reduce its fermentability and the health hazards resulting from its use". To provide protection against potential health risks from residual pathogens, sludge must not be applied to soil in which fruit and vegetable crops are growing or grown, or less than ten months before fruit and vegetable crops are to be harvested.

The Directive specifies rules for the sampling and analysis of sludges and soils. It sets out requirements for the keeping of detailed records of the quantities of sludge produced, the quantities used in agriculture, the composition and properties of the sludge, the type of treatment and the sites where the sludge is used.

#### ***URBAN WASTE WATER TREATMENT DIRECTIVE (Council Directive 91/271/EEC concerning urban waste-water treatment)***

Has as a goal the protection of the environment from the adverse effects of urban waste water discharges and discharges from certain industrial sectors. It regulates collection, treatment and discharge of domestic waste water, mixture of wastewater and waste water from certain industrial sectors (Annex III). Particularly the Directive requires:



- The collection and treatment of waste water in all agglomerations of >2000 PE;
- Secondary treatment of all discharges from agglomerations of > 2000 PE;
- More advanced treatment for agglomerations >10 000 PE in designated sensitive areas and their catchments;
- A requirement for pre-authorisation of all discharges of urban wastewater, of discharges from the food-processing industry and of industrial discharges into urban wastewater collection systems;
- Monitoring of the performance of treatment plants and receiving waters;
- Controls of sewage sludge disposal and re-use and treated waste water re-use.

***REACH DIRECTIVE (Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)***

It is the European Community Regulation on chemicals and their safe use. The aim of REACH is to improve the protection of human health and the environment through better and earlier identification of the intrinsic properties of chemical substances. It places greater responsibility on industry to manage the risks from chemicals and to provide safety information on the substances

***IPPC DIRECTIVE (Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control)***

It presents a set of common rules for permitting and controlling industrial installations and aims to minimise pollution from various industrial sources throughout the EU. It has an integrated approach: the permits must take into account the whole environmental performance of the plant, covering e.g. emissions to air, water and land, generation of waste, use of raw materials, energy efficiency, noise, prevention of accidents and restoration of the site upon closure. The permit conditions, including emission limit values (ELVs), must be based on Best Available Techniques (BAT). There are elements of flexibility, taking into account the technical characteristics of the installation, its geographical location and the local environmental conditions. Public has a right to participate in the decision making process.

***NITRATES DIRECTIVE (Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources)***

It is an integral part of the WFD and one of the key instruments in the protection of waters against agricultural pressures. It aims at protection of water quality across Europe by preventing nitrates from agricultural sources polluting surface waters and groundwater and by promoting the use of good farming practices. Steps of implementation are:

- (1) identification of polluted or threatened waters (N),
- (2) designation of "nitrate vulnerable zones" (NVZs),



- (3) establishment of Code(s) of good agricultural practice,
- (4) establishment of Action Programmes, to be implemented by farmers within NVZs on a compulsory basis,
- (5) national monitoring and reporting every 4 years.

### **CODE(S) OF GOOD AGRICULTURAL PRACTICE**

According to the Nitrates Directive implementation by farmers is on a voluntary basis and it should include:

- measures limiting the periods when nitrogen fertilizers can be applied on land in order to target application to periods when crops require nitrogen and prevent nutrient losses to waters;
- measures limiting the conditions for fertilizer application (on steeply sloping ground, frozen or snow covered ground, near water courses, etc.) to prevent nitrate losses through leaching and run-off;
- requirements for a minimum storage capacity for livestock manure; and
- crop rotations, soil winter cover and catch crops to prevent nitrate leaching and run-off during wet seasons.

In addition, in Nitrate Vulnerable Zones establishment of action programmes that must include before mentioned measures (Codes of good Agricultural Practice) and other measures, such as limitation of fertilizer application (mineral and organic), taking into account crop needs, all nitrogen inputs and soil nitrogen supply, maximum amount of applied livestock manure (corresponding to 170 kg nitrogen /hectare/year). Finally, national monitoring and reporting should include data and information on:

- Nitrates concentrations in groundwater and surface waters;
- Eutrophication of surface waters;
- Assessment of the impact of action programme(s) on water quality and agricultural practices;
- Revision of NVZs and action programme(s); and
- Estimation of future trends in water quality

### **THE COMMON AGRICULTURAL POLICY (CAP)**

As one of the oldest policies of the European Union, it is strongly rooted in the European integration project. Due to the CAP's long history (since 1960) it is also a policy that has been reformed on many occasions, in particular during the past one and a half decades. As a result, the new Common Agricultural Policy (CAP) with four basic EU regulations have been published in the Official Journal of 20 December 2013:

- Rural Development: Regulation 1305/2013
- "Horizontal" issues such as funding and controls: Regulation 1306/2013

- Direct payments for farmers: Regulation 1307/2013
- Market measures: Regulation 1308/2013

With these regulations the vast majority of CAP legislation will be defined and will contribute to the CAP simplification to guarantee its compatibility with broad policy objectives such as:

- the environment;
- food safety;
- cohesion; and
- protection of the Union's financial interests.

The purpose of the simplifications is to ensure that policies, the implementation mechanisms and the necessary legal framework are never more complex than necessary in order to achieve the intended objectives effectively.

### **MINISTERIAL CONFERENCE ON THE PROTECTION OF FORESTS IN EUROPE (MCPFE)**

The Ministerial Conference on the Protection of Forests in Europe (MCPFE, synonymous Helsinki Process and Forest Europe since November 2009) is a pan-European forest policy process at ministerial level, to develop guidelines, criteria and indicators for the protection and sustainable management of forests. Since 1990 every 3 to 5 years ministerial conferences and their follow-up processes were conducted and represent one of the most effective forest policy mechanisms at regional level.

Beside general guidelines for sustainable management and conservation of biodiversity of forests in Europe, following resolutions are considerable concerning climate change in the context of forest and water:

- Helsinki (1993) H4: strategies for a process of long-term adaptation of forests in Europe to climate change;
- Vienna (2003) V5: Climate change and sustainable forest management; and
- Warsaw (2007) W2: Forests and Water

On the initiative of Austria the European ministers made an historical decision and launched negotiations for a legally binding agreement on Forests in Europe during the last Forest Europe Ministerial Conference in Oslo (2011).

### **EU FOREST STRATEGY (2013)**

The Forest Strategy of the European Union is intended to supplement the national forest policies of the individual member states and to optimize the implementation of community measures in the area of forestry. The Forest Strategy stresses the principle of subsidiarity as well as sustainable management of forests (especially in view of the fact that the amount of wood used for energy production in the EU in 2020 would be equivalent to current total wood harvest) and their multi-functional role as the most important maxims in trade.

The EU Regulation on “support for the development of rural areas” is a framework regulation for the bilateral support between the European Commission and the EU member states aiming at the development of the rural areas. It is including sustainable management considering international agreements, especially the resolutions of the Ministerial Conference for the Protection of Forests in Europe.

Each Member State should point out its intentions to increase forests’ mitigation potential through increased removals and reduced emissions on the one hand and on the other forests’ adaptive capacity to climate change. Also the forest cover should be protected to ensure soil protection, water quality and water quantity regulation by integrating sustainable forestry practices in the Programme of Measures of River Basin Management Plans and in the Rural Development Programmes.

### **ALPINE CONVENTION (1995)**

The Alpine Convention, as a convention for the protection of the alpine region, was signed by the Ministers for the Environment of the alpine states and the Environmental Commissioner of the European Commission in 1991. It is a multilateral treaty according to international law and its objective is an environmentally compatible use of the entire alpine region in an economically, ecologically and socially balanced way.

The protocols regarding “conservation of nature and landscapes”, “mountain farming”, “land-use planning and sustainable development”, “mountain forests”, “tourism”, “soil conservation”, “energy”, “transport”, as well as a protocol on the settlement of disputes entered into force in 2002.

As global climate change is affecting the Alpine Space in a notable manner the Alpine Convention emphasises inter alia the importance of two strategies: The adaptation to changes in water balance due to increase of heavy rainfalls and drought periods on the one side and the solution of conflicts of different targets in water utilization on the other.

During the 10<sup>th</sup> Alpine Conference (Evian, 2009) the “*Action Plan on Climate Change in the Alps*” was adopted. Main objectives concerning mountain forests are: adaptation to climate change by keeping the Alpine forests in a good ecological state and by increasing their biodiversity, forestry in terms of an economic development of local populations and reinforcement of the role that forests play in preventing natural hazards as well as the implementation of the WFD.

The Alpine Convention has published a document that will be of key importance for the construction of small hydropower stations in an environmentally friendly way: the 'Common Guidelines for the use of small hydropower in the alpine region' include common principles and recommendations, an outline for an assessment procedure as well as a pool of evaluation criteria. Good practice examples with detailed methodologies are presented in an annex.

### ***CARPATHIAN CONVENTION (The Framework Convention on the Protection and Sustainable Development of the Carpathians)***

The Framework Convention on the Protection and Sustainable Development of the Carpathians (Carpathian Convention) was adopted and signed by the seven Parties (Czech Republic, Hungary, Poland, Romania, Serbia, Slovak Republic, Ukraine) in May 2003 in Kyiv, Ukraine, and entered into force in January 2006. It is the only multi-level governance mechanism covering the whole Carpathian area and besides the Alpine Convention the second sub-regional treaty-based regime for the protection and sustainable development of a mountain region worldwide.

The common vision of the Parties to the Carpathian Convention is to pursue comprehensive policy and cooperation in order to guarantee protection and sustainable development of the Carpathians. The improvement of the quality of life, the strengthening of local economies and communities and the conservation of natural values and cultural heritage should go hand in hand in the Carpathian area.

The Convention provides a framework for cooperation and multi-sectoral policy coordination, a platform for joint strategies for sustainable development and a forum for dialogue between all stakeholders involved – from the local community and various NGO's up to the regional and national Governments, Institutions of the European Union and the United Nations.

The Carpathians lie largely within the Danube River Basin, so exchange with the International Commission for the Protection of the Danube River (ICPDR) and the Carpathian Convention is important and the two organisations are observers of each other (Initiative of mutual observership status between Interim Secretariat of the Carpathian Convention (ISCC) and the ICPDR). Additionally, the official partnerships exist with:

- MoU<sup>1</sup> with the Executive Secretariat of the Central European Initiative (CEI-ES);
- MoU with the Carpathian Ecoregion Initiative (CERI);
- MoU with the Convention on Wetlands (Ramsar Convention);
- MoU with the Alpine Convention;

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<sup>1</sup> Memorandum of Understanding

- MoU with the Convention on Biological Diversity (CBD) and the Alpine Convention;
- MoC<sup>2</sup> with the European Academy (EURAC); and
- MoU with the Science for the Carpathians Initiative (S4C)

### 3. NATIONAL/REGIONAL LEGISLATION

European Union law (such as Directives) should have been transposed into the laws of the member states. Directives set (sometimes quite specific) objectives but leave the implementation to the EU member states. Regulations are directly applicable to member states and take effect without the need for implementing measures. EU member states have adopted the Water Framework Directive, its daughter directives and other directives with regard to water protection and pollution. Some countries have additional regional legislation (Austria, Italy).

All countries within the CC WARE project area have state Water Acts in accordance with the Water Framework Directive. Additionally, there are by -laws (regulations, decrees, etc) on surface and groundwater quality. Concerning water pollution, the following Acts and by -laws are of importance:

- Numerous decrees and by -laws on the emission of substances in the discharge of waste water from specific industry and interventions in the area (e.g. smelting plants, petrol stations, landfill effluents, urban waste water treatment, meteoric water from public roads, etc.);
- Nitrate Action Plan (Austria);
- Rules on criteria for the designation of a water protection zone (Slovenia);
- Quality of drinking water in compliance with the 80/778 Council Directive of the European Communities (Greece);
- Drinking water supply sources management and protection Act (Serbia);
- Regional Water Protection Plans (Italy);
- Rules for surveillance, sanitary inspection and monitoring of drinkable water (Romania);
- Ordinance № 3 of 16.10.2000 on the terms and conditions for research, design, validation and operation of sanitary protection zones - Water Protection Areas (Bulgaria).

State drinking water decrees are in accordance with the Drinking Water Directive. Drinking water is food; therefore also legislation regarding food has to be considered. Water supply systems (pipelines, maintenance etc.) are mainly regulated by regional or local (municipal) laws. Water supplies are mainly public and are owned by municipalities. Public water supply is a public service, which is diversely organised.

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<sup>2</sup> Memorandum of Cooperation

Given the scope and objectives of the CC -WARE project, diverse and numerous legislation and policies are recognized as significant for land use by project partners. In addition to national Spatial planning Acts, the majority of national legislation includes Acts, Strategies or other legislation that in particular address ecosystems.

In Greece it is Application of NATURA for the lakes of Thrace. With respect to forests, Austria has the Federal Forest Act, Austrian Forest Programme and Natural Forests Reserves. In Bulgaria, the Forest Act and associated Ordinances regulate the forests management. Acts on Forests exist in Slovenia, Serbia, while in Romania the Forest Code exist. In Italy, there are several provincial acts that address land use, e.g., forest and mountain land of river and protected areas (Autonomous Province of Trento), landscape protection (Provincia Autonoma di Bolzano). Agricultural land acts exist in Slovenia, Serbia and Austria. In addition there are numerous acts, by - laws, decrees and regulations that address environmental protection, construction activities, nature protection, etc., in many project countries. In Austria, a good example of linkage between water management and agricultural legislation is addressed in the Sewage Sludge Regulation of Lower Austria.

With respect to Climate Change, specific policies that address CC exist in many countries. In Slovenia, the adaptation strategy for agriculture and forestry to CC and resulting action plan are in force and the Climate Change Act (draft version) exists. National Climate Change Strategies are adopted in Hungary (2008-2025) and Romania (2013-2020), Third National Action Plan on Climate Change (2013-2020) exist in Bulgaria, while in Austria several documents address CC, namely the Austrian Adaptation Strategy, the Climate Protection Law and the Austrian Forest Program 2005 (thematic area 1 - "Climate protection") among the other. According to the available data, all countries that have participants in the CC - WARE project ratified the UNFCCC Convention.

River Basin management plans for the first reporting period and in line with the EU WFD are completed for many transboundary river basins, like the Danube, the Tisza and river basins in the East Aegean Sea Region.

## 4. LEVEL OF EU LEGISLATION IMPLEMENTATION

Since 1989, **Romania** has acceded to several international environmental treaties, which call for the implementation of treatment plants emissions, pollutant monitoring the quality of the environment and the integration of national networks in the European Monitoring environmental protection. Relevant European Directives contained in the *acquis Communautaire* include:

- 75/440/EE Directive on the quality required of surface water abstraction for drinking water purposes;
- 80/778 EEC and amendments 98/83/EC: Drinking Water Directive.

Romania has ratified a series of international treaties on the protection of water quality (Szeged Agreement on the Tisza river protection against pollution and its tributaries; Convention from Helsinki on the protection and

use of transboundary water courses and international lakes; Cooperation Agreement on the Protection of the Danube; Convention from Bucharest on the Strategic Action Plan regarding the Black Sea 1996.)

In **Austria**, the implementation of the Water Framework Directive is postulated in the amendment of the Water Law Act (2003). In this context, the Austrian water surveillance was adapted through the "*Water Condition Monitoring Regulation*", in which the requirements of the Water Framework Directive and the Austrian Water Act (Amendment 2003) have been implemented.

The adaptation of the National legislation in **Greece** to the EU legislation is generally done within the deadlines that are defined in every special case. The application of this legislation and the compliance to the new rules, whenever there are rules new or significantly different ones, on the other hand is not always as obvious as it might be. This is in part natural because the application of legislation induces usually a total reorganization of many administration services, data collection, efforts for information and acceptance of the rules by the local population and so on.

The main requirements of Directive 2000/60/EC of the European Parliament and of the Council of 2000 for establishing a framework for the Community actions in the field of water policy have been introduced into **Bulgarian** legislation, as well as requirements from other directives related to quantity and quality control of surface waters and drinking water supplies, such as Directive 98/83/EC concerning the quality of drinking water, Directive 2009/90/EC laying down technical specifications for chemical analysis and monitoring of water status and Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources. Other requirements introduced into Bulgarian legislation are related to the preservation of waters in territories marked for habitat or species protection as presented in NATURA 2000 - Directive 92/43/EEC on the conservation of natural habitats and wild flora and fauna and Directive 79/409/EEC on the conservation of wild birds.

In **Serbia**, the number of EU Directives and international conventions, or their parts are transposed into the Serbian legislation and policies (EU WFD, The Aarhus Convention, SEA Directive 2001/42/EC, The Carpathian Convention, of Danube River Protection Convention etc). However the implementation process is ongoing and it is realistic to say that it process will continue for the next 20 years.

The national regulation for water resources in Serbia includes a number of acts and sub legal acts that are mostly in line with the European regulations related to this sector. This is particularly true after the enactment of regulations that are implemented since 2004 (Act on environmental protection, Act on planning and construction, Act on waters, Act on mining and other).

The Water Act is mainly based on recommendations given in the EU Directives. More generally, the legislation related to environmental protection is in a process of harmonization with the EU Directives. In this context, the full implementation of Water Act will take some time. Number of by-laws is in an intensive process of



preparation with a view to fulfil the requirements related to the accession of the Republic of Serbia to the EU. As these by-laws will progressively repeal existing legal and regulatory framework, the Water Management Strategy will be developed in accordance with the principles which are being established in the new in-progress legislation. The by-laws are in line with EU directives requirements and will contribute to implementation of the WFD and other EU water directives in Serbia.

In **Hungary** all the EU environmental regulations have been implemented within the given time frame. This is an ongoing process because several new directives or amendments and other regulations have been launched since the publication of the WFD or DWD. The harmonisation of Hungarian regulations with the EU legislation started in 1994 after the signing of the accession partnership of Hungary and the EU. The accession partnership provided a framework for a number of policy instruments which was used to help the candidate countries in their preparations for membership. These included a national programme for the adoption of the acquits to be adopted by Hungary. The harmonisation closed by the accession 1st of May in 2004. The most important environmental issues were to develop of monitoring and implement control structures and capacities, A particular emphasis was given to waste water, waste management, air pollution, integrated industrial pollution control and risk management. Environmental protection requirements and the sustainable development were integrated into the definition and implementation of national and sectoral policies. The European Commission (EC) has a special process to analyse legal systems of the Member States and accession countries. If the EC discover any discrepancy than infringement procedure is started. Recently, there is an ongoing procedure against Hungary due to failure to fulfil obligations of 2000/60/EC Water Framework Directive in the implementation of recovery of the costs for water services.

### **Italy**

The Water Framework Directive 2000/60/EC has been implemented with the Legislative Decree n.152/2006: community obligations regarding the development of management plans have been transposed into national legislation through Article 117, Part III, of the Legislative Decree 152/2006, which lays down the obligation for each river basin district to adopt a management plan. The Ministerial Decree n.260/2010 is also for the implementation of Water Framework Directive 2000/60/EC

Moreover, River Basin/District Management Plan have been developed and approved with reference to 152/2006. They are required by Water Framework Directive (Directive 2000/60/EC), and are the cognitive, strategic and operational tool through which to plan, implement and monitor measures for surface water bodies and groundwater protection, rehabilitation and enhancement and facilitate the sustainable use of water resources on Hydrographic District (interregional scale).

Legislative Decree n.219/2010 of the Ministry of Environment and Protection of Land and Sea in the implementation of Directive 2008/105/EC regarding priority substances.

The Directive 92/43/EEC has been implemented with Republic President Decree DPR n.357/97 and Ministerial Decree (DM) March 7, 2012. The DPR n.357/97: is a regulation, implementing Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (as amended by Presidential Decree no. 120 of 12 March 2003). Ministerial Decree March 7, 2012: Ministry of Environment and Protection of Land and Sea approved the "fifth updated list of sites of Community importance for the continental biogeographical region in Italy, in accordance with habitats' Directive 92/43/EEC".

## 5. GAPS IDENTIFIED AND PROPOSALS / IDEAS FOR IMPROVEMENT

Among the other issues and gaps at **EU LEVEL** the preventive environmental risk management in drinking water supply systems does not exist. Moreover, **EU BLUEPRINT III Impact Assessment** indicated insufficient use of economic instruments, lack of support for specific measures, poor governance, and knowledge gaps in EU legislation.

In addition in Hungarian National report is underlined the necessity of development of water safety plans (WSP) and whether does the 2000/60/EC Water Framework Directive cover all important details of the repealed 75/440/EEC Council Directive and 79/869/EEC Council Directive and 77/795/EEC Council Decision. The comprehensive elaborations on before mentioned issues are provided in Hungarian national template.

### **AUSTRIA**

While the worthiness of protection of water bodies is satisfactorily defined in the Water Act, the Austrian National Environment Plan and a Study of the University of Technology (2010) still identify gaps in the practical application of protective measures. Utilisation demands have increased the strain on water bodies in certain Austrian regions. Groundwater protection should be given the highest priority and applied extensively. A guideline for water protection and conservation areas (separation into 3 zones due to the distance to the relevant spring, regulations for different users) exist (ÖVGW W 72, 2004) but is not legally binding unless it is pointed out as an obligatory condition for the running of a water supply within a permit. In order to have homogeneous DWPA (drinking water protection areas) regulations, a federal law could be evolved.

In the south of Austria precipitation is expected to decrease in winter. For these areas, as well as for the low-precipitation regions in the eastern parts of Austria, groundwater recharge will probably decrease again in the future due to climate change. A good water management plan is crucial to guarantee a sustainable water supply in these areas.

There is a noticed rise in temperature of surface and groundwater. This can lead to an acceleration of the processes between these systems and therefore change the chemical composition. This can be an additional task for drinking water protection policy.

Additionally, vulnerability and risk assessment mapping according to state-of-the-art methods should be intensified in karst areas.

Unfortunately, also the draft of the decreed drinking water protected area (DWPA) within our test area Waidhofen / Ybbs shows some weak points concerning forest management considering the protection of drinking water:

- Due to the Forest Law clear cuts > 2 ha are prohibited and clear cuts > 0,5 ha are subject to approval. Therefore the limit of 3 ha due to the decree is too high and only subject to registration is too weak. In fact a total clear cut prohibition according to water protection would be worth striving for.
- Another problem that not only exists at this site and can cause negative effects on water quality, are damages from deer. Therefore regulations concerning deer management are necessary, e.g. the feeding of deer should be prohibited in water protection and conservation areas.

Water resources protection always includes thresholds for toxic, dangerous and chemical substances to determine the water quality. In Austria they are defined in laws like the Austrian Water Law and the Drinking Water Decree. In order to have state-of-the-art drinking water protection, the level of these thresholds has to be checked regularly to keep the laws up to date. This can also mean that additional quality parameters and other substances like Beryllium and Thorium could be added to the threshold list. Within the last years, a lot of research has been done in the field of endocrine substances in water bodies. They can have severe effects on water quality, fish intoxication and drinking water pollution. This could be kept in mind for amendments of the laws.

A comparison of thresholds in the CC-WARE partner countries could be very interesting. This would clearly show the differences in drinking water protection and its importance. Further improvement by setting higher goals could be developed within this comparison.

In order to check the thresholds an effective and well distributed network of water quality testing sites has to exist. Various laws like the Water Condition Monitoring Regulation are dealing with this subject. The network has to be checked regularly in order to determine gaps and errors in the monitoring system. A cross-validation from independent agencies could help to guarantee the quality of the measurements. Further, densification of the testing network could improve the monitoring system.

Information about drinking water usage in households is crucial for awareness rising for water related problems in the society. Therefore, it is important that water suppliers publish this data. A lot of water associations have these information online and easy accessible for the people. But there are no guidelines or regulations that

would standardize this for all Austrian states. The information on the water department websites also varies from state to state and their structure can be very confusing.

Since climate change can have a severe impact on the water availability water saving technologies and efficient water use get more and more important. Austria, as a water rich country, doesn't have a lot of regulations in this field. The average water use per person is quite low compared to other highly developed countries. Nevertheless, water efficiency programmes are important to guarantee a sustainable water supply for the next generations. Especially in dry areas, where agriculture depends on irrigation, a proper management is necessary.

Although the soil protection acts exist, erosion is still happening widely in Austria. Stricter laws including actual programmes and measures are recommended. This would not only help to protect the soil on agricultural land, it would also decrease phosphorus pollution in rivers.

The EU Rural Development Regulation is, among other measures, financing the tending and restoration of forests with protection, welfare and recreational effects. The preservation of public service functions of forest - especially the protection function and water storage capacity - is therefore of rising importance.

The Forestry Department of the BMLFUW already implemented the "Protection through Forest" (in VOLE 07-13: ISDW) programme. But taking the EU legislation in account, the implementation of a further **"Forest for Water"** module is planned. It would improve the forest effects on the water regime and clean up ditches and riverside forests.

This new programme shall secure drinking water resources for future generations through adjusted forest management measures. To compensate the additional expenses, subsidies within the framework of the Regulation "Rural Development 2014+" could be distributed considering already existing requirements by the Austrian "Water Law" or other legislative rules and guidelines.

Due to the long implementation periods the measures, which will be supported by the VOLE-programme (2014-2020), have to be seen as an initial step towards the desired state improvements only.

In summary, it is evident that drinking water management is an interdisciplinary task. Main aspects of groundwater protection have to be done in the catchment: regulating the agricultural use, manage forestry measures and prevention of the input of toxic substances are only a few examples. But for all these fields different laws and regulations exist and an integral solution is hardly ever achieved. The organization of the interlinkage between the different fields of work and their regulations is probably one of the main tasks within the Austrian environment legislation. Comparing the different approaches in the CC-WARE partner countries could be an initial step in the right direction.

## **BULGARIA**

There is no integrated and common approach of forest-water management. The related legislation is more or less sectoral. According to the Strategy for the Development of the Water Sector: “The state is not sufficiently prepared for the impending climate change at the Balkans. The negative effect of global warming will be felt in the next 10-20 years much stronger than previously considered”. It is also pointed out that there are some discrepancies between the objectives, tasks, mechanisms and outcomes. According to the Strategy, the issues of provision and treatment of drinking water, “..... financial support for ensuring water quality, the activities for maintenance and control of reserve water sources, the status of water protection zones are not precisely settled in the legislation. There are no standards concerning the interaction of climate change and trends in water management”.

Important guidelines and changes concerning the RBMP update and the vulnerability analysis of water supply in water shortage conditions, drought and climate change have not been yet transposed completely. They are still recommendatory and integrated management is not entirely implemented.

Certain problems related to the water-protective functions of forests are as follows:

- The conflict between the increased protected areas and/or the area of forests with special functions and the need to increase of wood consumption;
- Slowing down the process of turning coppice into seed plantations as well as the implementation of not always appropriate types of fellings for their transformation;
- The deterioration in health and quality of small-scale private forests, caused mostly by logging, which leads to the loss of their water-protecting functions; and
- The construction of forest roads for extracting of harvested wood in protective forests has negative consequences, one of which is the loss of water-protecting function.

Some of them are pointed out also in the National strategy for the development of forest sector (2013-2020).

There are no clear financial mechanisms for the implementation of this Strategy as well as for the implementation of the EU Forest Strategy and Biodiversity Strategy.

Forest Act includes a special chapter on the management of ecosystem services and the benefits from them, but the secondary legislation, which should determine the methodology for their evaluation and payment, is still under preparation.

The solution of above mentioned problems is more or less political commitment at national level which should be taken by the decision-makers.

## **GREECE**

*The adaptation of the European Environmental legislation goes is proceeding fairly smoothly in Greece although certain problems have occurred concerning its implementation due to the lack of available resources. In addition, the current socio-economic conditions do not permit speedy implementation of some aspects of the national adaptation to the European legislation.*

*As a result of all the above there have been unavoidable delays in a few cases of implementation. This is especially the case for the elaboration of the River Basin Management Plans (RBMP). At present, 12 out of 14 RBMP have been published as laws. One more (for the island of Crete) is about to be finalised and the last one for the Aegean Islands is in progress.*

*Although Greece complies with the International Conventions for Green-House Gas Emissions, up to now there has been no approved National Climate Change Action Plan. As a result, there is no overall framework for the protection of drinking water and ecosystems under conditions of climatic change. More specifically, there are two areas which call for particular attention:*

- a) The smooth implementation of protection actions and measures to be taken (e.g. allocation of responsibilities, financing issues, practical considerations for the application etc.)*
- b) Identification of the vulnerable areas (in terms of water resources) to climate change and the need to have additional protection of these areas. The CC-WARE project is a step forward in this direction.*

*In addition to the above, there are some technical issues which have not as yet been addressed adequately (e.g. the estimation of ecological flows).*

## **HUNGARY**

The climate change issues are not mentioned and considered in the legislation of water sectors, only the new national strategies developed over the past several years have deal with the issue of adaptation to climate change. There are too much regulation and on the other hand less success in the implementation of that strict and complicated rules. Although the legislation and policies are regularly updated their applicability is sometimes very difficult and they are not well accepted by practitioners due to their contradictions, complexity etc. The successful application of any policy would require involvement of the stakeholders and a longer (proper) implementation period to be well prepared for it. Some actions are too expensive for implementation but the affordability of the measures usually are not assessed in Hungary. The source protection regulation (Government regulation No. 123 in 1997 on the protection of the actual and potential sources, and the engineering structures of drinking water supply) and the rules on Water Safety Planning are not harmonised (in Governmental regulation No. 201 in 2001 on drinking water quality and controlling). The WSP based on risk assessment but source protection rules does not consider risk at all in Hungary.

## ITALY

Lack of national legislation regarding adaptation strategy to climate change. In the Water Protection Plans (Piano di Tutela delle Acque - PTA - approved by several Italian regions with reference to DLgs 152/1999 and 152/2006) there is a lack of details regarding how to account for climate change and the role of ecosystem services. To fill this gap, the activities carried out at transnational scale in CC-WARE are relevant.

Moreover, with respect to protection zones for springs and wells devoted to human consumption, while the procedures for zoning protection areas of wells (geometrical and hydrogeological) can in most cases be considered adequate, the procedures for zoning protection areas of springs located in mountain areas (geometrical or half/time discharge decrease) are often not adequate to fully account for the specific hydrogeological characteristics of each springs considered. To fill this gap, the activities carried out at site-specific scale by PP11 within CC-WARE are relevant, as they are aimed to the adoption of procedures based on Vulnerability indexes based on physical characteristics of springs and continuous monitoring data.

## ROMANIA

- Existing legislation is not unitary and could not be properly implemented;
- There are not available maps regarding the water resources, existing maps do not treat the subject properly;
- Steps already taken to include the water transportation infrastructure into "critical infrastructure domain" in order to ensure a better protection;
- No established contribution of ecosystems in terms of quantity and quality of water and therefore not distributed properly their value;
- Is not monitored and respected the water protection legislation (the environment - in general) in areas with private land;
- Not allocated sufficient funds for water protection measures (torrents, afforestation, restoration of degraded ecosystems etc.); and
- Not clearly defined responsibilities of local authorities on water management and maintaining their health and prevent pollution.

## SERBIA

With respect to objectives of the CC WARE project, there are several gaps that should be considered in Serbia. First of all, the transposition of the EU legal framework without comprehensive consideration of the national priorities and characteristics might be time and money consuming. At the moment, it is estimated that around 10 Billion Euros are needed just for water sector to fulfill strict requirements. The similar apply to all sectors, so the lack of funding is a huge issue with respect to ESS, drinking water supply, land use practices, and CC.



Although the roles of ecosystems are recognized in sectoral legislation, e.g., Act on Forests, ecosystem services with respect to provision of drinking water are not recognized in majority of sectoral legislation and policies.

There is contradiction among sectoral laws. As an example, two laws, important for land use practices (among the others, e.g., discrepancies exist in Act on planning and construction and the Act on water. In the former the exploitation permit is issued within the period of seven days upon the reception of positive report by the Commission for Technical control without reference if the Water permit has been previously issued. According to the latter the exploitation permit cannot be issued without Water permit.

Coordination among different inspections has to be improved and jurisdictions should be better specified.

Despite the numerous of legislation documents they are not always implemented. As an example, drinking water sources protection zones are not always considered properly, and illegal building happened close to them.

There is sectoral cooperation at the state level, however it should be improved. Moreover end beneficiaries and stakeholders at the local level are not always included in decision making process, and the capacity building at all levels is necessity.

In summary, the legislation and policies in general terms advocate multidisciplinary approach and inter-sectoral cooperation but it is not applied in practise.

When it comes to climate change, the national strategies developed over the past several years have generally mentioned the issue of adaptation to climate change. Thus, the National Strategy for Sustainable Development 94, National Environmental Protection Programme and Biodiversity Strategy 95 has paid special attention to climate change and framework adaptation measures have been recommended. The Strategy for Scientific and Technological Development has identified environment and climate change as one of the seven priority fields in the domain of science and technology.

In the earlier adopted sectoral documents, such as the Forestry Development Strategy, Energy Sector development Strategy by 2015 and Agriculture Development Strategy, climate change was only recognized as one of several important factors, but no special attention was paid to the planning of actual measures for climate change mitigation and sectoral adaptation to changed climate conditions.

## RECOMMENDATIONS

### BULGARIA

The process of harmonization of the national legislation, the Water Act in particular, with European legislation on the basis of the Water Framework Directive should continue. A unified state policy is required. It is necessary to transpose the standards related to the updating of management plans on climate change and vulnerability

and risk analysis of water supply /water resource systems under conditions of water shortage, drought and climate change.

The Water Law needs changes to provide the development of long-term measures for ensuring water supply, optimization of dam and water system management and new schemes and decision support systems in reservoir management. All this should be included in the future plans for water supply management in drought periods and in RBMP.

Integration of measures is needed in RBMP and in the general plans in the WSS sector, which are result of advanced analysis of the water supply and water resource infrastructure, the priorities and indices of reliability of water supply, water resource management and maintenance of the sanitary-protection zones and water protection forests. It is imperative to make joint analysis of the water protection forests and the management of the water resource /water supply/ systems and to specify additional arrangements to be set in the updated plans for River Basin Management.

Improvement of legislation related to the preservation of water and forest resources and implementation of efficient systems for monitoring and control of actions, laid out in the legal framework.

Development of economic incentives to encourage private forest owners to conduct better management and preservation of their forests.

Integration of the efforts of various institutions in charge of drinking water management to provide improved legislation related to water preservation, control and management of water protection areas.

Optimization of government / public institutions responsible for preservation and utilization of water resources and for the implementation of actions mitigating the vulnerability of water resources under climate change conditions.

It is also necessary to unify the terms and definitions used in forest, water, health, etc. legislation.

## **GREECE**

Every new regulation or law has to be tested, before publication, for its applicability in every specific case, if its target is to be achieved and produce beneficial results.

The main conclusion derived from the survey of the national legislation regarding the water resources and ecosystems is that there is a need for a general, clear and coherent legislation framework within which each separate action can be applied. In this context, the following aspects are important:

- Data collection which is crucial for the elaboration of technical legislation and for the monitoring of its application;

- Appropriate administration reforms which will help the proper implementation of the new legislation;
- Coupling of the various specific subjects and actions, foreseen from different acts, in order to have faster and better results;
- Simplification of reporting and assessment which will facilitate the control of application.

Some of the above issues seem to be also important at the European level. Coupling of the Water Framework Directive with the Common Agriculture Policy is a step taken by EC in this direction.

### **HUNGARY**

The preventive environmental risk management in drinking water supply systems should be strengthened in EU legislation and implementation through forming the water safety plans (WSP).

Worldwide the principal starting points for the setting of water quality standards are the World Health Organization Guidelines (WHO). The Guidelines for Drinking-water Quality WHO (2004) outlines, a preventive management framework for safe drinking-water that comprises five components, three of which combine to form the water safety plan.

Key components in the framework for safe drinking-water are:

- Health based targets (based on an evaluation of health concerns).
- System assessment (to determine whether the water supply chain (from source through treatment to the point of consumption) as a whole can deliver water of a quality that meets the health-based targets.
- Operational monitoring of the control measures in the supply chain, which are of particular importance in securing drinking-water safety.
- Management plans (documenting the system assessment and monitoring; describing actions to be taken in normal operation and incident conditions - including upgrade and improvement), documentation and communication.
- A system of independent surveillance that verifies that the above are operating properly.

A water safety plan comprises system assessment and design, operational monitoring and management plans (including documentation and communication). The risk management approach is based largely upon HACCP (Hazard Analysis and Critical Control Point). The principles of HACCP (which is a preventive risk management system that has been used in the food manufacturing industry for a number of decades) are based on developing an understanding of the system, prioritising risks and ensuring that appropriate control measures are in place to

reduce risks to an acceptable level. These principles have been refined and tailored to the context of drinking-water following the application of HACCP by several water utilities.

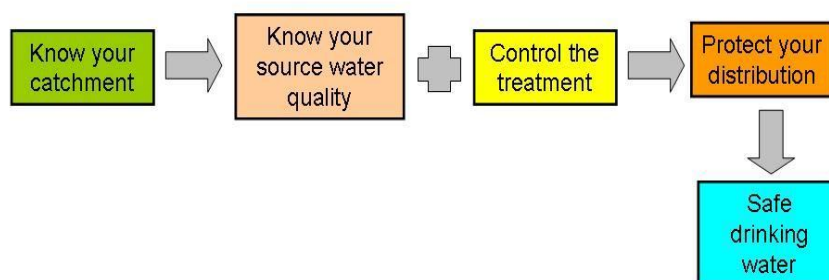
The most cost-effective and protective means of consistently assuring a supply of acceptable drinking-water is the application of some form of risk management based on sound science and supported by appropriate monitoring. It is important that risk management is inclusive and, therefore, needs to cover the whole system from catchment to consumer. Water supply systems can be considered as a number of steps (Figure 9) aimed at assuring the safety of drinking-water, including:

- preventing pollution of source waters;
- selective water harvesting;
- controlled storage;
- treatment prior to distribution;
- protection during distribution; and
- safe storage within the home and, in some circumstances, treatment at the point of use.

These steps can function as barriers, where activities are designed to minimise the likelihood of contaminants entering the water supply or reduce or eliminate contaminants already present in the supply. With the multiple barrier approach, each barrier provides an incremental reduction in the risk of water becoming unsafe. If there is a failure at one point, the other barriers continue to provide protection.

As first point of the preventive environmental risk management **effective catchment management** should carry out, such as **drinking water source protection**, because this has many benefits. By decreasing contamination of source water, the amount of treatment and quantity of chemicals needed is reduced. This may reduce the production of treatment by-products and minimise operational costs. Effective resource and source protection include the following elements:

- Developing and implementing a catchment management plan, which includes control measures to protect surface and groundwater sources;
- Ensuring that planning regulations include protection of water resources (land use planning and water shed management) from potentially polluting activities and are enforced; and
- Promoting awareness in the community of the impact of human activities on water quality.



**Figure 1. 'Catchment to consumer' approach to risk management of the safety of drinking water**  
(after Medema et al. 2003)

### ITALY

- The need for a strong effort, both on a technical and decision making level, on a national scale to adopt national legislation regarding adaptation strategy to climate change;
- Clarification of details in Water Protection Plans regarding how to account for climate change and the role of ecosystem services in adopted plans in several Italian regions;
- Adoption of Procedures for zoning protection areas of wells based physical characteristics of springs and continuous monitoring data.

### ROMANIA

- Integrated system for monitoring of water quality and quantity;
- The legislation harmonisation for establishing the value of water ecosystem services;
- The implementation of the methodologies from projects.

### SERBIA

More stable financing, and prioritization in line with national specificities. The role of ESS and CC impacts on drinking water protection and supply might be integrated more in sectoral strategic documents. Better Cooperation among different inspections and sectors will likely contribute to better protection of drinking water sources. Spatial plans should comprehensively consider cross cutting issues of relevance for water resources and ESS, and adverse effects that changes in land use practices have on them.

## 6. SYNTHESIS OF THE STAKEHOLDERS QUESTIONNAIRE

It was recognized that feedbacks from the participants at the Mid-term conference and 1. Knowledge transfer workshop (in Modena, 19./20.03.2014) policy might be valuable inputs to CC WARE project, in particular with respect to legislation and policies improvement. Based on the answers provided in questionnaires the most significant drinking water supply issues recognized by stakeholders are exhibited in Figure 2 and the proposals for cross-cutting issues solutions are depicted in Figure 3, respectively.

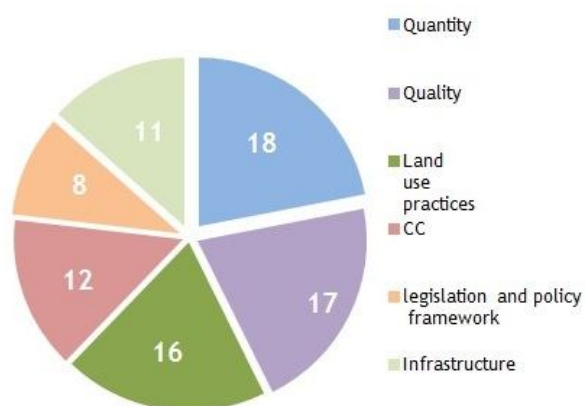


Figure 2: The main drinking water supply issues

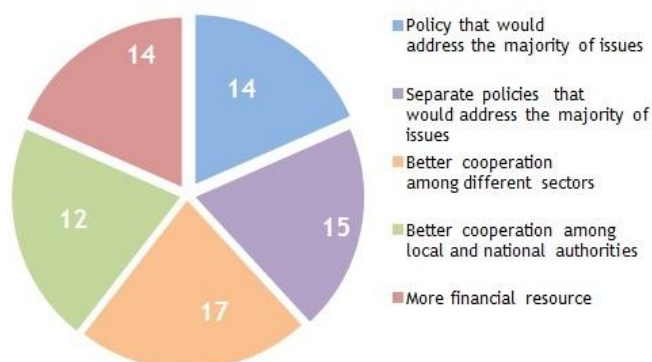


Figure 3: Cross-cutting issues solution

Numbers presented in figures are sum of all rankings (1 the most significant, while 5 is the least significant) for the issues and solutions. However, water quality is ranked as the most significant DWS issue followed by water quantity and land use practices. With respect to solutions for cross-cutting issues the most significant is Policy that would address the majority of issues, followed by better cooperation among different sectors. Answers provided by participants stressed that cross-cutting issues relevant for ESS, DWS, Land use practices and CC should be more integrated, that existing policies and legal framework at national and EU level address cross-cutting issues but improvement is needed.

Based on questionnaires majority of participants have moderate knowledge on ESS, but think that ESS role is significant for DWS. With respect to CC majority of them are familiar with CC impacts on water resources, but some of them stressed that they would like to become more familiar with CC and water management, CC and water protection, DWS risk assessment under CC, CC impact assessment on ESS, etc.

Some of additional comments suggest that results of CC WARE project might be useful for the next RBMPs. Finally, all participants - except one - rate this type of workshop as very useful. In summary, based on the questionnaires outputs the problems identified in CC WARE project are significant for DWS, ESS, land use and CC.

## 7. CONCLUSIONS

- Although the legislation and policies are regularly updated their applicability is sometimes very difficult and they are not well accepted by practitioners due to their contradictions, complexity etc.
- The full application of any policy requires involvement of the end users at the early stages of the policy development and comprehensive consideration of the practitioners' opinions on their applicability.
- The integrated water resources management is advocated in EU WFD, and number of policies however the implementation of that approach is missing;
- In some countries Drinking water supply is not regulated in a comprehensive way and it is just part of some other legislation and policies;
- Implementation of strict EU requirements is often in discrepancy with national legal framework and available funding sources;
- In all countries the more integrated approach that would sustain better interlinkage of DWS, LU, ESS and CC is recognized;
- All PPs indicated that role of ESS is not recognized in national legislation at the level it should be;
- Even if existing water protection plans that addressed climate changes do not provide clear details on implementation;
- According to questionnaires filled by stakeholders and decision makers from SEE countries the scope and objectives of CC WARE address cross-cutting issues of DWS, LU, ESS and CC;
- Based on generated data in this report, there is a need for improvement of the legal framework that address cross-cutting issues of DWS, LU, ESS and CC;

Finally, there are still open questions at national and EU Level:

- Do we regulate too much?
- Do we need just improvement of existing legal framework?
- Do we need new legal framework and policies?



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**SEWAGE SLUDGE DIRECTIVE** (*Directive 86/278/EEC*)  
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**NITRATES DIRECTIVE (Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources)**

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**CODE(S) OF GOOD AGRICULTURAL PRACTICE**

<http://www.fao.org/prods/gap/>

**THE COMMON AGRICULTURAL POLICY (CAP)**

[http://ec.europa.eu/agriculture/cap-history/index\\_en.htm](http://ec.europa.eu/agriculture/cap-history/index_en.htm)

**MINISTERIAL CONFERENCE ON THE PROTECTION OF FORESTS IN EUROPE (MCPFE)**

[http://www.foresteuropa.org/ministerial\\_conferences](http://www.foresteuropa.org/ministerial_conferences)

**EU FOREST STRATEGY (2013)**

[http://ec.europa.eu/agriculture/forest/strategy/index\\_en.htm](http://ec.europa.eu/agriculture/forest/strategy/index_en.htm)

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## ANNEXES - NATIONAL LEGISLATION TEMPLATES

1. *National legislation template Austria*
2. *National legislation template Bulgaria*
3. *National legislation template Greece*
4. *National legislation template Hungary*
5. *National legislation template Italy*
6. *National legislation template Romania*
7. *National legislation template Serbia*
8. *National legislation template Slovenia*

# ***ANNEX 1***

## ***NATIONAL LEGISLATION TEMPLATE AUSTRIA***

# Relevant national legislation analysis for improvement of land use and water management regulation and policies in Austria within the scope of CC - WARE project

Contribution by LP and other Austrian Project Partners:

Ministry of Agriculture, Forestry, Environment and Water  
Management,  
Forest Department – LP



Municipality of the City of Vienna,  
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**Table 1: Drinking water supply and drinking water sources protection**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
Wasserrechtsgesetz (WRG), BGBl. I Nr. 98/2013	Austrian Water Law 1959 (amendment 2013)	X		Ministry (BMLFUW)*	ÖPUL (Austrian Agro-Environmental Programme) WFD Flood Risk Directive National Water Management Plan
Lebensmittelsicherheits- und Verbraucherschutzgesetz (LMSVG), BGBl. II Nr. 296/2013	Food Safety and Consumer Protection Act 2006 (amendment 2013)	X		Ministry (BMG)**	TWV Food Law 1975 Austrian Food Codex
Trinkwasserverordnung (TWV), BGBl. II Nr. 359/2012	Drinking Water Decree 2001 (amendment 2012)	X		Ministry (BMG)**	Austrian Food Codex

<sup>1</sup> Authority in charge for implementation e.g. ministry, municipality, etc.

<sup>2</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)



Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
Österreichisches Lebensmittelbuch, IV. Auflage	Austrian Food Codex	X		Ministry (BMG)**	LMSVG
Strategiekonzept für das NÖ Trinkwasser 2002	Strategy Concept "Drinking Water Supply in Lower Austria" 2002		X	State Government	ÖPUL
NÖ Trinkwasserplan 2007	Lower Austrian Drinking Water Plan 2007		X	State Government	
NÖ Wassercharta 2003	Water Charter of Lower Austria 2003		X	State Government	Lower Austrian Drinking Water Concept Water Management Framework Contract
NÖ Gemeindewasserleitungsgesetz (NÖ GWLG), LGBl 6930-	Lower Austria Water Supply Law for Municipalities 1978		X	State government	WRG

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
7/2013	(amendment 2013)				
NÖ Wasserleitungs-anschlussgesetz (NÖ WLAG); LGBl 6951-3/2013	Lower Austria Water Supply Connection Law 1978 (amendment 2013)		X	State Government	WRG
Trinkwasserschutz- und -schongebiete	Legally decreed drinking water protection areas (DWPA)		X	State and District Authorities	Spatial Planning Act WRG

\*Austrian Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW)

\*\*Austrian Ministry of Health

In general, the **Austrian Water Law** (WRG) was designed to guarantee continuous provision of water as well as a safeguard for future water supply. Therefore it regulates the use of water, respectively the authorisation of the use of water, the protection of water resources and protection against floods and common water management obligations (water management plan, framework regulations, and programmes of the EU).

The *EU Water Framework Directive* (WFD) was implemented in the amendment in the year 2003. The central elements of the 2003 amendment of the Austrian Water Law are:

- Establishment of requirements for the formulation of environmental goals, such as the “good ecological and chemical condition” for surface waters and the “good chemical and quantitative condition” of groundwater
- Establishment of deadlines for achieving objectives, including the requirements for the gradual implementation of the WFD
- Establishment of necessary measures to prevent the deterioration of all water bodies and establishment of requirements for deviation from these measures within the authorisation process
- Establishment of a common data information system (WISA – Austrian supra-regional water information system) as a basis for status analyses and the implementation of integrative programmes for the collection of emission data
- Establishment of administrative requirements for management plans, regional programmes and the active participation of the population
- Explicit establishment of the combined/integrative approach
- Establishment of regulations for the utilisation of economic tools

One objective of the Austrian Water Law is the establishment of a legal framework as a basis for sustainable and responsible use of water resources. Thus, there are regulations for the different users: households, the municipal sector, the industrial and services sector (especially power generation) and agriculture. Furthermore a *National Water Management Plan* has to be compiled and published by the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW) every six years. Based on a status analysis the significant use of water and conservation and restoration measures are being defined and published in these plans.

Another important point of the Water Law is the definition of the legal framework for water cooperative society ("Wassergenossenschaft") and water association ("Wasserverbände"). While the first one is a union of involved parties from one community, the latter is defined as a public law entity when more than one community is affected. These non-profit boards have several rights and obligations within the Water Law in order to achieve common interests such as water supply and groundwater management.

Water protection and water conservation areas ("Wasserschutz- und Wasserschongebiete") are preventive protection measures for water bodies and are defined in §§34 and 35 of the Austrian Water Law. These planning instruments should ensure the sustainable water supply in quantity and quality. With this law, the responsible authority (Ministry, State governor or district authority) can regulate the land-use or prohibit the construction of problematic facilities within these areas. Projects affecting the water household or the groundwater in quality or quantity can be prohibited in order to ensure a sustainable drinking water supply.

An additional tool established with §53 are the Water Management Frameworks (“Wasserwirtschaftliche Rahmenpläne”). They can be drawn up by everybody interested in a proper organization of water management in a certain region. The frameworks should include all aspects of water management of surface and groundwater bodies and have to be approved by the Ministry (BMLFUW). They are published at the state water departments.

The **Food Safety and Consumer Protection Act** (2006) is defining among other things the requirements for food production and water for human use. It is specifying quality as well as hygienic standards with regard to international and national regulations. The Act is building the legal base for the Austrian Drinking Water Decree.

The **Austrian Drinking Water Decree** of the Federal Ministry of Health regulates the requirements concerning the quality of water for human use, the comprehensiveness and the frequency of drinking water analysis for water suppliers as well as derogations of water quality. It is the crucial law for drinking water quality as it defines all threshold values for relevant substances in the supplied drinking water.

The **Austrian Food Codex** can be seen as an objective expert report for publications of definitions, policies, directives and quality measures for putting goods on the market. It is an additional information source to the Food Safety and Consumer Protection Act.

The **Strategy Concept Drinking Water Supply in Lower Austria 2002**, the **Lower Austrian Drinking Water Plan 2007** and the **Water Charter of Lower Austria 2003** are examples for regional policies, which also exist for the 8 other provinces of Austria. The Lower Austrian examples were selected, as the exemplary test area of the CC-WARE project is situated in this province.

These documents should help to improve the water supply within the provinces. They include instructions for status analyses, improvement measures and planning tools for municipalities, especially in rural areas.

The **Water Supply Law for Municipalities** regulates the measurement of drinking water use and the financing of the drinking water supply for municipalities and water associations in Lower Austria

The **Water Supply Connection Law** of Lower Austria regulates the compulsory connection within a municipalities' drinking water system. Furthermore it defines clearly when separate drinking water supplies, e.g. private dwells, are allowed.

The mentioned supply laws also exist in all other states except for Tyrol where the supply is directly managed by the communities and water associations.

Based on the Austrian Water Law (WRG) the province authorities can issue a decree for **Drinking Water Protection Areas** (DWPA). Additionally to the WRG, several guideline catalogues, like the “Guideline ÖVGW W 72, 2004” exist which are regularly used. Due to the fact that the province authorities are responsible for the implementation of these measures, the realization differs in the different region and in every legally decreed DWPA.

**Table 2: Land use legislation/ policies**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
Österreichisches Raumentwicklungskonzept 2011 (ÖREK 2011)	Austrian Spatial Development Concept (ÖREK 2011)	X	X	Austrian Conference on Spatial Planning (ÖROK)	
Forstgesetz, BGBl 440/1975	Austrian Federal Forest Law 1975 (amendment 2007)	X		Ministry (BMLFUW)	Forest Development Plan
Österreichisches Waldprogramm 2005	Austrian Forest Program 2005 (thematic area 5 – "Protective function")	X		Austrian forest dialogue (continuously updated)	WFD EU-Council Regulation(EG/1257/1999) on support for rural development
Österreichisches Naturwaldreservateprogramm	Natural Forest Reserves Program	X		Ministry (BMLFUW)	

<sup>3</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>4</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)



<b>Legislation / policy original title</b>	<b>Legislation/ policy title in English</b>	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
1995	1995				
Landwirtschaftsgesetz (LWG), BGBl. I Nr. 2/2008	Agriculture Act 1992 (amendment 2008)	X		Ministry (BMLFUW)	
Österreichisches Programm zur Förderung einer umweltgerechten, extensiven und den natürlichen Lebensraum schützenden Landwirtschaft – ÖPUL2007	Austrian Agro- Environmental Programme 2007	X		Ministry (BMLFUW)	LWG
Verordnung über das Aktionsprogramm Nitrat, 2012	Nitrate Action Plan 2012	x		Ministry (BMLFUW)	Water Law EU-Council Regulation 91/676/EG on protection of water resources
NÖ Klärschlammverordnung, LBGL. 6160/2-5	Sewage Sludge Directive of Lower Austria 1994 (amendment 2005)		X	State Government	
NÖ Raumordnungsgesetz, LBGL. 8000-25	Lower Austrian Spatial Planning Act		X	State Government	Austrian Water Law Lower Austrian Building Regulations Act (LGBl. 8200-20)

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
Regelwerk – Grundsätze zur Bewirtschaftung der Quellenschutzgebiete der Stadt Wien	Principles for Land-Use in Source Water Protection Areas of the City of Vienna		X	State Government, MA31 Vienna Waterworks MA49 Vienna Forests and Agriculture	Austrian Federal Forest Law WRG TWV Laws Cooperating States (Lower Austria, Styria)

The **Austrian Spatial Development Concept** (2011) is one of the central works of the Austrian Conference on Spatial Planning (ÖROK). So-called “implementing partnerships” have set up to execute the concept. These partnerships work on concrete themes of special relevance for spatial development in Austria. They include Federal Ministries, State governments and authorities as well as other organisations such as the Austrian Railway Company. The ÖROK also serves as a Coordination Platform between the national and the European regional and spatial planning authorities.

The **Austrian Federal Forest Law** defines the legal framework for forestry on national scale. Various aspects (paragraphs) with relevance for drinking water sources protection can be identified, but it has to be emphasized that in general no specific binding legislative rules are defined solely for drinking water protection areas.

Here some relevant paragraphs are highlighted, just as example of a comprehensive legal framework. The first most relevant part of the Forest Law affecting drinking water protection areas (DWPA) is the limitation of clear cuts to spatial extensions below 0,5 ha or below 2 ha, if the regional forest authority gives its permission. It has to be emphasized that these limitations are not enough for ensuring source water protection.

A further relevant part is the prohibition of forest devastation, which is valid for all forest areas in Austria. Human induced forest devastation currently could be caused by e.g. elevated wild ungulate densities, which destroy selected (or in some cases all) tree species in the regeneration phase and also can harm pole stands.

The declaration of protective forests (e.g. site protective forests or protective forests towards erosion) can also be of supreme relevance for water source protection, as significant guidelines and restrictions for forest management are related to these declarations.

Also of central importance is the Forest Development Plan (ger.: Waldentwicklungsplan), which stratifies the whole forest area of Austria into units defining the main forest function in the respective area. The different main functions are economic function (timber production), protective function (protection against natural hazards, forest site protection), beneficial function (e.g. protection of water sources) and recreational function (forests for the recreation of people). The functions may have low, medium or high relevance in the specific region.

Related to the Forest Development Plan is the Forest Subject Plan (Ger.: Waldfachplan), by which a detailed forest management strategy can be defined for e.g. a forested drinking water protection area.

The **Natural Forest Reserves Program** protects designed natural forest areas, where the natural processes of forest succession are not disrupted by direct human interventions like forest management measures. The relevance for drinking water protection areas (DWPA) is given, as some of these forest reserves are situated within DWPA. In the case of stable forest ecosystems, natural forest reserves are aligned with the purposes of source water protection.

The **Agriculture Act** is defining the framework for a common agricultural policy in Austria. The overall goal is the preservation and promotion of a sustainable and stable agricultural and forest industry in rural areas with regards to regional and social differences. Agriculture should be enhanced in a way to preserve the natural life resources like soil, water and air in a sustainable way. Co-financing through EU-Projects should be supported.

The **Austrian Agro-Environmental Programme 2007** (ÖPUL) is subsidizing an environmentally sound usage of agricultural land. It is supporting an integral, horizontal approach in order to guaranty the possibility of nationwide participation. The overall goals are:

- Subsidization of sustainable development of rural areas
- Contribution to fulfil the rising demand on ecosystem services
- Support of the farmers to improve production processes in order to protect the environment, the landscape, the rural livelihood, the natural resources, the soil and the genetic diversity

To implement the EU Nitrates Directive, the **Nitrate Action Plan** was introduced in 2008 and amended in 2012. Its goal is the reduction of surface and groundwater pollution by agricultural nitrate sources. It defines the times of the year when nitrate-based fertilizers, regardless if they are artificial or natural, must not be applied on agricultural land. Further regulations for fertilizer application close to water bodies or on steep land are given. Also the storage requirements and the permitted amount of fertilizer-use are regulated in this directive.

Some of the Austrian states, e.g. Styria, have additional regulations regarding the application of manure on agricultural land ("Gülleverordnung").

The **Sewage Sludge Directive of Lower Austria** is a good example for the linkage between water management and agricultural legislation as well as national and state law. It regulates the use of sewage sludge as a substitute for artificial fertilizer. The regulation defines benchmarks for the soil and the sewage sludge in order to allow an

application on agricultural areas. Regulations like this exist in almost all Austrian states, except in Vienna and Tyrol where the application of sewage sludge is forbidden.

The **Lower Austrian Spatial Planning Act** is presented as a typical example for the legal spatial planning in Austria. Each state has its own spatial planning act which includes the overall and specific goals of spatial planning, present planning tools and regulates the regional and local spatial planning. Only Vienna, which is a state as well as a municipality the spatial planning is regulated in the building regulations and with a City Development Plan.

Two main goals of the spatial planning acts are the prevention of water contamination and securing sufficient drinking water supply. These aims are included in the regional as well as in the local spatial planning. Especially in the land utilisation plan water protection areas have to be highlighted and the land use can be limited.

95% of the drinking water in Vienna is coming from four mountain sources in Lower Austria and Styria. The catchments are source water protection areas. In order to properly manage the land use, the City of Vienna is trying to acquire the catchment areas. Nevertheless land use activities such as forestry, tourism and alpine pasture farming have to be managed and interest conflicts have to be solved. The **Principles for Land-Use in Source Water Protection Areas of the City of Vienna** is a guideline for the municipal departments and other affected parties on how to cooperate and assure a proper drinking water supply.

**Table 3: Climate change legislation/policies**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>5</sup>	Interlinkage <sup>6</sup>
Österr. Strategie zur Anpassung an den Klimawandel 2012	Austrian Adaptation Strategy 2012	X		Ministry (BMLFUW)	
Österreichisches Waldprogramm 2005	Austrian Forest Program, 2005 (thematic area 1 – "Climate protection")	X		Austrian forest dialogue (continuously updated)	WFD EU-Council Regulation(EG/1257/1999) on support for rural development
Rahmenübereinkommen der Vereinten Nationen über Klimaänderungen, BGBl. III Nr. 12/1999	United Nations Framework Convention on Climate Change	X		United Nations Federal Government	

<sup>5</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>6</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>5</sup>	Interlinkage <sup>6</sup>
Klimaschutzgesetz (KSG), BGBl. I Nr. 94/2013)	Climate Protection Law 2011 (amendment 2013)	X		Ministry (BMLFUW)	

The **Austrian Strategy for Adaption to Climate Change** was adopted by the Federal Government on October 23rd, 2012. The overall aim is:

- to reduce anticipated negative impacts of climate change on Austria's society, economy and nature/ecosystems
- to use positive effects of climate change and promote synergies
- to provide an overall framework in which adaptation should take place - this should ensure coordination and harmonisation of the various climate change adaptation activities

The **Austrian Forest Program** has been elaborated by the participants of the Austrian Forest Dialogue, an open forum for all forest relevant interest groups. The derived Work Programme is a document and its measures are continuously updated and further developed. The 7 main thematic areas are related to the 6 "pan-European



Criteria for Sustainable Forest Management” of the Ministerial Conference on the Protection of Forests in Europe (MCPFE), thematic area 1 deals with climate protection related aspects.

The ultimate objective of the **United Nations Framework Convention on Climate Change** is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Furthermore it defines several principles and commitments to achieve this goal. Research and systematic observation as well as education, training and public awareness shall help to carry out the commitments.

The **Climate Protection Law** is building the framework to realise effective measures for climate protection. It specifies emission ceilings for six sectors: waste management, energy and industry, fluorinated gases, buildings, agriculture and transport. It also governs the development and implementation of climate protection measures not included in the EU Emissions Trading Scheme and is therefore an important part of the Austrian climate policy.

**Table 4: Water management legislation/policies<sup>7</sup>**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
Qualitätszielverordnung Grundwasser – QZV Chemie GW, BGBl II Nr. 461/2010	Quality Objective Ordinance – Chemical Status of Groundwater (amendment 2010)	X		Ministry (BMLFUW)	WRG WFD EU Directive 2009/90/EC
Gewässerzustandsüberwachungsverordnung - GZÜV, BGBl. II Nr. 465/2010	Water Condition Monitoring Regulation (amendment 2010)	X		Ministry (BMLFUW)	WRG WFD EU EQSD 2008/105/EC
Qualitätszielverordnung Ökologie Oberflächengewässer –	Quality Objective Ordinance – Ecological	X		Ministry	WRG

<sup>7</sup> Only those which are not listed before

<sup>8</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>9</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

<b>Legislation / policy original title</b>	<b>Legislation/ policy title in English</b>	National level	Regional level	Implementation Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
QZV Ökologie OG, BGBl. II Nr. 461/2010	Status of Surface Waters (amendment 2010)			(BMLFUW)	WFD  EU Directive 2009/90/EC
Qualitätszielverordnung Chemie Oberflächengewässer – QZV Chemie OG, BGBl. II Nr. 461/2010	Quality Objective Ordinance – Chemical Status of Surface Waters (amendment 2010)	X		Ministry (BMLFUW)	WRG WFD EU Directive 2009/90/EC EU EQSD 2008/105/EC
Abwasseremissions- verordnungen (AEV) – Sachbereiche	Ordinances on Wastewater Emissions – several fields	X			WRG EU - Directives
Bundeswasserbautenför- derungsgesetz, BGBl. I Nr. 98/2013	Hydraulic Engineering Assistance Act 1985 (amendment 2013)	X		Ministry (BMLFUW)	Austrian Federal Forest Law WRG UFG
Umweltförderungsgesetz (UFG), BGBl. I Nr.	Environmental Subsidizations Act 1993	X		Ministry	Hydraulic Engineering

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
146/2013	(amendment 2013)			(BMLFUW)	Assistance Act

The **Quality Objective Ordinances of the BMLFUW** regarding the chemical and ecological status for groundwater and surface waters are accompanying regulations of the Water Framework Directive and its implementation in the Austrian Water Law (WRG). They all define measures and specifications for the assessment of a 'good status'.

The **Water Condition Monitoring Regulation** is a guideline for the implementation of monitoring programmes for surface and groundwater bodies in control the requirements set in the above-mentioned ordinances.

Several **Ordinances on Wastewater Emissions** exist in Austria. There are ordinances for the treatment of wastewater coming from municipalities, industrial productions (e.g. paper production, glass production, etc.), waste management and many more. They all define benchmarks and regulation for the wastewater treatment and the outflowing water quality. Also the management and treatment of storm- and road wastewater is regulated in these directives.

The **Hydraulic Engineering Assistance Act** is regulating the Austrian subsidization system for several water management measures. These include projects for improvement of the water household, protection against natural hazards, drinking and wastewater treatment, soil drainage and irrigation systems, etc. Also several initial projects, such as water management studies can be subsidised. In order to receive this governmental financial support prerequisites which are defined in the Act, have to be fulfilled.

The **Environmental Subsidizations Act** is very similar to the previous law but includes various types of environmental protection measures. Projects in the fields of wastewater treatment, reduction of air pollution, international cooperation and remediation of contaminated site can be subsidised in order to protect the environment.

**Table 5: River Basin Management Plans**

According to the WFD the EU Member States were obliged to develop River Basin Management (RBM) Plans until the year 2009. These plans are applicable for six years and contain concrete targets until 2015. Afterwards they will be evaluated and an update with a view to medium-term and long-term planning and objectives and measures will be carried out every six years.

Name of river basin	International level	National level	Implementation Jurisdiction <sup>10</sup>	Approval status
Danube	ICPDR - Danube River Basin Management Plan	"Nationaler Gewässerbewirtschaftungs- plan 2009" (NGP)  National Water Management Plan		Ministry  EU Commission
Rhine	ICPR – Internationally	NGP		Ministry  EU Commission

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<sup>10</sup> Competent authority for implementation e.g. government, ministry

Name of river basin	International level	National level	Implementation Jurisdiction <sup>10</sup>	Approval status
	Coordinated Management Plan for the International River Basin District of the Rhine			
Elbe	ICPER – Internationaler Bewirtschaftungsplan für die Flussgebietseinheit Elbe	NGP		Ministry EU Commission

These three river basins are all international ones and parts of them are lying in Austria. WFD Article 13 (3) requires that “Member States shall endeavour to produce a single river basin management plan” for international river basin districts. For each river basin, international commissions exist in order to assure an integral and international water management:

- The International Commission for the Protection of the Danube River (ICPDR)
- The International Commission for the Protection of the Rhine (ICPR)
- The International Commission for the Protection of the Elbe River (ICPER)

In accordance with the WFD the Danube, Rhine and Elbe countries have developed a RBM plan entailing measures of basin-wide importance as well as setting the framework for more detailed plans at the sub-basin and/or national level.

In Austria the Federal Ministry of Agriculture, Forestry, Environment and Water Management has published the National Water Management Plan (NGP) in the year 2010. It is a consolidated management plan for whole Austria and includes the data for all three Austrian river basins. Therefore it fulfils the requirements of the WFD and it has been approved by the responsible EU Commission.



**Table 6: OTHER legislation/policies of relevance for CC - WARE project**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
NÖ Bodenschutzgesetz, LBGl. 6160-4	Soil Protection Act of Lower Austria 1988 (amendment 2005)		X	State Government	Sewage Sludge Directive

The goal of the state **Soil Protection Act** is to guarantee the sustainable soil fertility and further improve it. It should help to improve the protection against pollutants, prevention against soil erosion and preservation of site specific soil characteristics.

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<sup>11</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>12</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

# ***ANNEX 2***

## ***NATIONAL LEGISLATION TEMPLATE BULGARIA***

**Relevant national legislation analyses for  
improvement of land use and water management  
regulation and policies**

**within**

**CC-WARE project**

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**Table 1 Drinking water supply and drinking water sources protection**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
<b>Закон за водите</b> Обн. ДВ. бр.67 от 27.07.1999 г., последно изменение: ДВ. бр.66 от 26.07.2013 г.	<b>Water Act</b> Prom. SG № 67 of 27.07.1999 last amended: SG № 66 of 26.07.2013 This law introduces the requirements set by Directive 2000/60/EC of the European Parliament and of the Council of 23.10.2000 establishing a framework for the Community action in the field of water policy. All water resources are protected to provide for the upkeep of the adequate quantity and quality of water; for this purpose, the following are defined: the minimal required river flow, measures for the preservation of the quantity and quality of water resources, including resources	x		Ministry of Environment and Waters /MOEW/, Ministry of Health /MH/	Water Supply and Sewerage Services Regulation Act Tourism Act Concessions Act Health Act Environmental Protection Act Forest Act Energy from Renewable Sources Act Disaster Protection Act Spatial Development Law

<sup>1</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>2</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	used for supplying water to households, water protection areas, dynamic reserves of river sediment, water usage regulations, etc.				
Закон за опазване на околната среда, ДВ №. 91/25.09.2002, изм. ДВ № 66/26.07.2013	<b>Environmental Protection Act</b> , Promulgated, State Gazette №. 91/25.09.2002, last amend. SG № 6 Article 35 refers to water resources: Conservation and Use of Water and Water Bodies (1) The conservation and use of water and water bodies shall be based on a long-term national policy. (2) The long-term policy of conservation and use of water and water bodies shall be based on rational water management at both national and basin level with the main purpose of achieving a good status of all ground and surface waters and of ensuring the quantity and quality of water necessary for: 1. the needs of drinking and	x		MOEW	Water Act, Soils Act, Waste Management Act, Medicinal Plants Act, Protected areas Act, Clean Ambient Air Act, Subsurface Resources Act, Biodiversity Act, Protection Against the Harmful Impact of Chemical Substances and Preparations Act

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	household water supply of the present and future generations; 2. a favorable conservation status and development of ecosystems and wetlands; 3. economic and social activities 6/26.07.2013				
<b>Закон за защитените територии,</b> Обн. ДВ. бр.133 от 11 Ноември 1998г., посл. изм. ДВ. бр.66 от 26 Юли 2013г.	<b>Protected Areas Act,</b> Promulgated, State Gazette №.133/11.11.1998, last amend. SG № 66/26.07.2013 This Act regulates the categories of protected areas, the assigned use thereof and the regime of protection and use, designation and management of the said areas. Article 2 (1) The purpose of this Act is to conserve and preserve protected areas as a national and universal human wealth and asset and as a special form of conservation of Bulgarian nature, conducive to the advancement of culture and science and to public welfare. (2) Nature conservation within	x		MOEW	Forest Law, Water Act, Spatial Development Law, Tourism Act,

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	protected areas shall take precedence over the other activities therein.				
Закон за биологичното разнообразие, обн. ДВ. бр.77 от 9 Август 2002г, изм. ДВ. бр.66 от 26 Юли 2013г.	<p><b>Biological diversity Act,</b> Promulgated, State Gazette №.77/09.08.2002, last amend. SG № 66/26.07.2013</p> <p>This Act regulates the relations among the State, the municipalities, and the juristic and natural persons in respect of the conservation and sustainable use of biological diversity in the Republic of Bulgaria.</p> <p>(2) "Biological diversity" means the variety of all living organisms in all forms of their natural organization, the natural communities and habitats thereof, of the ecosystems and the processes occurring therein.</p> <p>(3) Biological diversity is an integral part of national wealth, and the conservation thereof is a priority and obligation of central-government and municipal authorities and citizens</p>	x		MOEW	Forest Law, Water Act, Environmental Protection Act, Protected Areas Act

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
<b>Наредба № 9 за качеството на водата, предназначена за питейно- битови цели , ДВ. бр. 30 от 2001 г.</b>	<b>Ordinance № 9 of 16.03.2001 for quality of water intended for domestic purposes</b> Prom. SG № 30 of 2001 This Regulation shall set out requirements to the quality of water intended for human consumption. The objective of this Regulation shall be to protect human health from the adverse effects of any contamination of drinking water through the introduction and provision of requirements to water quality and safety	x		Ministry of Health /MH/; Ministry of Environment and Waters (MOEW); Ministry of Regional Development /MRD/	Water Act; Health Law; Spatial Development Law
<b>Наредба № 12 от 18.06.2002 г. за качествените изисквания към повърхностни води, предназначени за питейно- битово водоснабдяван</b>	<b>Ordinance № 12 of 18.06.2002 on the quality requirements for surface water intended for domestic water supply</b> Prom. SG № 63 of 2002; last amended: am. SG № 15/2012 specifying the quality requirements for fresh surface water, which after appropriate treatment is used or is prospective of obtaining water for domestic water supply, the water	x		Ministry of Environment and Waters (MOEW); Ministry of Regional Development /MRD/	Water Act; Spatial Development Law



Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
е, ДВ. Бр. 63 от 2002 г.; посл. изм. ДВ. бр.15 от 21.02. 2012 г.	categories and conditions for measurement, sampling and testing of indicators.				
<b>Наредба № 3 от 16.10.2000 г. за условията и реда за проучване, проектиране, утвърждаване и експлоатация на санитарно-охранителните зони</b> ДВ 88/27.10.2000	<b>Ordinance №3 of 16.10.2000 on the terms and conditions for research, design, validation and operation of sanitary protection zones</b> around water sources and facilities for drinking-household water supply and around sources of mineral water, used for therapeutic, prophylactic, drinking and hygiene needs. It is issued by the, Prom. SG № 88 of 27.10.2000	x		MOEW	Water Act, Forest Act
<b>Наредба за ползването на повърхностните води,</b> Обн. ДВ. бр.56 от 22.07.2011	<b>Ordinance on the use of surface water,</b> Prom. SG № 56 of 22.07.2011 - regulates the use of surface water and water bodies and the order of issuing permit for use of surface water bodies	x		MOEW	Water Act

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
<b>Наредба № 4 за хигиенните изисквания при използването на язовири за питейно-битово водоснабдяване, ДВ бр.15/14.02.2003</b>	<b>Ordinance №4 regulating hygiene requirements for using reservoirs as drinking and household water supply sources</b> , SG №15/14.02.2003 - Regulates the hygiene requirements regarding artificial lakes the water of which is used to supply water to households	x		MH	Health Law; Water Act Directive 2000/60/EC of the European Parliament and of the Council of 23.10.2000 establishing a framework for the Community action in the field of water policy Directive 2009/90/EC of the European Commission of 31.07.2009 laying down technical specifications for chemical analysis and monitoring of water status
<b>Наредба № 1 от 10.10.2007 г. за проучване, ползване и опазване на подземните води - ДВ, бр. 87 от 30.10.2007, изм. ДВ бр. 15 от 21.02.2012</b>	<b>Ordinance № 1 of 10.10.2007 on exploration, use and protection of groundwater –</b> Promulgated, State Gazette №.87/30.10.2007, last amend. SG № 15/21.02.2012 The specific requirements are defined for the exploration and use of groundwater, including mineral water, and for water protection against pollution and deterioration.	x		MOEW, Ministry of regional development, Ministry of Health, Ministry of Economy and Energy	Water Act, Waste Management Act Subsurface Resources Act, Environmental Protection Act  Water Supply and Sewerage Services Regulation Act

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
<b>Наредба № 8 от 05.08.2011 г. за сечите в горите.</b> Обн. - ДВ, бр. 64 от 19.08.2011 г.; изм. и доп., бр. 63 от 16.07.2013 г.	<b>Ordinance №. 8 of 05.08.2011 regulating logging in forest regions</b> Prom. SG № 64 of 19.08.2011, last amend. SG № 63 of 16.07.2013 It states that forests, classified as forest natural habitats within the boundaries of areas protected by the Biodiversity Act, are governed according to various regimes for management and application of forest systems, meant to aid in the preservation of species typical for the habitat, the application of close-to-nature technologies, the preservation of the landscape's integrity, etc. The ordinance provides for the preservation of zones in the immediate vicinity of constant river streams with a width of № less than 15 meters, in which logging is prohibited or limited to an intensity of № more than 5% of the total growing stock (Article 65). This ordinance regulates a system of forest management	x		Ministry of Agriculture and Food (MAF), Executive Forest Agency (EFA)	Forest Law, Biodiversity Act

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	regimes and measures for natural forest habitats, included in the European Ecological Network defined by Natura 2000 (Article 4).				
<b>Наредба № 8 от 11.05.2012 г. за условията и реда за защита на горските територии от пожари, обн., ДВ, бр. 38 от 18.05.2012 г.</b>	<b>Ordinance №. 8 of 11.05.2012 regulating</b> the requirements and the order for the preservation of woodlands from forest fires. Promulgated in the State Gazette, issue 38 of 18.05.2012. It states the order and way for protection of forest territories against fires – the protection of forest against fires is a complex of safety measures and activities for prevention, detection, limitation and extinguishment of forest fires.	x		MAF, Ministry of Interior, EFA, MOEW	Forest Law, Environmental Protection Law, Law for the Interior Ministry
<b>Наредба № 4 от 19.02.2013 г. за защита на горските територии срещу ерозия и порои и строеж на</b>	<b>Ordinance №. 4 of 19.02.2013 on the woodland erosion control and flood protection -</b> Prom. SG No 21 of 01.03.2013 <b>Наредба № 4 от 19.02.2013 г. за защита на горските територии срещу ерозия и порои и строеж на</b>	x		Ministry of Agriculture and Food, Executive Forest Agency	Forest Law

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
<b>укрепителни съоръжения.</b> Обн. ДВ, бр. 21/01.03.2013	<b>укрепителни съоръжения.</b> Обн. ДВ, бр. 21 от 01.03.2013 г. It states the planning and protection of forest territories against floods and erosion: - facilities and activities for protection of forests against erosion and floods - anti-erosion activities and fortifications - requirements for the forest protective belts - protection against landslides in forest territories				
<b>Наредба № 1 от 11.04.2011 за мониторинг на водите,</b> изм. ДВ. бр.44 от 17.05.2013	<b>Ordinance No. 1 of 2011 – Water Monitoring.</b> Prom. SG № 34 of 29.04.2011, last amended: am. SG No 44 of 17.05.2013, issued by the Ministry of Environment and Water. The ordinance defines the requirements for monitoring water and the laws protecting water in compliance with the regulations given in Chapter 10, Section VIII of the Water Act (WA) and the regulations for	x		MOEW	Water Act

<b>Legislation / policy original title</b>	<b>Legislation/ policy title in English</b>	<b>National level</b>	<b>Regional level</b>	<b>Implementation Jurisdiction<sup>1</sup></b>	<b>Interlinkage <sup>2</sup></b>
	<p>quantity monitoring of water, conducted in the country, in compliance with the requirements stated in Article 171, Paragraph 6 of WA.</p> <p>The framework for monitoring surface water is created by the Basin Directories (BD) in compliance with the requirements of Article 169 and 169a of WA. Currently under development, there are programs for monitoring of surface waters, classifying and presenting of their ecological state, as well as additional requirements for monitoring of territories used in water protection projects as given in Article 119a of the Water. This ordinance introduces the requirements of Addendum V, Item 1.3, Item 2.2 and Item 2.4 of Directive 2000/60/EC of the European Parliament and of the Council of 23.10.2000 for the establishing of a framework for the Community actions in the</p>				

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	field of water policy (OJ, L 327/1 of 22.12.2000) and completely transposes the requirements of Directive 2009/90/EC of the European Commission of 31.07.2009 laying down technical specifications for chemical analysis and monitoring of water status.				
Наредба № 2 от 13.09.2007 г. за опазване на водите от замърсяване с нитрати от земеделски източници, ДВ № 27/11.03.2008	<b>Ordinance № 2/13.09.2007 on the protection of waters against pollution caused by nitrates from agricultural sources, SG № 27/11.03.2008</b> This will facilitate the reduction of nitrate levels in surface and subsurface waters.	x		MOEW, MAF, MH	Water Act,

## **The Water Act**

According to the Water Act, one of the measures for improving the quality of drinking water is updating the water protection areas around water sources and the exercising of greater enforcement of the bans and limitations on within their boundaries, the responsibility for which falls to water supply companies and the supervising bodies.

Under Bulgarian legislation the water protection forests are related to the management of water resources in territorial and functional respect as part of the catchments areas of reservoirs and collecting derivations, integral part of river flows and water supply systems.

In the context of legal analysis the management of water, when passing through the water resource systems, is equivalent to the management of the water economy systems. The water resource balances and the analysis of operation of the water economy systems and water supply systems are in the base of the vulnerability and risk assessment of water supply during water shortage and drought periods, including development of measures too (Drought management plan report, 2008). This requires the implementation of an index system to assess the reliability of operation of the water resource system (and reservoirs) and the water resources balances. The water management measures for the water resource (water supply) systems (WRS) are indivisible from WRS themselves.

**Ordinance №3 of 16.10.2000 on the terms and conditions for research, design, validation and operation of sanitary protection zones – Water Protection Areas.** The water protection areas (WPA) around surface drinking water sources, which are the main sites of the current project, are studied, planned, approved and exploited in compliance with the regulations of Ordinance №3 of 16.10.2000. The ordinance is passed based on Article 135, Paragraph 3 of the Public Health Law.

The water protection areas provide for the physical protection of the water basin and/or the facility in question, protection against pollutants, guaranteeing the planned quantity and quality of water and the long-term preservation of the water source's good condition.

The water protection areas consist of three zones: Inner I, Middle II and Outer III. The innermost zone provides for stern protection of the areas immediately surrounding the water source and/or facility against human activity which may be potentially harmful to the water. The remaining two zones provide for protection of the water source against pollution (via chemical, biological, rapidly decomposing, easily degradable and highly absorb-able substances), against activities which lead to the loss of water resources, as well as other activities, leading to lower quality water.

Within Zone I, the only allowed activities are those, connected to the exploitation of the water source and/or the facility, as well as activities related to the implementation of erosion-control, afforestation and forestry actions.



(Article 9, Paragraph 1), but such actions have to be conducted so as N<sup>o</sup>t to inflict damage to the water source, the water pumps and the measuring facilities, and without lowering the quality of the water. When necessary, activities defined in the addenda to the ordinance are banned or limited within zones II and III. The designated WPAs are given in the river basin management plan.

Municipal governing bodies and landowners within the boundaries of WPAs are under a prohibitive regime, banning long-term investments, the alteration of the purpose of the lands or removing these lands from the forest fund for Zone I and a prohibitive and/or restrictive regime regulating actions designated in Addendum N<sup>o</sup>. 1, given that the term of these restrictions cannot be longer than six years.

This ordinance defines the boundaries of the zones within the WPAs depending on the type of the water source (river, reservoir or lake), as well as the degree of pollution and the self-purification capabilities of the body of water, the types of pollutants and the specific conditions of the local environment. Also defined in the ordinance are the conditions in compliance to which land usage within WPAs is limited. Farmland and woodland within Zone I of the area is managed according to the requirements of the projects described in Article 27, Item 16 or Article 32, Paragraph 1, Item 14. Woodland within Zone II and III is reclassified as special purpose woodland (protected), it is registered, managed and used only within special forestry projects. Thinning within WPAs in the vicinity of natural spring catchments is conducted N<sup>o</sup> more often than every five years in two stages.

In relation with forest territories the following limitations are in force:

- Agricultural and forest areas part of Zone I are utilized according to special management plan, ensuring the restoration, renovation and maintenance of the plantations;
- Forest areas, part of Zone II and III are categorized in forest with special purposes and are managed and used according to special forest management plans.
- Thinning in WPA around water storages is conducted every 5 years on two stages
- In Zone I are prohibited durable investments, change of land purpose or excluding of forest territories from the forest fund
- In Zone II are prohibited/or limited the activities according to Annex I, according to the water source, such as: forest loggings, but only thinning, extraction of underground resources, creation of new or expansion of settlements, building of roads, etc.
- In Zone II and III are forbidden or limited the activities included in Annex I and II, such as: building of new roads, fertilization, extraction of underground resources, use of crop dusting detergents, etc.

The main aim of forest management in WPA is the protection and enhancement of water-protective functions of forests. Silvicultural activities in Zone I are N<sup>o</sup>t foreseen, because of its strict management regime. Silvicultural

activities in Zone I are not foreseen, because of its strict management regime. Regeneration cuttings are conducted in Zone II and III with very concrete characteristics for every habitat and extended regeneration period. The main types of felling planned are: shelterwood felling; progressive group felling; group selection cutting; irregular progressive felling, etc.

Thinnings are consistent with the density and age of the stands, the origin, type of wood species. The thinings are not more than 20% of the area.

To improve the sanitary condition of the stands / decay, drought, snow-break, snow-fall, etc./, the sanitary cuttings are conducted.

Exercising enforcement on WPA exploitation is within the authority of the Ministry of Environment and Water and basin directories, whereas compliance with sanitation and hygiene requirements in WPAs – within the authority of the branches of the Ministry of Health.

**Ordinance №12 of 2002–Quality Requirements for Surface Waters used for Water Supply to Households.**

All water from surface water sources, used for household supply via the water distribution network, as well as all fresh surface water used in household water supply after proper treatment is subject to quality requirements regulated by Ordinance №12 of 18.06.2002. The ordinance is passed based on Article 135, Item 4 in relation to Article 189 of the Water Act and Article 20 of the Public Healthcare Act.

According to physical, chemical and microbiological indicators, as defined in Addendum №.1 of the ordinance, surface waters are classified in three distinct categories: A1, A2, and A3.

Such classification of water surface water sources, used for household drinking water supply, is conducted by the Basin directories with assistance from the regional branches of the Government Sanitation Control Service (GSCS) based on existing data and the principle of the river basin. Basin directories in conjunction with the Regional Health Inspection Services (RHIS) prepare long-term regional programs, providing for specific actions and terms, based on river basin management plans for improving environmental quality, including surface water and especially water of type A3.

The legislation regarding protection of drinking water is directed to protection of water resources but also to protection of habitats and species related with water ecosystems. Special efforts were done for water monitoring and chemical analysis of water status and for the preservation of woodlands from forest fires.

**Table 2 Land use legislation/ policies**

<b>Legislation / policy original title</b>	<b>Legislation/ policy title in English</b>	<b>National level</b>	<b>Regional level</b>	<b>Implementation Jurisdiction<sup>3</sup></b>	<b>Interlinkage <sup>4</sup></b>
<b>Закон за горите,</b> Обн. ДВ. бр.19 от 8 Март 2011г, изм. ДВ. бр.109 от 20 Декември 2013г.	<b>Forest Act,</b> Prom. SG № 19/08.03.2011, last amend. SG № 109/20.12.2013 This law shall provide for the public relations, connected to protection, management and using the forest territories in the Republic of Bulgaria, in view to guaranteeing multifunctional and sustainable management of the forest eco-systems.	X		Executive Forest Agency;  Ministry of Agriculture and Food	Water Act; Spatial Development Law

<sup>3</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>4</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

	<p>The purposes of the law shall be:</p> <ol style="list-style-type: none"> <li>1. protection and increasing the forest area;</li> <li>2. maintaining and improving the forest state;</li> <li>3. guaranteeing and maintaining the eco-systems, the social and economic functions of the forest territories;</li> <li>4. guaranteeing and increasing the production of timber and Non-timber forest products by natural management of the forest territories;</li> <li>5. maintaining the biological and landscape diversity and improvement of the conditions of the populations of the kinds of wild flora, fauna and mycota.</li> <li>6. providing</li> </ol>				
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	<p>opportunities for relaxation of the population and improving the conditions for recreation;</p> <p>7. achieving balance between the interests of society and forest territory owners;</p> <p>8. assisting and encouraging the owners of land properties in forest territories;</p> <p>9. implementation of international and European commitments for protection of forest habitats.</p>				
<p><b>Наредба № н-4 от 14.09.2012 г. за характеризиране на повърхностните води.</b> Обн. ДВ. бр.22 от 5.03.2013</p>	<p><b>Ordinance № n-4 of 14.09.2012 on characterization of surface water,</b> Prom. SG No 22 of 5.03.2013 The order and method of characterization, classification and presentation of the</p>	X		MOEW	Water Act

	<p>status/potential of surface bodies of water (rivers, lakes, transitional and coastal waters, artificial or highly modified bodies of water) are regulated by Ordinance N<sup>o</sup>. 4 of 14.09.2012. It is passed based on Article 135, Paragraph 1, Item 9 of the Water Act.</p> <p>The main actions regulated are related to: defining the intensity of human activity on water resources, biological monitoring of surface water status and the following classification of the ecological status and the ecological potential of the water, classification of its chemical status.</p> <p>This ordinance introduces the requirements laid out</p>				
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	in Addenda II, V, and VIII of Directive 2000/60/EC of the European Parliament and of the Council.				
<b>Наредба № 18 от 27.05.2009 г. за качеството на водите за напояване на земеделските култури</b> обн. ДВ, бр. 43 от 9.06.2009г.	<b>Ordinance № 18 of 27.05.2009 on the quality of water for irrigation of agricultural crops</b> – prom. SG №43/09.06.2009 It is for surface, groundwater and waste water, used for irrigation in agriculture. It guarantees the human health and life through protection of soils, agricultural crops and quality of water in water bodies from the possible unfavorable impact of the water intended for irrigation	X		MOEW, Ministry of Agriculture and Food	Water Act
<b>Наредба № 6 от 5.02.2004 г. за устройство на горите и земите</b>	<b>Ordinance №. 6 of 05.02.2004 regulating the management of</b>	X		Ministry of Agriculture and Food, Executive Forest Agency	Forest Law, Hunting Law

от горския фонд и на ловностопанските райони в Република България. Обн., ДВ, бр. 27 от 1.04.2004, изм., бр. 80/7.10.2005 г.	<b>forests, forest resources and hunting grounds in the Republic of Bulgaria-SGN<sup>o</sup></b> 27/01.04.2004, last amend. SGN <sup>o</sup> 80/7.10.2005 It states the order for development of forest inventory and the forest and hunting management plans in the forest and hunting territories.				
<b>Наредба № 2 от 07.02.2013 г. за условията и реда за залесяване</b> на горски територии и земеделски земи - Обн. - ДВ, бр. 16 от 19.02.2013 г	<b>Ordinance №. 2 of 07.02.2013 regulating the requirements and the order for afforestation</b> of woodland and farmland, used for the creation of specialized, protective forest areas, forests in protected territories, inventory of planted cultures, reporting and registration – Prom.	X		Ministry of Agriculture and Food, Executive Forest Agency	Forest Law



	SG № 16/19.02.2013				
<b>Наредба № 1 от 30 януари 2012 г. за контрола и опазването на горските територии</b> - Обн. ДВ. 6р.11 от 7.02. 2012	<b>Ordinance №. 1 of 30.01.2012 regulating the management and preservation of woodland</b> - Prom. SG № 11/07.02.2012 It states the control and defence of the forest territories; marking of trees intended for harvesting and wood for transportation	X		Ministry of Agriculture and Food, Ministry of Interior, Executive Forest Agency	Forest Law, Hunting Law  Protected Areas Act, <b>Fisheries</b> and Aquaculture <b>Act</b> , Medicinal Plants Act, Biodiversity Act,  Law for the Interior Ministry

## Forest Act

Forests, along with their main functions, such as soil and air quality protection, conservation of biodiversity, ensuring social and other kinds of benefits to society, the production of wood and other types of products, regulating climate and absorbing carbon, have also the function of protecting the country's water resources (Article 4 of the Forestry Law).

Forest territories which have a predominant function to protect and preserve water sources are classified as "protected".

Government and municipal forest territories within Zone I of a water protection area and the water-pumping facilities used to supply water to households are classified, under the Water Law, as public government and public municipal property (FA – Article 27 and Article 28).

Providing for the quantity and quality of water from forest territories is defined in the Forestry Law as one of the main community ecosystem benefits of forests (Article 248). Such a benefit is tightly connected to other ecosystem benefits, like slowing down and regulating the effects of climate change, preservation of biodiversity and erosion and flood control.

The Forestry Law contains a ban on reducing the total forest cover percentage of the country. Changing the function of areas of land in forest territories is possible only in specified cases. This, to a great extent, guarantees the preservation of water-protecting forests. Forest territories related to drinking water supply are public property.

**Ordinance №. n-4 of 2012 – Characterization of Surface Waters.** The order and method of characterization, classification and presentation of the status/potential of surface bodies of water (rivers, lakes, transitional and coastal waters, artificial or highly modified bodies of water) are regulated by Ordinance №. 4 of 14.09.2012. It is passed based on Article 135, Paragraph 1, Item 9 of the Water Act.

The main actions regulated are related to: defining the intensity of human activity on water resources, biological monitoring of surface water status and the following classification of the ecological status and the ecological potential of the water, classification of its chemical status.

This ordinance introduces the requirements laid out in Addenda II, V, and VIII of the Directive 2000/60/EC of the European Parliament and of the Council.

***Table 3 Climate change legislation/policies***

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>5</sup>	Interlinkage <sup>6</sup>
Трети Национален план за действие по изменение на климата за периода 2013-2020 г.	THIRD NATIONAL ACTION PLAN ON CLIMATE CHANGE FOR THE PERIOD 2013-2020	x		MOEW	Water Act, Forest Law,

Bulgarian policy on climate change is based on two essential aspects related, on one side, to the country's international commitments undertaken with the ratification of the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol and, on the other side, to the newly adopted European legislation in this area. The main strategic objective of the Third National Action Plan on Climate Change (NAPCC) is to outline the framework for action to combat climate change for the period 2013-2020 and to focus the country's efforts on actions leading to reduction of the negative impacts of climate change and implementation of the undertaken commitments.

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<sup>5</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>6</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

***Table 4 Water management legislation/policies<sup>7</sup>***

<b>Legislation / policy original title</b>	<b>Legislation/ policy title in English</b>	<b>National level</b>	<b>Regional level</b>	<b>Implementa tion Jurisdiction<sup>8</sup></b>	<b>Interlinkage<sup>9</sup></b>
<b>Национална стратегия за развитие на водния сектор до 2015 г.</b>	<b>National strategy for the development of water sector until 2015</b>  National Strategy for Development of the Water Sector 2004-2015 is a frame for integrated water management and is in the spirit of the Frame Directive of EC for the policy in the field of the water resources.	x		MOEW	Water Act

<sup>7</sup> Only those which are not listed before

<sup>8</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>9</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

**The National Strategy for the Development of the Water Sector till 2015** is a strategic framework for the integrated management of water resources up to 2015 in the example of the Framework Directive of the EU on the Community action in the field of water policy. The main strategic purpose of this framework is: sustainable use of water resources for provision of drinking water to the population and stable economics in the field of basin management of transnational waters and global climate change, simultaneously guaranteeing the ecological stability of deteriorated water systems and national interests in ensuring the necessary quantity and quality of water for the needs of contemporary and future generations. The program discusses the status of water resources and expands the main long-term policies and actions in the field of water sector.

Water management activity according to the Bulgarian legal system includes also the activities on the management of water resource systems (WRS) and facilities. "The detachment of water as an independent object of management when it is found in or passes through the facilities of the water systems, from the facilities themselves and their management may be only purely theoretical".

**Table 5 River Basin Management Plans**

Name of river basin	National level	Regional level	Implementation Jurisdiction <sup>10</sup>	Approval status
<b>Management plan for the river basins in the Danube region</b> According to Art. 155, &1, p.2 /Water Act/ and Art.13 /Water Framework Directive/ The management plan is main instrument and mechanism for: <ul style="list-style-type: none"> <li>- information on surface and groundwater characteristics</li> <li>- information about quality and quantity of water</li> <li>- anthropogenic impact over surface and ground water bodies</li> <li>- actual status of water bodies</li> <li>- monitoring and control of water bodies</li> <li>- coordination of programmes and measures to achieve the ecological aims</li> <li>- public relation activities to include the society in planning and management</li> </ul>		x	River basin directorate for the Danube region – Pleven, MOEW	x 2010 – 2015 /actualization in procedure for the next period 2016 - 2020/

<sup>10</sup> Competent authority for implementation e.g. government, ministry

Name of river basin	National level	Regional level	Implementation Jurisdiction <sup>10</sup>	Approval status
<b>Management plan for the river basins in East Aegean Sea Region</b>		x	East Aegean Sea River Basin Directorate – Plovdiv, MOEW	x 2010 – 2015 /actualization in procedure for the next period 2016 - 2020/
<b>Management plan for the river basins in Black Sea Region</b>		x	Basin directorate for water management in black sea region – Varna, MOEW	x 2010 – 2015 /actualization in procedure for the next period 2016 - 2020/
<b>Management plan for the river basins in West Aegean Sea Region</b>		x	West Aegean Sea River Basin Directorate – Blagoevgrad, MOEW	x 2010 – 2015 /actualization in procedure for the next period 2016 - 2020/

The objectives and methodological guidance of the Water Framework Directive (WFD) have been extended for a long time, but Bulgarian legislation remains within a narrow framework and does not regulate the implementation of these new objectives. In drought cases these objectives are 1/ priority meeting of the water needs of people; 2/ minimizing the negative effect on the ecological status (ecological runoff) and the quantitative status of groundwater bodies and 3/ minimizing the negative effect on economy.

**River Basin Management Plans (RBMPs)** should integrate all measures and sector policies. The update of RBMP is already running but unlike the Floods Directive the guidelines given by the EC in relation to climate change, water shortage and droughts are still prescriptive. Master plans have been developed for water supply/resource systems (WRS) but the integrated management set in the laws and regulations is still not achieved fully in practice. The EC focuses on the analysis of management and on the completion of the program of measures. Long-term and short-term measures have to be developed to provide the water supply. They have to be related to the optimization of the reservoirs and water resource management - new schemes and systems supporting decision making, incl. in reservoir management, risk and decision models, early warning systems. All this should be included in the future plans for water supply management in drought periods. Similar measures should be included in RBMPs (Drought management plan report, 2008). The regional water supply and sewerage (WSS) plans have been already composed, but many of them are not approved by local authorities since reservoirs have not been considered.

The definitions and guidelines set by the European Commission concerning the River Basin Management Plans (RBMs) related to climate changes (Guidance document N°24 River basin management in a changing climate, 2009) and the Plans for management during water shortage and drought periods (Drought management plan report, 2008) have not yet been included in the Water Law. These and other documents are known and as far as possible they are adhered to by the Basin Directorates, being still prescriptive. They are not taken into account in Water act and the related legislation.

In this respect it is better to initiate legislative changes because the joint analysis of the water protection forests and the management of the water resource systems /water supply/ systems are especially important in connection with the forthcoming update of the plans for river basin management till 2015, including the second and third planning cycles. Pursuant to the cited guidelines and policies of the European Commission (EC) the vulnerability analysis of the water supply systems under drought conditions should be considered as a priority. This analysis is performed taking into account the water supply and water economy infrastructure and setting of priorities and indices for reliability and provision of water supply. As part of the above plans, the so-called Plans for management of the water supply systems under drought conditions should be developed.



**Table 6 Other legislation/policies of relevance for CC – WARE project**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
<b>Наредба № 5 от 30.05.2008 г. за управление качеството на водите за къпане,</b> обн., ДВ, бр. 53/10.06.2008	<b>Ordinance № 5 of 30.05.2008 for quality management of bathing water,</b> prom. SG № 53/10.06.2008 The aim of this Ordinance is to monitor and classify the quality of bathing water and the management of the quality of bathing water. Its aim is protection and improvement of quality of bathing water through integrated water management.	X		MH, MOEW	Water Act, Health Act
<b>НАРЕДБА № 6 от 9.11.2000 г. за емисионни норми за допустимото съдържание на вредни и опасни вещества в отпадъчните води, зауставани във водни</b>	<b>Ordinance № 6 of 9.11.2000 on the emission standards</b> for the admissible levels of harmful and hazardous substances in waste water discharged into water bodies, prom. SG № 97/28.11.2000, last amend. SG № 24/23.03.2004	x			

<sup>11</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>12</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

обекти. Обн., ДВ, бр. 97/28.11.2000 , изм. И доп., бр. 24 от 23.03.2004					
<b>Наредба № 7 от 14.11.2000 г. за условията и реда за заустване</b> на производствени отпадъчни води в канализационните системи на населените места, обн. ДВ, бр. 98 от 1.12.2000	<b>Ordinance № 7 of 14.11.2000 on the terms and conditions for discharge</b> of industrial waste water in the sewerage systems of settlements, prom. SG № 98/01.12.2000	x			
<b>НАРЕДБА № 13 от 29.01.2004 г. За условията и реда за осъществяване на техническата експлоатация на язовирните стени и съоръженията към тях</b> , обн., ДВ, бр. 17 от 2.03.2004	<b>Ordinance № 13/29.01.2004 on the conditions and order for dam walls and related facilities technical operation</b> , prom. SG № 17/02.03.2004	x		MOEW, MRD, MAF, MEE	Water Act
<b>Наредба № 14 от 3.08.1987 г. за курортните ресурси,</b>	<b>Ordinance №. 14 of 03.08.1987 regulating tourism resources, resort areas and resorts</b> , prom. SG № 79/13.10.1987, last amend. SG №	x		MH	Health Act

<b>курортните местности и курортите, обн., ДВ, бр. 79/13.10.1987, изм. Бр. 70 от 10.08.2004</b>	70/10.08.2004				
<b>Национална стратегия за развитие на горския сектор на Република България за периода 2013 – 2020</b>	<b>The National Strategy for the Development of the Forest Sector of the Republic of Bulgaria for the period 2013-2020 (NSDFS RB 2013-2020)</b> It is the main document establishing the strategic framework for the government policy on achieving long-term stable management of vital and productive multifunctional forests and on the competitiveness of the forest sector. It states that 'Bulgarian forests have various economical, ecological and social functions of special significance to the stable development of the country.	X		MAF, EFA	Forest Act
<b>Стратегически план за развитие на горския сектор в Република България 2014 - 2023</b>	<b>Strategic plan for the development of forest sector in Republic of Bulgaria 2014- 2023</b>	x		EFA	Forest Act

**The National Strategy for the Development of the Forest Sector of the Republic of Bulgaria for the period 2013-2020 (NSDFSRB 2013-2020)** is the main document establishing the strategic framework for the government policy on achieving long-term stable management of vital and productive multifunctional forests and on the competitiveness of the forest sector. It states that 'Bulgarian forests have various economical, ecological and social functions of special significance to the stable development of the country. They are key to the formation and preservation of a vital environment, as of 31.12.2011 covering 4.1 million ha or 37.4% of the territory. Forest territories ensure and preserve the quantity and quality of 85% of the country's water flow or around 3.6 billion cubic metres of pure drinking water.

The item 'Analysis of the opportunities for preservation and improvement of forests' productive functions' states that ecosystem benefits (among which is drinking water supply) are legally regulated, but a regulatory ordinance on the efficient enforcement of the Forestry Act's texts concerning 'repaying' forest territories for all their ecosystem benefits is missing.

Expansion of forests' ecosystem benefits is provided for by Item 2.7.3 of the Strategy – Opportunities for Development of the Forest Sector.

The National Strategy for Development of the Forest Sector 2013-2020 is directed towards the realization of the following **scenario**: 'Close to 2020, Bulgaria will have vital, productive and multifunctional forests, a stable and competitive forest sector, preserved biodiversity, **quantity and quality of water resources**'.

Measure №. 8 Creating Public Attitude and Affinity Towards Sharing Responsibility for the Stable and Close to nature (Multifunctional) Management of Forests provides for assisting and introducing innovative financial mechanisms to encourage the preservation and stable usage of water resources.

The Chapter analyzing the forest sector in Item 5.1. Protected Forests – Soil, Water and Other Ecosystem Functions states:

EFA (Executive Forest Agency) data for 2010 shows **the total area of protected forests to be** 518 667 ha, which is **12.5% of the total area of forest territories** in Bulgaria. In comparison to 2005, the total area of protected forests has been reduced by 27 444 ha. The areal reduction of erosion-control forests of 25 849 ha and of 2293 ha for water-protecting forests comes from reclassifying these forests as forests with a more strict conservation regime. Between 2006 and 2011, 702.5 ha have been planted for erosion-control purposes in areas destroyed by fires and other natural disasters and along the banks of river streams.

**The Strategic plan for the development of forest sector in Republic of Bulgaria 2014 – 2023** is based on the current status and prospects of the forest sector and a review of the available strategic and legislative documents at the national, European and international level.

To achieve the objectives of the National strategy for the development of the forest sector the Strategic plan for the development of the forest sector identifies operational objectives and activities, grouped in accordance with the objectives of the Strategy objectives, priorities and measures. In addition the plan includes an assessment of the resources needed, the expected results, the responsible and involved institutions, communication and media policy and indicators, and the monitoring rules for its implementation.

The **Mission** of The strategic plan for the development of the forest sector is to determine specific actions for the implementation of the strategic objectives, priorities and measures included in National strategy for the development of the forest sector in the Republic of Bulgaria 2013-2020, providing conditions for the achievement of the Vision included in it, namely:

"By 2020 Bulgaria will have a vibrant, productive, and multifunctional forests, sustainable, competitive and innovative forest sector, stored biological diversity, quantity and quality of water resources in the forest areas. The sector will support the economic development of the country, provide conditions for complete realization of employed people, contribute to mitigating the effects of climate change and guarantee the maintenance of healthy environment."

#### **Sources of information:**

[www.lex.bg](http://www.lex.bg) – all national legislation in original language

[www.moew.government.bg](http://www.moew.government.bg) - Ministry of environment and water, legislation related to water resources and protection of the environment

[www.iag.bg](http://www.iag.bg) – Executive forest agency – all forest related legislation in original language

<http://eur-lex.europa.eu/> - EU legislation, national legislation in all languages

# ***ANNEX 3***

## ***NATIONAL LEGISLATION TEMPLATE GREECE***

Relevant national legislation analyses for  
improvement of land use and water  
management regulation and policies in  
Greece within the scope of  
CC - WARE project

Contribution of Greek Project Partners:

Decentralized Administration of  
Macedonia and Thrace / Water  
Directorate of Central Macedonia  
(PP10)



**HELLENIC REPUBLIC**  
**Decentralized Administration**  
**of Macedonia and Thrace**

EYATH S.A., Thessaloniki Water Supply  
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## 1. NATIONAL/REGIONAL LEGISLATION

***Table 3.1: Drinking water supply and drinking water sources protection***

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
1.	Όροι διάθεσης λυμάτων και υγρών βιομηχανικών αποβλήτων σε φυσικούς αποδέκτες και καθορισμού των ανωτάτων επιτρεπτών ορίων ρυπαντών Υ.Α. 15549/6.7.1983	Concerning the conditions of disposal of sewage and of industrial wastewater into natural receivers and setting maximum permitted levels of pollutants	X		Ministry for the Environment	
2.	Προστασία των νερών που χρησιμοποιούνται για την ύδρευση της περιοχής πρωτεύουσας	Protection of water used for water supply in the area of the capital pollution and		X	Water and Sewerage Company of Athens	

<sup>1</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>2</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	από ρυπάνσεις και μολύνσεις Υ.Α. Α5/2280/1983	infections				
3.	Ποιότητα του πόσιμου νερού, σε συμμόρφωση προς την 80/778 οδηγία του Συμβουλίου των Ευρωπαϊκών Κοινοτήτων της 15.7.80 ΚΥΑ Α5/288/23.1/20.2.86	Quality of drinking water in compliance with the 80/778 Council Directive of the European Communities 15.07.80	X		Ministry for the Environment	
4.	Απαιτούμενη ποιότητα των επιφανειακών νερών που προορίζονται για: «πόσιμα», «κολύμβηση», διαβίωση ψαριών σε γλυκά νερά» και «καλλιέργεια και αλιεία οστρακοειδών», μέθοδοι μέτρησης, συχνότητα δειγματοληψίας και ανάλυσης των επιφανειακών νερών που προορίζονται για	Quality required of surface water intended for "drinking", "bathing", living in freshwater fish "and" fishing and shellfish farming 'methods of measurement, sampling and analysis of surface water intended for water supply	X		Ministry for the Environment	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	πόσιμα ΚΥΑ 46399/1352/27.6/3.7.86					
5.	Προστασία του υδάτινου περιβάλλοντος από τη ρύπανση που προκαλείται από ορισμένες επικίνδυνες ουσίες που εκχέονται σε αυτό και ειδικότερα καθορισμός οριακών τιμών ποιότητας νερού σε κάδμιο, υδράργυρο και εξαχλωροκυκλοεξάνιο ΠΥΣ 144/87	Protect the aquatic environment from pollution caused by certain dangerous substances discharged in this particular setting limits water quality cadmium, mercury and hexachlorocyclohexane	X		Ministry for the Environment	
6.	Διαχείριση των υδατικών πόρων και άλλες διατάξεις Ν. 1739/1987	Management of water resources and other restrictions	X		Ministry for the Environment	WFD Water Act
7.	Μέτρα και περιορισμοί για την προστασία του υδάτινου περιβάλλοντος και ειδικότερα καθορισμός	Restrictions and measures to protect the aquatic environment and in particular to establish	X		Ministry for the Environment	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	οριακών τιμών των επικινδύνων ουσιών στα υγρά απόβλητα Υ.Α. 18186/271/1988	limits for hazardous substances in wastewater				
8.	Μέτρα και περιορισμοί για την προστασία των υπογείων νερών από απορρίψεις ορισμένων επικινδύνων ουσιών Κ.Υ.Α. 26857/553/1988	Restrictions and measures to protect groundwater from discharges of certain dangerous substances	X		Ministry for the Environment	
9.	Τροποποίηση όρων διάθεσης λυμάτων και υγρών βιομηχανικών αποβλήτων σε φυσικούς αποδέκτες: α) θαλάσσια περιοχή νομού Πιερίας β) Αλιάκμονα ποταμό και καθορισμός των ανωτάτων επιτρεπτών ορίων ρυπαντών στο νομό Πιερίας Υ.Α. 5662/1988	Changes in the waste disposal and of industrial wastewater into natural receivers: a) sea area Pieria b) Aliakmonas River and determination of maximum permissible limits of pollutants in the prefecture of Pieria		X	Water Directorate of the Region (District)	
10.	Άδεια χρήσης νερού ΠΔ 256 11/05/1989	Water use permission		X	Water Directorate of the Region (District)	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
11.	Άδεια εκτέλεσης έργου αξιοποίησης υδατικών πόρων από νομικά πρόσωπα ιδιωτικού δικαίου, που δεν περιλαμβάνονται στο δημόσιο τομέα και από φυσικά πρόσωπα ΚΥΑ Φ16/5813/17.05.89	Permission of execution utilization works water resources by private legal entities, which are not included in the public sector and natural persons		X	Water Directorate of the Region (District)	
12.	Προσδιορισμός κατώτατων και ανώτατων ορίων των αναγκαίων ποσοτήτων για την ορθολογική χρήση νερού στην άρδευση ΚΥΑ Φ16/6631	Determination of minimum and maximum limits of the quantities necessary for the rational use of water in irrigation	X		Ministry for the Environment	
13	Ποιότητα του νερού ανθρώπινης κατανάλωσης σε συμμόρφωση προς την Οδηγία 98/83/ΕΚ του Συμβουλίου της Ευρωπαϊκής Ένωσης της 3 ης Νοεμβρίου 1998 ΚΥΑ	Quality of water for human consumption in compliance with Directive 98/83/EC of the European Union Council, 3 November 1998	X		Ministry for the Environment	Water Act, Environmental Protection Act

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	Y2/2600/2001					
14.	Έγκριση Τεχνικών προδιαγραφών Κατασκευής έργων υδρογεωτρήσεων ως ελάχιστα όρια (αναδημοσίευση) ΥΑ ΔΙΠΑΔ/β/60 /12.03.03	Permission Technical specifications Construction works for boreholes as minimum limits (republished)	X		Ministry for the Environment	
15.	Προστασία και διαχείριση των υδάτων - Εναρμόνιση με την Οδηγία 2000/60/ΕΚ του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 23ης Οκτωβρίου 2000 Ν. 3199/2003	Protection and Water Management - Compliance with Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000	X		Ministry for the Environment	
16.	Χορήγηση παρεκκλίσεων σύμφωνα με την Υ2/2600/2001 κοινή υπουργική απόφαση «για την ποιότητα του νερού ανθρώπινης κατανάλωσης ΥΑ	Granting of derogations according to Decision No. Y2/2600/2001 common ministerial decision 'quality of water intended for human consumption'	X	Χορήγηση παρεκκλίσεων σύμφωνα με την Υ2/2600/2001 κοινή υπουργική απόφαση «για την ποιότητα του νερού ανθρώπινης κατανάλωσης ΥΑ	Ministry for the Environment	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	Δ.ΥΓ2/5932/2006			Δ.ΥΓ2/5932/2006		
17.	Αξιολόγηση και διαχείριση των κινδύνων πλημμύρας- Εναρμόνιση με την Οδηγία 2007/60/EK ΚΥΑ 31822/1542/Ε103/2010	Assessment and management of flood risks-Compliance with Directive 2007/60/EC	X	Αξιολόγηση και διαχείριση των κινδύνων πλημμύρας- Εναρμόνιση με την Οδηγία 2007/60/EK ΚΥΑ 31822/1542/Ε103/2010	Ministry for the Environment	
18.	Ορισμός Εθνικού Δικτύου Παρακολούθησης της ποιότητας και της ποσότητας των υδάτων με καθορισμό των θέσεων (σταθμών) μετρήσεων και των φορέων που υποχρεούνται στην λειτουργία τους, κατά το άρθρο 4, παράγραφος 4 του Ν. 3199/2003 (Α' 280) ΚΥΑ 140384/2011	Appointment of National Monitoring Network quality and quantity of water to determine the positions (channels) measurements and operators are required to operate in accordance with Article 4, paragraph 4 of Law 3199/2003 (A280)	X	Ορισμός Εθνικού Δικτύου Παρακολούθησης της ποιότητας και της ποσότητας των υδάτων με καθορισμό των θέσεων (σταθμών) μετρήσεων και των φορέων που υποχρεούνται στην λειτουργία τους, κατά το άρθρο 4, παράγραφος 4 του Ν. 3199/2003 (Α' 280) ΚΥΑ 140384/2011	Ministry for the Environment	

The legislation concerning frameworks or harmonization with European Legislation is always of National level. The application of this legislation is in general a duty of regional and local authorities or local Directions depending from Central Government. Regional and local decisions or circulars aim to the easier practical implementation of National legislation or to cope with local issues due to specific local conditions.

Each act is followed by a number of "Presidential Decrees" that define the details and practical considerations concerning the effective application of the act. Sometimes, delays of the Publication of such decrees lead to keep inactive legislation that is officially approved and established.

There is an important interlinkage among the various acts and decisions especially in time, not as parts of general national plan, but rather as a multitude of laws to be applied for the same or similar subjects. This situation is going to improve as the implementation of European legislation cover the older national one.

**Table 3.2: Land use legislation/ policies**

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
1.	Κατηγορίες και περιεχόμενο χρήσεων γης ΠΔ23-2-87	Classes and content of land uses	X	X	Ministry for the Environment Local Authorities	

<sup>3</sup> Authority in charge for implementation e.g. ministry, municipality, etc.

<sup>4</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)



No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
2.	Εφαρμογή NATURA για τις Λίμνες Θράκης ΦΕΚ 1042/22.7.2005	Application of NATURA for the lakes of Thrace	X	X	Ministry for the Environment Local Authorities	NATURA

The Greek list of Natura 2000 sites includes 241 Sites of Community Importance (SCI) and 202 Special Protection Areas (SPA).

***Table 3.3: Climate change legislation/policies***

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional Level	Implementation Jurisdiction <sup>5</sup>	Interlinkage <sup>6</sup>
1.						

Actually, there exists not any Climate Change legislation or policies in Greece

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<sup>5</sup> Competent authority for implementation e.g. government, ministry, municipality, etc.

<sup>6</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

**Table 3.4: Water management legislation/policies<sup>7</sup>**

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
1.	Σύσταση Διευθύνσεων Διαχείρισης Υδατικών Πόρων Δυτικής Μακεδονίας, Κεντρικής Μακεδονίας, Ανατολικής Μακεδονίας και Θράκης ΠΔ 412 16/06/1989	Establishment of Management Directorate of Water Resources of Western Macedonia, Central Macedonia, Eastern Macedonia and Thrace		X	Ministry for the Environment	
2.	Κύρωση της Συμφωνίας μεταξύ της Κυβέρνησης της Ελληνικής Δημοκρατίας και της Κυβέρνησης της Δημοκρατίας της Αλβανίας για την ίδρυση μιας μόνιμης Ελληνο – Αλβανικής Επιτροπής για θέματα	Ratification of the Agreement between the Government of the Greek Republic and the Government of the Republic of Albania on the establishment of a permanent Greek -	X		Ministry for the Environment	

<sup>7</sup> Only those which are not listed before

<sup>8</sup> Competent authority for implementation e.g. government, ministry, municipality, etc.

<sup>9</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

	διασυνοριακών γλυκών υδάτων. Ν 3405/2005	Albanian Committee for transboundary freshwater issues.				
3.	Διάρθρωση της Διεύθυνσης Υδάτων της Περιφέρειας ΚΥΑ οικ.47630/01.12.05	Structure of the Water Directorate of the Region (District)	X		Ministry for the Environment	
4.	Οργάνωση της Κεντρικής Υπηρεσίας Υδάτων του Υπουργείου Περιβάλλοντος, Χωροταξίας και Δημοσίων Έργων ΚΥΑ 49139/2005	Organisation of Central Water Service of the Ministry of Environment, Physical Planning and Public Works	X		Ministry for the Environment	
5.	Συγκρότηση Εθνικού Συμβουλίου Υδάτων ΥΑ 34685/2005	Establishment of the National Water Council	X		Ministry for the Environment	
6.	Απαγορευτικά, περιοριστικά και λοιπά ρυθμιστικά μέτρα για την προστασία και διαχείριση επιφανειακών και υπόγειων υδάτων του Νομού ΧαλκιδικήςΥ.Α. 2234/29.6.2007	Prohibitive, restrictive and other regulatory measures for the protection and management of surface and groundwater of Prefecture of Halkidiki		X	Water Directorate of the Region (District)	
7.	Απαγορευτικά, περιοριστικά και λοιπά ρυθμιστικά μέτρα για την προστασία και διαχείριση επιφανειακών και υπογείων υδάτων του Νομού ΘεσσαλονίκηςΥ.Α.	Prohibitive, restrictive and other regulatory measures for the protection and management of surface and		X	Water Directorate of the Region (District)	

	2358/26.7.2007	groundwater Prefecture Thessaloniki	of of				
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The management and protection of water resources is governed by national legislation. Regional legislation, based on national legislation, is applied only for very specific local cases as for example well permits, water use etc.

***Table 3.5: River Basin Management Plans***

No.	Name of river basin Legislation / policy original title	Name of river basin Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>10</sup>	Approval status
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<sup>10</sup> Competent authority for implementation e.g. government, ministry

1.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Δυτικής Πελοποννήσου (GR01)	River Basin Management Plan Water District of Western Peloponnese (GR01)		Water Directorate of the Region (District)	Act
2.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Βόρειας Πελοποννήσου (GR02)	River Basin Management Plan Water District of Northern Peloponnese (GR02)		Water Directorate of the Region (District)	Act
3.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Ανατολικής Πελοποννήσου (GR03)	River Basin Management Plans Water District of Eastern Peloponnese (GR03)		Water Directorate of the Region (District)	Act
4.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Δυτικής Στερεάς Ελλάδας (GR04)	River Basin Management Plan Water District of Western Sterea Ellada (GR04)		Water Directorate of the Region (District)	Act
5.	Σχέδιο Διαχείρισης	River Basin		Water Directorate of	Act

	Λεκανών Απορροής του Υδατικού Διαμερίσματος Ηπείρου (GR05)	Management Plan Water District of Epirus (GR05)		the Region (District)	
6.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Αττικής (GR06)	River Basin Management Plan Water District of Attica (GR06)		Water Directorate of the Region (District)	Act
7.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Ανατολικής Στερεάς Ελλάδας (GR07)	River Basin Management Plan Water District of Eastern Sterea Ellada (GR07)		Water Directorate of the Region (District)	Act
8.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Θεσσαλίας (GR08)	River Basin Management Plan Water District of Thessalia (GR08)		Water Directorate of the Region (District)	Act
9.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Δυτικής Μακεδονίας (GR09)	River Basin Management Plan Water District of Western Macedonia (GR09)		Water Directorate of the Region (District)	Act
10	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος	River Basin Management Plan Water District of		Water Directorate of the Region (District)	Act

	Κεντρικής Μακεδονίας (GR10)	Central Macedonia (GR10)			
11.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Ανατολικής Μακεδονίας (GR11)	River Basin Management Plan Water District of Eastern Macedonia (GR11)		Water Directorate of the Region (District)	Act
12.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Θράκης (GR12)	River Basin Management Plan Water District of Thrace (GR12)		Water Directorate of the Region (District)	Act
13.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Κρήτης ( GR13)	River Basin Management Plan Water District of Crete (GR13)		Water Directorate of the Region (District)	Approved
14.	Σχέδιο Διαχείρισης Λεκανών Απορροής του Υδατικού Διαμερίσματος Νήσων του Αιγαίου ( GR14)	River Basin Management Plan Water District of Aegean Islands (GR14)		Water Directorate of the Region (District)	Public Consultation





River Basin Management Plans have been prepared for each one of the 14 water districts. Every water district comprises one or many river basins. The approval and application of the plan is therefore common for the river basins that form a water district, covered by a unique act. Transnational River Basin Management Plans have also to be prepared for transnational rivers.

***Table 3.6: OTHER legislation/policies of relevance for CC - WARE project***

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
1.	Ειδικά προγράμματα Περιβαλλοντικής Εκπαίδευσης ΥΑ Γ2/2352/28-4- 1993	Special programs for environmental education	X		Ministry of Education	

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<sup>11</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>12</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)



There is a large number of general and specific acts, programs and projects aiming at the environmental sensibilization, education and active participation of the population and the school youth especially.

## 2. Level of relevant EU legislation implementation

The Greek legislation on water is constantly harmonized to EU Directives by Acts, Joint Ministerial Decisions, Presidential Decrees and Circular Orders at national level, ensuring compliance with European legislation and quality standards to achieve the conservation, protection and improvement of water quality, ensure protection of public health and provide means for a sustainable management of water resources. The application of the legislation is ensured by regional and local administration, according to the national legislation and the regional or local conditions, especially administrative organization ones. The main problem of current legislation is the adoption of newer acts that do not completely substitute the older ones, but rather extend, complete or transform them. The result is a multitude of laws to which one has to comply, every time a specific problem arises. A second problem is the applicability or fast application of legislation due to socioeconomic issues (Long time established practices, lack of finances, improper administrative organization etc.), that ask for a more general legislation renewal and administration reorganization. The final issue relates to the control and monitoring possibilities that take also time (and extra finances) to comply with the developed legislation, not forgetting also some technical issues at European level, as foreexample ecological flows.

### 3. GAPS IDENTIFIED and Proposal/ Idea of actions/measures/ policies that might fill the “GAPS”

Every new regulation or law has to be tested, before publication, for its applicability in every specific case of application, if its target is to be achieved and produce beneficial results.

The main conclusion that derives from the survey of the national legislation regarding the water resources and ecosystems is that there is a need for a general, clear and coherent legislation framework within which each separate action can be applied. In this context, the following aspects are important:

1. Data collection which is crucial for the elaboration of technical legislation and for the monitoring of its application
2. Appropriate administration reforms which will help the proper implementation of the new legislation.
3. Coupling of the various specific subjects and actions, foreseen from different acts, in order to have faster and better results.
4. Simplification of reporting and assessment which will facilitate the control of application.

Some of the above issues seem to be also important at the European level. Coupling of the Water Framework Directive with the Common Agriculture Policy is a step taken by EC in this direction.

	PP (country)	Austria	Slovenia	Hungary	Romania	Bulgaria	Greece	Italy	Serbia
Test area location - name			Ljubljana moor						
Water resource type	surface water				x	x			x
	reservoir				x				x
	karst aq	x	x				x		
	bank filtration			x					x
	porous aq confined			x					
	porous aq unconfined	x	x	x					
	fissured aquifer							x	
Topography	mountain	x			x	x	x	x	
	hills	x				x		x	x
	plain	x	x	x	x				x
Landuse (CLC 2006)	agriculture		x						
	forest								
	urban areas		x						
	wetlands		x						
	water		x						
Protected areas	special protected areas		x	x			x		
	DWPA	x	x	x	x	x	x	x	x
ES services aim	surface water quality	x		x	x	x			x
	GW quantity	x	x				x	x	x
	surface water quantity	x			x	x			x
	GW quality	x	x	x			x		x
Eco-regions	acc. To WFD legislation								
Ecosystem type	forest (AT)	x		x	x	x	x	x	x
	grassland (HU)	x		x				x	x
	wetlands (SL)		x	x					
	arable land/agriculture (SR)		x		x				x

# ***ANNEX 4***

## ***NATIONAL LEGISLATION TEMPLATE HUNGARY***

Relevant national legislation analyses for  
improvement of land use and water  
management regulation and policies in  
Hungary within the scope of  
CC - WARE project

Contribution by National Institute for  
Environment

Prepared by:

Ágnes Tahy



## 1. NATIONAL/REGIONAL LEGISLATION

**Table 1.1: Drinking water supply and drinking water sources protection**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementatio n Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
<b>Magyarország Alaptörvénye (2011. április 25.)</b>	The Fundamental Law of Hungary	X		Parliament Government Citizens	European Union Founding Treaties
<b>2011. évi CCIX. törvény</b> a víziközmű- szolgáltatásról  & <b>58/2013. (II. 27.) Korm. rendelet</b> a víziközmű-szolgáltatásról szóló 2011. évi CCIX. törvény egyes rendelkezéseinek végrehajtásáról	Act No. 209 in 2011 on water utility supply  & Government regulation No. 58 in 2013 on the implementation of Act No. 209 in 2011 on water utility services	State or local government		Ministry of National Development	2000/60/EC Water Framework Directive

<sup>1</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>2</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
<b>201/2001. (X.25.) Korm. rendelet</b> az ivóvíz minőségi követelményeiről és az ellenőrzés rendjéről	Governmental regulation No. 201 in 2001 on drinking water quality and controlling	State or local government		Ministry of Human Capacities	98/83/EC Drinking Water Directive
<b>21/2002. (IV. 25.) KöViM rendelet</b> a víziközművek üzemeltetéséről	Ministerial regulation No. 21 in 2002 on operation of water services	State or local government		Ministry of Human Capacities Ministry of Interior	98/83/EC Drinking Water Directive
<b>6/2002. (XI. 5.) KvVM rendelet</b> az ivóvízkivételre használt vagy ivóvízbázisnak kijelölt felszíni víz, valamint a halak életfeltételeinek biztosítására kijelölt felszíni vizek szennyezettségi határértékeiről és azok ellenőrzéséről	Ministerial regulation No. 6 in 2002 on the quality required of surface freshwater to abstract for drinking water purposes and to support fish life and their monitoring	State or local government		Ministry of Interior Ministry of Agriculture	75/440/EEC Surface water DWD 79/869/EEC Monitoring DWD 77/ 795 /EEC information exchange 2006/44/EC Fish Directive 2000/60/EC

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
					WFD
<b>2011. évi CLXXXIX. Törvény</b> Magyarország helyi önkormányzatairól	Act No. 189 in 2011 on Local Governments of Hungary	Local government		Ministry of Interior	
<b>123/1997. (VII. 18.) Korm. rendelet</b> a vízbázisok, távlati vízbázisok, valamint az ivóvízellátást szolgáló vízellátási létesítmények védelméről	Government regulation No. 123 in 1997 on the protection of the actual and potential sources, and the engineering structures of drinking water supply	State or local government			2000/60/EC Water Framework Directive
<b>2012. évi CLXVI. Törvény</b> a létfontosságú rendszerek és létesítmények azonosításáról, kijelöléséről és védelméről & <b>541/2013. (XII. 30.) Korm. rendelet</b> a létfontosságú vízgazdálkodási rendszerelemek és vízellátási létesítmények azonosításáról, kijelöléséről és védelméről	Act No. 166 in 2012 on designation and protection of critical systems and infrastructure & Government regulation No. 541 in 2013 on designation and protection of critical water management systems and infrastructure	X		Prime Minister's Office Ministry of National Development Ministry of Interior	2008/114/EC Critical Infrastructure Directive
<b>2013. évi LIV. Törvény</b> a rezsicsökkentések végrehajtásáról	Act No. 54 in 2013 on implementation of overhead	X		Minister's Office Ministry of	2000/60/EC Water

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementatio n Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	reduction			National Development	Framework Directive
<b>47/1999. (XII. 28.) KHVM rendelet</b> az állami tulajdonú közüzemi vízműből szolgáltatott ivóvízéért, illetőleg az állami tulajdonú közüzemi csatornamű használatáért fizetendő díjakról  & <b>8/2014. (I. 31.) BM rendelet</b> a lakossági víz- és csatornaszolgáltatás támogatásáról és az egészséges ivóvízzel való ellátás ideiglenes módozatainak ellentételezéséről	Ministerial regulation No. 47 in 1999 on the charges of the state- owned water utility services  & Ministerial regulation No. 8 in 2014 on the subsidisation of public users fees of water utilities and compensation of temporary solutions for healthy drinking water supply	X		Minister's Office  Ministry of National Development	2000/60/EC Water Framework Directive
<b>240/2000. (XII. 23.) Korm. rendelet</b> a települési szennyvíztisztítás szempontjából érzékeny felszíni vizek és vízgyűjtőterületük kijelöléséről	Government regulation No. 240 in 2000 on identification of catchment areas of nutrient sensitive areas under urban waste water treatment directive		X	Ministry of Interior	91/271/EEC UWWTD  2000/60/EC WFD
<b>2008. évi XLVI. Törvény</b> az élelmiszerláncról és hatósági felügyeletéről	Act No. 56 in 2008 on food chain and control by authority	X		Ministry of Agriculture	2009/128/EC Use of Pesticides

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementatio n Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
&  <b>43/2010. (IV. 23.) FVM rendelet</b> a növényvédelmi tevékenységről	&  Ministerial regulation No. 43 in 2010 on the plant protection activity				Directive  1107/2009/EC Pesticide Directive
<b>2052/2002. (II. 27.) Korm. határozat</b> az Ivóvízbázis-védelmi Program végrehajtásáról	Government decision No. 2052 in 2002 on Action Programme of Drinking Water Protection	State or local government		Ministry of Interior	2000/60/EC WFD
<b>213/2005. (X. 5.) Korm. rendelet</b> a határokat átlépő vízfolyások és nemzetközi tavak védelmére és használatára vonatkozó, Helsinkiben, 1992. március 17- én aláírt egyezményhez kapcsolódó Víz és Egészség Jegyzőkönyv kihirdetéséről	Government regulation No. 213 in 2005 on promulgation of the Protocol on Water and Health in relation to the Water Convention, Helsinki, 17/03/1992.	X		Ministry of Human Capacities  Ministry of Interior	Water Convention, Helsinki

The Fundamental Law of Hungary set up the framework for drinking water safety. The **Constitution** pronounces that **everyone shall have the right to physical and mental health**. To achieve healthy life for the citizens Hungary shall promote the effective application of the right by an agriculture free of genetically modified organisms, **by ensuring access to healthy food and drinking water**, by organising safety at work and healthcare provision, by supporting sports and regular physical exercise, as well as **by ensuring the protection of the environment**. Therefore Hungary shall recognise and give effect to the right of everyone to a healthy environment. Anyone who causes damage to the environment shall be obliged to restore it or to bear the costs of restoration, as provided for by an Act.

**Natural resources**, in particular arable land, forests and **the reserves of water**, biodiversity, in particular native plant and animal species, as well as cultural assets **shall form the common heritage of the nation**; *it shall be the obligation of the State and everyone to protect and maintain them, and to preserve them for future generations.*

In 2011 a new law was adopted for water utility supply (Act No. 209 in 2011) to establish fundamental rights and obligations related to water utility services, for protection of national assets of water service sectors and for sustainable development this sector. The targets of the act is the protection of water resources, welfare of consumers and to achieve this objective validate the transparent and equal treatment in accordance with the requirements of relevant regulations of the European Union.

The Governmental Decree No. 58 in 2013 on the public water supply and wastewater treatment defines **the responsibilities of operators and consumers**. Some important rules:

- The operator should provide 10-30 L/person drinking water for the consumers if the service is suspended for 6-24 hours.
- The consumed water has to meter at the connection point and fee has to pay accordingly.
- The operator can restricted the supplying of the consumers if they did not pay the bill but must not stop the service completely.
- The operator shall inform the consumers if the consumption of the drinking water has some risk to the health or the authority restricted the usage or consumption of the drinking water.

The Council Directive 98/83/EC (on the quality of water intended for human consumption) and - for some parameters - temporary values based on the Treaty of Accession are adopted to the national legislation of Hungary in the *Governmental Decree No. 201 in 2001 on the quality requirements and control of drinking water*. The scope of this regulation extends to the quality of the drinking water (the water intended for human consumption) and the regular monitoring of the quality of water. By way of derogation in the Treaty of Accession from Article 9(1) of Directive 98/83/EC, Hungary may provide for derogations from the parametric value for arsenic, boron, fluoride and nitrite until 25 December 2009 without communicating such a decision to the Commission. Hungary extended derogation until 25.12 2012

for arsenic. This derogation does not apply to drinking water intended for food processing. The national Water Quality Improvement Programme had included two deadlines:

I. step: 184 settlements, 400.925 persons, deadline: 25.12.2006.

[parameters:  $B^-$ ,  $F^-$ ,  $NO_2^-$ , above 30  $\mu g/l$   $As^{3+}$ ]

II. step: 689 settlements, 2.137.580 persons, deadline: 25.12.2009.

[parameters: 10-30  $\mu g/l$   $As^{3+}$ ,  $NH_3$ ],

than later an extension of period of performance for 3 years until 25.12.2012.

There are three articles where ***Hungarian regulation is more stringent than the DWD:***

- In case of karstic, shallow groundwater, bank filtration and surface water at each abstraction points Chemical Oxygen Demand, Ammonium, Nitrite and Chloride have to meet a **more stringent limit value as indicator parameters**. If these limits are exceeded the operator should investigate the cause of the exceedance. If the limit is exceeded a consequence of natural processes, or a known cause, which does not indicate unexpected contamination of water sources and that is safeguarded by protection area than no need for special considerations. Other reasons, not caused by natural assets, to eliminate the pollution, the operator should apply a treatment technology, or until the pollution exclusion the contaminated well(s) must disable to service.
- Some water quality components are more stringent than in the EU legislation like trihalomethans 50  $\mu g/L$  in Hungary than 100  $\mu g/L$  in DWD, while other components are not mentioned in the DWD for example: chlorite (0,2 mg/L), cis-1,2-dichloroethylene (50  $\mu g/L$ ). Some indicator parameters are included into the Hungarian regulations as hardness between 50 and 350 CaOmg/L.
- The operator shall **establish drinking water safety management system** for the water supply systems with an average capacity over than 10 m<sup>3</sup>/day or serving 50 persons. The **Water Safety Plan** (WSP) should be approved by the Chief Medical Office of the National Public Health and has to revise every five years but updated yearly.

The first appearance of WSP in the Hungarian legislation occurred in 2009. Since than guidance has elaborated based on WHO Water Safety Plan Manual (Geneva, 2004). There is a schedule for implementation of regulation: the drinking water supply system over 100 000 persons the WSP shall prepare

until 1<sup>st</sup> of July in 2012, than systems between 50 000-100 000 persons until 1<sup>st</sup> of July in 2013, than systems between 5000–49 999 persons 1<sup>st</sup> of July in 2014, at last systems between 50–4999 until 1<sup>st</sup> of July in 2016.

The Ministerial Decree No. 21 in 2002 on the **operational rules of public water utilities** (by Ministry of Environment and Water) defines the detailed rules on operation of a drinking water supply system (waterworks) and on sewage collection and treatment. This regulation requires preparation the operational management manual for each waterworks which have to approve by public health authority. This manual should comprise measures to manage the protection area of drinking water source to ensure the safe drinking water supply. A **more stringent regulation than the DWD** in this degree is that **monitoring should carry out at sources** (not only at the tap): The operator is responsible for monitoring or checking of water level, amount of abstracted water and physical, chemical, bacteriological (biological as appropriate, toxicological) quality of the water resources and utilized water which is produced and allocated to drinking water network. The operator shell execute baseline test at the source in every 6 years, and yearly a regular initial inspection and more often bacteriological tests. The results of the tests shell deliver to the environmental and water authority.

The ministerial regulation No. 6 in 2002 on the quality required of surface freshwater to abstract for drinking water purposes and to support fish life and their monitoring was acting as compliance of several EU regulations, namely the

- 75/440/EEC Council Directive of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States;
- 79/869/EEC Council Directive of 9 October 1979 concerning the methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water in the Member States;
- 78/659/EEC Council Directive of 18 July 1978 on the quality of fresh waters needing protection or improvement in order to support fish life;



- 77/795/EEC Council Decision of 12 December 1977 establishing a common procedure for the exchange of information on the quality of surface fresh water in the Community;

The 75/440/EEC and 79/869/EEC Council Directives and the 77/795/EEC Council Decision have been repealed by Article 22 of the 2000/60/EC Water Framework Directive since 22.12.2007. Directive 78/659/EEC is repealed by Article 17 of Directive 2006/44/EC of the European Parliament and of the Council of 6 September 2006 on the quality of fresh waters needing protection or improvement in order to support fish life. The ministerial regulation No. 6 in 2002 was not changed after the repealing of EU regulations despite the WFD does not cover all details of these three EU regulations. Maybe this is a fault of deregulation process but can be a conscious decision of the regulatory body of Hungary.



The drinking water supply is a task of municipalities (as it has laid down in the Act No. 189 in 2011 on Local Governments) therefore they are responsible for **establishment of source protection zones and implementation of protection measures**. The No. 123 in 1997 Governmental decree established the rules how to delineate the protection zones and define which activities should cease or need prior approval by the proper authority. The Government Decree No. 123 in 1997 legislation does not address yet climate change especially but it is planned to amend. It is planned to lay down new, risk-based aspects for legislators and that way an adaptation will be necessary in the future due to developments and new knowledge gained in the CC-WARE project.

The scope of the source protection regulation (No. 123 in 1997) in Hungary extends to the sources of water serving the supply of drinking water, mineral- and medicinal water, regardless whether actually exploited, committed or designated for future use, further to the facilities which serve the treatment, storage and distribution of water for such uses, and which supply water to at least 50 persons on a daily average or more than 10 m<sup>3</sup>/day.

Protection is understood to mean the determination, designation, establishment and maintenance of a protective block or area or zone. Protection is realised by the implementation of part, or all of the safety measures. The boundaries of the protective zones shall be determined by observing the particular hydrological and hydrogeological conditions considering the permitted rate of abstraction or in the case of future sources of supply the full capacity of the aquifer(s). The protective measures set forth in the regulation serve the following purposes:

- a) The **inner protective block, zone**: protection of the abstraction works and the water supplies from direct pollution and damage,
- b) The **outer protective block, zone**: protection against refractory, further bacterial and other decomposable pollutants,
- c) The **hydrology or hydrogeological block, zone**: Protection against refractory pollutants by measures prescribed for the entire, or part of the catchment (recharge) area of the abstraction. The hydrogeological protective block or area is subdivided to "A", "B" and "C" protective zones.

The delineation of the protection zones is based on the estimation of the travel time, assuming steady seepage flow.

**Table 1.** *Dimensioning the protective blocks, protective areas of groundwater sources of supply in terms of the travel time in Governmental Decree No. 123 in 1997*

Type of protection	Design yield		Travel time	Delineation on the surface of the protective area
	Operated source	Future source		

Type of protection	Design yield		Travel time	Delineation on the surface of the protective area
	Operated source	Future source		
Inner zone	Daily peak	-	20 days	Surface projection of block, minimum 10 m from the abstractions
Outer zone	Monthly peak	-	6 months	Surface projection of block, minimum 100 m from the abstractions (No protective area in the absence of surface projection)
Hydrogeological zone "A"	Annual mean	Annual mean	5 years	Surface projection of block
Hydrogeological zone "B"	Annual mean	Annual mean	50 years	Surface projection of block
Hydrogeological zone "C"	Annual mean	Annual mean	catchment	Surface projection of recharge block

**Table 2.** Dimensioning the protective area of surface sources of supply in Governmental Decree No. 123 in 1997

Protective area	Lakes and reservoirs		Rivers and other streams	
	Smaller than 10 ha, or less than 60 days retention time	Larger than 10 ha, or over 60 days retention time	$Q^{95} < 50 \text{ m}^3/\text{s}$	$Q^{95} \geq 50 \text{ m}^3/\text{s}$
Inner zone - on water surface	Full water surface	Circle of 100 m radius about the intake	200 m upstream and 20 m downstream of the intake (the downstream distance is 50 m on sections with flow velocity less than 0.5 m/s, disturbed, or backflow) 50 m on each side of the intake	
Inner zone - on bank side	50 m wide strip on full HHW along bank	If the intake is farther than 100 m from the LLW along bank: none If the intake is closer: a 20 m wide strip along the bank section intersected by the circle	For intakes less than 50 m from the LLW along bank: 20 m wide strip beyond the HHW along bank	
Outer zone - on water surface	-	For less than 120 days retention time the entire water surface, otherwise the part beyond the inner zone of a 200 m radius circle about the intake	5 km upstream of the intake	2 km upstream of the intake
Outer zone -	50 m wide strip	For less than 120 days retention time as for less	From the HHW along bank 200	From the HHW

Protective area	Lakes and reservoirs		Rivers and other streams	
	Smaller than 10 ha, or less than 60 days retention time	Larger than 10 ha, or over 60 days retention time	$Q^{95} < 50 \text{ m}^3/\text{s}$	$Q^{95} \geq 50 \text{ m}^3/\text{s}$
on land	on full along bank beyond the inner zone	than 10 ha size, otherwise a 50 m wide strip along the HHW along bank section intersected by the 200 m radius circle, or a 100 m wide strip beyond the inner zone	m wide up to 1 km, 100 m wide up to 2 km upstream of the intake.	along bank 200 m wide up to 0.5 km.
Hydrologic	For less than 120 days retention time the entire catchment		Not covered by the present order	Not covered by the present order

LLW = Lowest water level in records

HHW = Highest water level in records

The most stringent restrictions are in the inner zone, for example: The inner zone shall be fenced or guarded in another effective manner. The owner of the inner zone shall be the same as that of the water facilities. Regular access shall be permitted to the personnel of the operator of the water facility, who perform work there and who possess a "health book" demonstrating the regular medical checks provided for in another act of legislation. Entry shall be authorised further to superiors of the personnel and representatives of the supervisory authority, further to persons authorised specifically (e.g. for the period of performing work) by the owner of the protective area. The person authorising entry shall be responsible for preventing those staying temporarily in the protective area from causing pollution.

In the protection zones depending on in which zone, several activities are prohibited, or prohibited for new facilities and activities, or may be allowed pending on the outcome of an environmental audit or environmental impact assessment. Other activities are allowed if they operates without pollution or new facilities and activities can let pending on the outcome of an EIA, or environmental audit, or an equivalent investigation. Some activities are not restricted at all or in the hydrological or hydrogeological zones.

Act No. 166 in 2012 on designation and protection of critical systems and infrastructure is the adoption of the Council Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection. The Hungarian law defines the national critical infrastuctures as well, including critical water management systems.

The EU Directive establishes a procedure for identifying and designating European Critical Infrastructures (ECI) and a common approach for assessing the need to improve their protection. The Directive has a sectoral scope, applying only to the energy and transport sectors. The Hungarian law broadens the sectoral scope with water, agriculture, industry, health care, finance, governance, infocommunication and public safety. The government regulation No. 541 in 2013 on designation and protection of critical water management systems and infrastructure establishes the procedure for identifying and designating National Water Management Critical Infrastructures. In case of drinking water systems a surface water treatment plant over 40 000 m<sup>3</sup>/day or a reservoir over 50 000 m<sup>3</sup> shell designate as national critical infrastructure (NCI). The regulations also require owners/operators of designated ECI or NCI to prepare Operator Security Plans and nominate Security Liaison Officers (linking the owner/operator with the national authority responsible for critical infrastructure protection).

Critical infrastructure is an asset or system which is essential for the maintenance of vital societal functions. The damage to a critical infrastructure, its destruction or disruption by natural disasters, terrorism, criminal activity or malicious behaviour, may have a significant negative impact for the security of the EU or the State and the well-being of its citizens. Reducing the vulnerabilities of critical infrastructure and increasing their resilience is one of the major objectives. An adequate level of protection must be ensured and the

detrimental effects of disruptions on the society and citizens must be limited as far as possible. The primary and ultimate responsibility for protecting ECIs and NCIs falls on the Member States and the owners/operators of such infrastructures.

One of the EU2020 strategic issues is to promote climate change adaptation and risk prevention. To reach sustainability the pricing policy under WFD is an important instrument. Member States are required to ensure that the prices charged to water consumers for services, such as for the delivery of fresh water and the collection and treatment of wastewater, reflect the full costs of extracting, treating and transporting it to consumers. It is required to provide adequate incentives for users to use water resources efficiently. However, the WFD also allows certain derogations for less favoured areas or to ensure affordability of basic services. According to the CC-WaterS project findings in the South Eastern Europe Regions most of the states can burden due to support self contributions of environmental structural investments. The consumers are not able to pay the bill of full cost recovery of big developments, the affordability already problem now.

In Hungary Act No. 209 in 2011 on water utility supply establishes the pricing policy of the country including the following incentives:

- the principle of recovery of costs: prices paid for the use of water utility services shall recover the allowable costs relating to the operation of water utilities – in accordance with Article 9 of the 2000/60/EC Water Framework Directive
- the 'polluter-pays' principle: financial, economic and legal conditions of water utility supply shall be established in a way that if the entity of the polluter can be identified, the environmental damages should be paid by the polluter,.
- the principle of solidarity: worthwhile and supportable pricing mechanism in a social scale is where the effects of different operational costs of water utilities of municipalities to prices are partially or completely equalized, and its objective is to provide water utility service at a more favourable price in municipalities where the water utility system can be operated at a less favourable cost level,
- the principle of the lowest cost: in planning and implementing the development of the water utility system, and its operation, those solutions shall be preferred, which result in the increase of the prices of water utility supply at the minimum rate during the term

required by law or possibly by the tender dossier, or when failing these, during the expected lifetime of the water utility with keeping or improving the operational safety of the water utility,

- the principle of prohibition of cross-financing: the price of water utility supply for the sector shall be laid down by recovering all allowable expenditures and costs of the water utility supply sector and the reasonable business profit of the water utility supplier in connection with this activity, but it may not include the recovery of expenditures and costs of other economic activities of the supplier.

To reach all these principle minimum 3 regulations should take into account: Act No. 54 in 2013 on implementation of overhead reduction and Ministerial regulation No. 47 in 1999 on the charges of the state-owned water utility services and Ministerial regulation No. 8 in 2014 on the subsidisation of public users fees of water utilities and compensation of temporary solutions for healthy drinking water supply.

Public water supply in Hungary has declined since the early 1990s due to the introduction of much higher water prices. Such way it was convinced that the right price signals are an effective tool for improving resource efficiency and influencing consumption patterns. Nowadays, the drinking water prices (and sewer) are such high that affordability is a problem. The Hungarian government have to maintain a social subsidising system for municipalities situated in low income regions. The municipalities can apply for subsidy of price of drinking water and sewage service where the costs of supply, collection and treatment are higher than the national average.

The Government established the Hungarian Energy and Public Utility Regulatory Authority to protect consumers by providing regulated access to networks and systems, carrying out regulatory competencies in order to maintain security of supply and fostering competition. Within the consumer protection a key task is to keep end-user prices on an affordable level, especially under the circumstances of economic and financial crisis. The scope of the Authority has been extended in 2012 with the water public utilities. The policy on reduction in overhead costs was established in 2012.

According to official statistics, an average Hungarian family had spent one third of their total income on overhead costs before (*Table 3. and Figure 1*). In addition to water-related costs were strikingly high in Hungary in comparison to other observed regions. It was on 6 December 2012 when the Government announced that the prices of household gas, district heating and electricity would be reduced by



10 percent as from 1 January, 2013. As of 1 July, 2013 there was 10 percent reduction furthermore in water, sewerage and waste disposal fees as well as in the prices of sewage, PB gas and chimney sweeping. In accordance with the Government's intentions, the Parliament has reduced household overheads furthermore since then.

The Hungarian Government is working on an act on public utility services to create a single framework for the current acts on the public service sector. It will rule that services that are natural monopolies in Hungary (water, electricity, gas, district heating) and other important services of public interest should to a decisive part be owned by the state or local authorities. The companies will spend the profit generated on the operation, maintenance and development of the service. The Government policy of overhead cost reduction is pioneering not only in Hungary but in all Europe. Partly considering the Hungarian success, overhead cost reduction is on the agenda in several EU countries and the relevant measures easing the burden on the population have already been introduced in some.

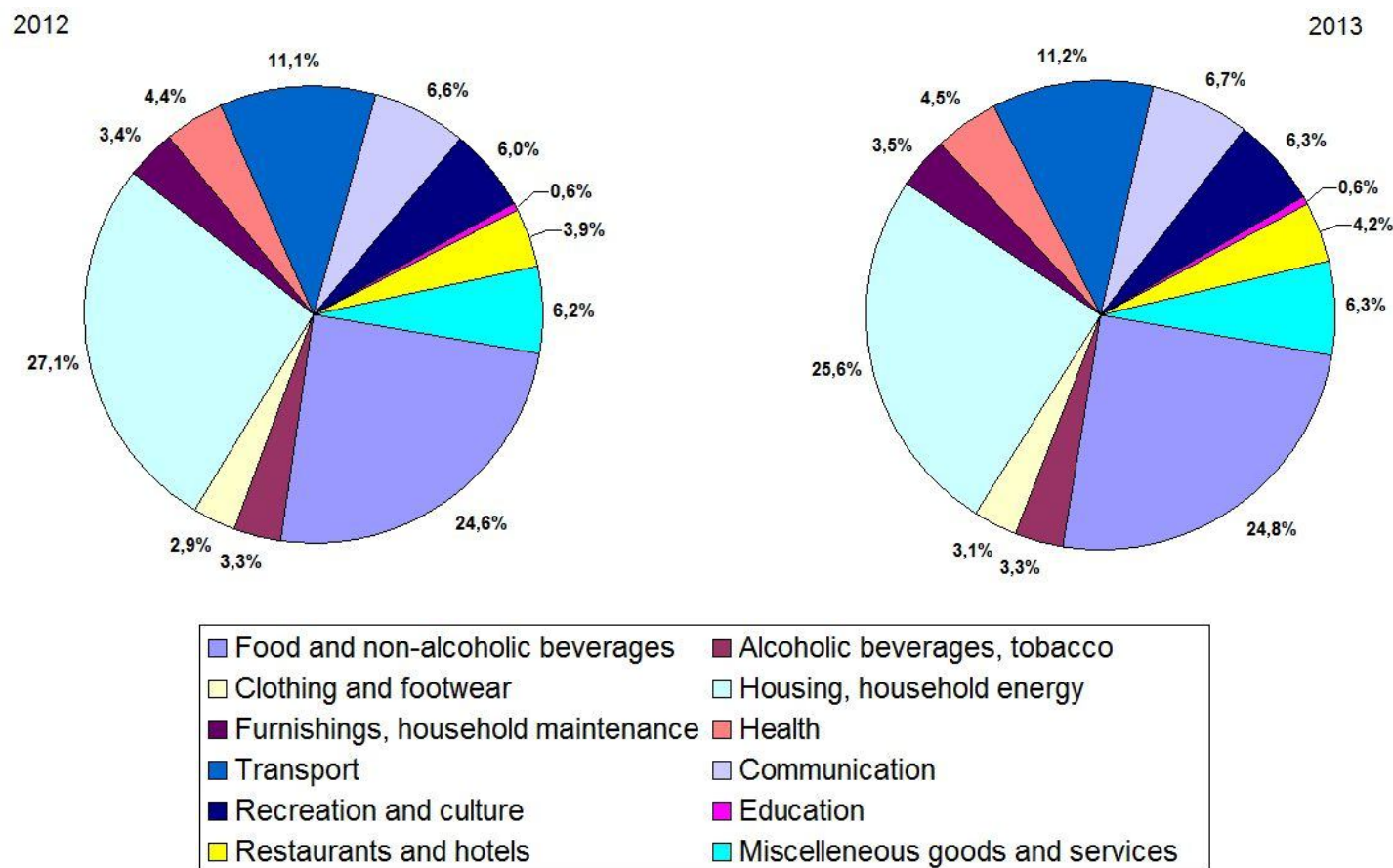
In addition the water utility system has changed under regionalization to integrate about 400 smaller supplier into about 40 large company. It is preferable to take into account the interests of the consumers in case of establishment or development of the water utility works and technical and economic considerations shows that an integrated water utility system covering more municipalities is can be more reasonable solution compared to separated water utility systems.

***Table 3. Structure of consumption expenditure per capita, % (2010-2013)***

<b>COICOP main consumption groups</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Food and non-alcoholic beverages	23,7	24,1	24,6	24,8
Alcoholic beverages, tobacco	3,3	3,2	3,3	3,3
Clothing and footwear	3,3	3,2	2,9	3,1

<b>Housing, household energy</b>	<b>26,1</b>	<b>26,9</b>	<b>27,1</b>	<b>25,6</b>
Furnishings, household maintenance	3,6	3,5	3,4	3,5
Health	4,5	4,3	4,4	4,5
Transport	10,1	10,9	11,1	11,2
Communication	6,1	6,7	6,6	6,7
Recreation and culture	6,7	6,2	6,0	6,3
Education	0,6	0,6	0,6	0,6
Restaurants and hotels	4,2	3,9	3,9	4,2
Miscellaneous goods and services	7,7	6,5	6,2	6,3
<b>Total</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

**Figure 1. Structure of consumption expenditure per capita, % (2012 and 2013) (Source: KSH)**



By Government regulation No. 240 in 2000 on identification of catchment areas of nutrient sensitive areas under 91/271/EEC urban waste water treatment directive (UWWTD) watersheds of surface water reservoirs are designated if they are used for drinking water abstraction.

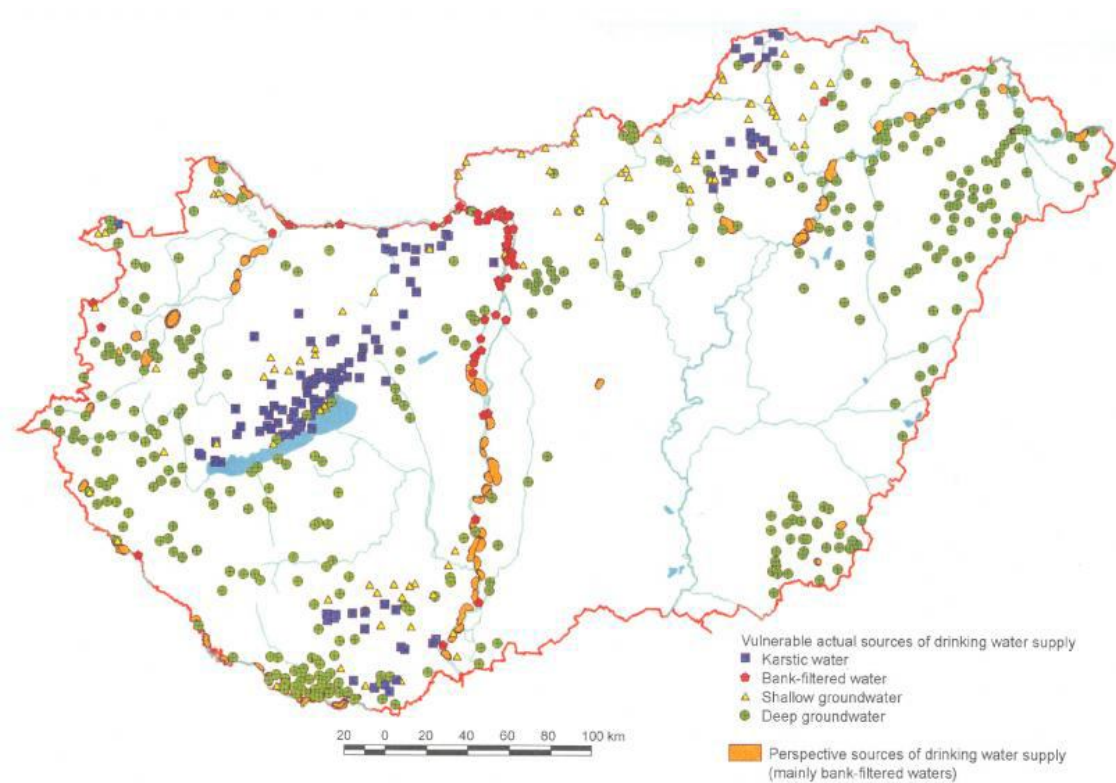
By Act No. 56 in 2008 on food chain and control by authority and Ministerial regulation No. 43 in 2010 on the plant protection activity bring into force the Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides. These regulations pay necessary attention to avoid pollution of surface water and groundwater with pesticides by taking appropriate measures, such as the establishment of buffer and safeguard zones or planting hedges along surface waters to reduce exposure of water bodies to spray drift, drain flow and run-off. It is not allowed to use pesticides that are classified as dangerous for the aquatic environment in and along water courses and lakes in the buffer zones. Use of pesticides in areas for the abstraction of drinking water is regulated by Governmental decree No. 123 in 1997 that in inner safeguard zones pesticides must not be used or stored but in outer zones controlled and reduced use is allowed.

National Drinking Water Protection Action Plan was established in 1993 in Hungary. The last period of the programme was started by the Government decision No. 2052 in 2002 on Action Programme of Drinking Water Protection. The first inventory was based on the existing knowledge of hydrogeology of Hungary. More than 700 places were designated as vulnerable sources than based on the capacity schematic protection zone were estimated as area of investigation. The state or local government is responsible for the investment to carry out diagnostic tasks such as establishment of monitoring system, exploration of aquifers and pollution sources and modelling for delineation of hydrogeological protection zones and at the end designation by legislative act. Recently about 80% of drinking water resources are explored and their protection zones are delineated (Figure 2), most of them are along large rivers as bank filtered source of drinking water where mixture of surface and groundwater can be abstracted. The other important but usually vulnerable drinking water

sources are karstic regions. The following investigations usually carried out for exploration of drinking water resources in Hungary according to rules in the Governmental decree No. 123 in 1997:

- Mapping of geology, soil and land use
- Airborne photo and satellite image interpretation including normal colour and infrared records (infrared
- Measuring hydro-meteorological parameters like precipitation, temperature, discharge and water level
- Vulnerability mapping of karst terrains (research of epikarst) and shallow porous aquifers
- Using several geophysical survey methods
- Modelling of seepage through unsaturated zone and groundwater flow and transport in saturated zone or surface run-off
- Measuring chemical parameters including analysis of isotopic composition of waters
- Inspection of pollution sources (point and diffuse) of human activities

**Figure 2. Vulnerable and perspective source protection zones in Hungary**



Hungary is active on international level as well and organized the Budapest Water Summit in 2013. The principal objective of the Summit was to prepare water-related goals for the post Rio+20 development agenda. The Role of Water and Sanitation in the Global Sustainable Development Agenda is to take stock of the various developments, in and outside the United Nation system. The United Nations Economic

Commission for Europe (UNECE) brings together governments to formulate environmental policy and support its implementation like Protocol on Water and Health in relation to the Water Convention, Helsinki, 17/03/1992. The Protocol was signed by Hungary on 17<sup>th</sup> of June in 1999, approved on 7<sup>th</sup> of December in 2001 and promulgated by Government regulation No. 213 in 2005. The main aim of the Protocol is to protect human health and well being by better water management, including the protection of water ecosystems, and by preventing, controlling and reducing water-related diseases. The Protocol is the first international agreement of its kind adopted specifically to attain an adequate supply of safe drinking water and adequate sanitation for everyone, and effectively protect water used as a source of drinking water. To meet these goals, its Parties are required to establish national and local targets for the quality of drinking water and the quality of discharges, as well as for the performance of water supply and waste-water treatment. They are also required to reduce outbreaks and the incidence of water-related diseases. This Protocol introduces a social component into cooperation on water management. Water resources management should link social and economic development to the protection of natural ecosystems. Moreover, improving the water supply and sanitation is fundamental in breaking the vicious cycle of poverty.

**Table 1.2: Land use legislation/ policies**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
<b>1995. évi LIII. Törvény</b> a környezet védelmének általános szabályairól	Act No. 53 in 1995 on environmental protection	X		Ministry of Agriculture	All environmental legislations
<b>1996. évi LIII. Törvény</b> a természet védelméről	Act No. 53 in 1996 on nature protection	X		Ministry of Agriculture	79/409/EEC 92/43/EEC (Natura2000)
<b>96/2009. (XII. 9.) OGY határozat</b> a 2009-2014 közötti időszakra szóló Nemzeti Környezetvédelmi Programról					
<b>2003. évi XXVI. Törvény</b> az Országos Területrendezési Tervről					
<b>218/2009. (X. 6.) Korm. rendelet</b> a területfejlesztési koncepció, a területfejlesztési program és a	on Regional Development and Regional Planning	X		Ministry of National Development	

<sup>3</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>4</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)



Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementati on Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
területrendezési terv tartalmi követelményeiről, valamint illeszkedésük, kidolgozásuk, egyeztetésük, elfogadásuk és közzétételük részletes szabályairól					
<b>314/2005. (XII. 25.) Korm. rendelet</b> a környezeti hatásvizsgálati és az egységes környezethasználati engedélyezési eljárásról		X		Ministry of Agriculture	2011/92/EU 2010/75/EU
<b>172/2004. (XII. 23.) FVM rendelet</b> az Agrár- és Vidékfejlesztési Operatív Program kihirdetéséről				Ministry of Agriculture  Prime Minister's Office	
<b>195/2013. (VI. 12.) Korm. rendelet</b> a Kárpátok védelméről és fenntartható fejlesztéséről szóló, 2003. május 22-én Kijevben készült Keretegyezményhez kapcsolódó, a fenntartható erdőgazdálkodásról szóló jegyzőkönyv kihirdetéséről	Protocol on Sustainable Forest Management to the Framework Convention on the Protection and Sustainable Development of the Carpathians				
<b>275/2004. (X. 8.) Korm. rendelet</b> az					79/409/EEC

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementati on Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
európai közösségi jelentőségű természetvédelmi rendeltetésű területekről					92/43/EEC (Natura2000)
<b>253/1997. (XII. 20.) Korm. rendelet</b> az országos településrendezési és építési követelményekről					
<b>2009. évi XXXVII. Törvény</b> az erdőről, az erdő védelméről és az erdőgazdálkodásról & <b>153/2009. (XI. 13.) FVM rendelet</b> az erdőről, az erdő védelméről és az erdőgazdálkodásról szóló 2009. évi XXXVII. törvény végrehajtásáról					
<b>47/2014. (IV. 24.) VM rendelet</b> a 2014. évi körzeti erdőtervezésre vonatkozó tervezési alapelvekről, valamint az érintett körzeti erdőtervek alapján folytatott erdőgazdálkodásról					
<b>2007. évi CXXIX. Törvény</b> a termőföld védelméről					

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementati on Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
<b>90/2008. (VII. 18.) FVM rendelet</b> a talajvédelmi terv készítésének részletes szabályairól					
<b>50/2001. (IV. 3.) Korm. rendelet</b> a szennyvizek és szennyvíziszapok mezőgazdasági felhasználásának és kezelésének szabályairól	on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture				86/278/EEC Sewage sludge Directive
<b>2007. évi XVII. Törvény</b> a mezőgazdasági, agrár-vidékfejlesztési, valamint halászati támogatásokhoz és egyéb intézkedésekhez kapcsolódó eljárás egyes kérdéseiről  <b>61/2009. (V. 14.) FVM rendelet</b> az Európai Mezőgazdasági Vidékfejlesztési Alapból nyújtott agrár-környezetgazdálkodási támogatások igénybevételének részletes feltételeiről					1307/2013/EU 1305/2013/EU CAP (new)
<b>89/2004. (V. 15.) FVM rendelet</b> a növényvédő szerek forgalomba hozatalának és felhasználásának engedélyezéséről,					1107/2009/EC Pesticide Directive

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementati on Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
valamint a növényvédő szerek csomagolásáról, jelöléséről, tárolásáról és szállításáról					
<b>91/2007. (IV. 26.) Korm. rendelet</b> a természetben okozott károsodás mértékének megállapításáról, valamint a kármentesítés szabályairól					
<b>40/2004. (IV. 7.) FVM rendelet</b> a növényfajták állami elismeréséről					
<b>1/2014. (I. 3.) OGY határozat</b> a Nemzeti Fejlesztés 2030 - Országos Fejlesztési és Területfejlesztési Konceptióról					
<b>27/2006. (II. 7.) Korm. rendelet</b> a vizek mezőgazdasági eredetű nitrátszennyezéssel szembeni védelméről  & <b>59/2008. (IV. 29.) FVM rendelet</b> vizek mezőgazdasági eredetű nitrátszennyezéssel szembeni védelméhez szükséges cselekvési					91/676/EEC Nitrate Directive

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementati on Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
program részletes szabályairól, valamint az adatszolgáltatás és nyilvántartás rendjéről					
<b>1998. évi XXVII. Törvény</b> a géntechnológiai tevékenységről	on the deliberate release into the environment of genetically modified organism				90/220/EEC

**Table 1.3 : Climate change legislation/policies**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>5</sup>	Interlinkage <sup>6</sup>
<b>2007. évi LX. Törvény</b> az ENSZ Éghajlatváltozási Keretegyezménye és annak Kiotói Jegyzőkönyve végrehajtási keretrendszeréről	Act No. 60 in 2007 on frame of implementation the UN Framework Convention on Climate Change and Kyoto Protocol	x		Ministry of National Development, Ministry of Foreign Affairs and Trade	UNFCCC (1992) & Kyoto Protocol  2003/87/EC
<b>29/2008. (III. 20.) OGY határozat</b> a Nemzeti Éghajlatváltozási Stratégiáról	National Climate Change Strategy 2008-2025			,	
<b>2003. évi CVII. Törvény</b> „A sivatagosodás elleni küzdelemről a súlyos aszályjal és/vagy sivatagosodással sújtott országokban, különös tekintettel Afrikára” ENSZ Egyezmény kihirdetéséről	Act No. 107 in 2003 on promulgation of the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa			Ministry of Agriculture, Ministry of Interior Ministry of Foreign Affairs and Trade	UNCCD
<b>2011. évi CLXVIII. Törvény</b> a mezőgazdasági termelést érintő időjárás				Ministry of Agriculture	

<sup>5</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>6</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>5</sup>	Interlinkage <sup>6</sup>
és más természeti kockázatok kezeléséről					
<b>94/2014. (III. 21.) Korm. rendelet</b> a Nemzeti Alkalmazkodási Térinformatikai Rendszer működésének részletes szabályairól	NATér				2007/2/EC INSPIRE
<b>277/2005. (XII. 20.) Korm. rendelet</b> az Országos Meteorológiai Szolgálatról					
<b>77/2011. (X. 14.) OGY határozat</b> a Nemzeti Energiastratégiáról					

Hungary's policy on climate change is based on two essential aspects related, on one side, to the country's international commitments undertaken with the ratification of the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol and, on the other side, to the newly adopted European legislation in this area. The main strategic objective of the Third National Action Plan on Climate Change (NAPCC) is to outline the framework for action to combat climate change for the period 2013-2020 and to focus the country's efforts on actions leading to reduction of the negative impacts of climate change and implementation of the undertaken commitments.

**Table 1.4: Water management legislation/policies<sup>7</sup>**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
<b>1995. évi LVII. törvény</b> a vízgazdálkodásról	Act No. 57 in 1995 on water management				2000/60/EC WFD  91/271/EEC UWWTD  98/83/EC DWD  2004/35/EC Environmental Liability Directive
<b>1995. évi LIII. törvény</b> a környezet védelmének általános szabályairól	Act No. 53 in 1995 on general rules for protection of environment				
<b>147/2010. (IV. 29.) Korm. rendelet</b> a vizek hasznosítását, védelmét és kártételeinek elhárítását szolgáló	Governmental regulation No. 147 in 2010 on rules for activities and facilities of water use, protection and defence				

<sup>7</sup> Only those which are not listed before

<sup>8</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>9</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)



Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
tevékenységekre és létesítményekre vonatkozó általános szabályokról	against damages of water				
<b>220/2004. (VII. 21.) Korm. rendelet</b> a felszíni vizek minősége védelmének szabályairól					
<b>219/2004. (VII. 21.) Korm. rendelet</b> a felszín alatti vizek védelméről					
<b>90/2007. (IV. 26.) Korm. rendelet</b> a környezetkárosodás megelőzésének és elhárításának rendjéről					2004/35/EC
<b>130/2000. (VII. 11.) Korm. rendelet</b> a határokat átlépő vízfolyások és nemzetközi tavak védelmére és használatára vonatkozó, Helsinkiben, 1992. március 17-én aláírt Egyezmény kihirdetéséről	Convention on the Protection and Use of Transboundary Watercourses and International Lakes				UNECE Water Convention
<b>74/2000. (V. 31.) Korm. rendelet</b> a Duna védelmére és fenntartható használatára irányuló	Promulgation of the Sofia Convention on the cooperation to protect and				ICPDR

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
együttműködésről szóló, 1994. június 29-én, Szófiában létrehozott Egyezmény kihirdetéséről	sustainable use of the Danube				
<b>178/2010. (V. 13.) Korm. rendelet</b> a vizek többletéből eredő kockázattal érintett területek meghatározásáról, a veszély- és kockázati térképek, valamint a kockázatkezelési tervek készítéséről, tartalmáról					2007/60/EC Flood Directive
<b>10/1997. (VII. 17.) KHVM rendelet</b> az árvíz- és a belvízvédekezésről					2007/60/EC Flood Directive
<b>72/1996. (V. 22.) Korm. rendelet</b> a vízgazdálkodási hatósági jogkör gyakorlásáról					
<b>101/2007. (XII. 23.) KvVM rendelet</b> a felszín alatti vízkészletekbe történő beavatkozás és a vízkútfúrás szakmai követelményeiről					
<b>2011. évi CXXVIII. Törvény</b> a katasztrófavédelemről és a hozzá	on the control of major-accident hazards				96/82/EC & 2003/105/EC

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
kapcsolódó egyes törvények módosításáról  & <b>219/2011. (X. 20.) Korm. rendelet</b> a veszélyes anyagokkal kapcsolatos súlyos balesetek elleni védekezésről	involving dangerous substances				Seveso Directive

Act No. 57 in 1995 on water management law declares that municipalities or the state is responsible for drinking water supply and for protection of drinking water sources. The drinking water utilities are properties exclusively of the municipalities or the state. The operator company should be the property of the municipalities or the state but temporarily they can give the operational right to a private company by concession contract.

**Table 1.5: River Basin Management Plans**

Name of river basin	National level	Regional level	Implementation Jurisdiction <sup>10</sup>	Approval status
1042/2012. (II. 23.) Korm. határozat Magyarország vízgyűjtő-gazdálkodási tervéről				
221/2004. (VII. 21.) Korm. rendelet a vízgyűjtő-gazdálkodás egyes szabályairól				
XXXXXXXX				

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<sup>10</sup> Competent authority for implementation e.g. government, ministry

**Table 3.7: OTHER legislation/policies of relevance for CC - WARE project**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
<b>38/2012. (III. 12.) Korm. rendelet</b> a kormányzati stratégiai irányításról	XXXXXXX				
<b>148/1999. (X. 13.) Korm. rendelet</b> az országhatáron áterjedő környezeti hatások vizsgálatáról szóló, Espooban (Finnország), 1991. február 26. napján aláírt egyezmény kihirdetéséről	Convention on Environmental Impact Assessment in a Transboundary Context				EN Espoo Convention
<b>132/2010. (IV. 21.) Korm. rendelet</b> az országhatáron áterjedő környezeti hatások vizsgálatáról szóló, Espooban, 1991. február 26. napján elfogadott egyezményhez kapcsolódó, a stratégiai környezeti vizsgálatról szóló, Kijevben, 2003. május 21-én	Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context				UN Espoo Convention

<sup>11</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>12</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
elfogadott jegyzőkönyv kihirdetéséről					
195/2006. (IX. 25.) Korm. rendelet a nagy távolságra jutó, országhatárokon áttérjedő levegőszennyezésről szóló, 1979. évi Genfi Egyezményhez kapcsolódó, a savasodás, az eutrofizáció és a talaj közeli ózon csökkentéséről szóló, 1999. december 1-jén, Göteborgban aláírt Jegyzőkönyv kihirdetéséről	The Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol)				
219/2011. (X. 20.) Korm. rendelet a veszélyes anyagokkal kapcsolatos súlyos balesetek elleni védekezéséről					96/82/EC
<b>1/2014. (I. 3.) OGY határozat</b> a Nemzeti Fejlesztés 2030 - Országos Fejlesztési és Területfejlesztési Koncepcióról					
<b>18/2013. (III. 28.) OGY határozat</b> a Nemzeti Fenntartható Fejlődés Keretstratégiáról					

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
<b>1414/2013. (VII. 4.) Korm. határozat</b> a Nemzeti Kutatás- fejlesztési és Innovációs Stratégia (2013-2020) elfogadásáról					Horizon2020
<b>1035/2012. (II. 21.) Korm. határozat</b> Magyarország Nemzeti Biztonsági Stratégiájáról					
<b>1307/2011. (IX. 6.) Korm. határozat</b> a Nemzeti Környezettechnológiai Innovációs Stratégiáról					
<b>1103/2006. (X. 30.) Korm. határozat</b> az Új Magyarország Fejlesztési Terv elfogadásáról					

## 2. Level of relevant EU legislation implementation

In Hungary all the EU environmental regulations have been implemented within the given time frame. This is an ongoing process because several new directives or amendments and other regulations have been launched since the publication of the WFD or DWD.

The harmonisation of Hungarian regulations with the EU legislation started in 1994 after the signing of the accession partnership of Hungary and the EU. The accession partnership provided a framework for a number of policy instruments which was used to help the candidate countries in their preparations for membership. These included a national programme for the adoption of the *acquis* to be adopted by Hungary. The harmonisation closed by the accession 1<sup>st</sup> of May in 2004. The most important environmental issues were to develop of monitoring and implement control structures and capacities, A particular emphasis was given to waste water, waste management, air pollution, integrated industrial pollution control and risk management. Environmental protection requirements and the sustainable development were integrated into the definition and implementation of national and sectoral policies. The European Commission (EC) has a special process to analyse legal systems of the Member States and accession countries. If the EC discover any discrepancy than infringement procedure is started. Recently, there is an ongoing procedure against Hungary due to failure to fulfil obligations of 2000/60/EC Water Framework Directive in the implementation of recovery of the costs for water services.

It is important from the CC-WARE project point of view the in the Europe 2020 Strategy the Commission is proposing five measurable EU targets for 2020 that will steer the process and be translated into national targets and one of them for climate change. Europe must do actions for sustainable growth by promoting a more resource efficient, greener and more competitive economy. One of the Flagship Initiative is the "Resource efficient Europe" and all Programmes have to meet these challenges like LIFE (1293/2013/EU), research and innovation in „Horizont 2020“ (1291/2013/EU). For example it is expected that around 35% of the Horizon 2020 budget will be climate related expenditure. The title of the LIFE Programme changed, as well, to "Programme for the Environment and Climate Action (LIFE)".



### 3. GAPS IDENTIFIED and Proposal/ Idea of actions/measures/ policies that might fill the “GAPS”

#### 1. GAP (in EU legislation)

***The preventive environmental risk management in drinking water supply systems should be strengthened in EU legislation and implementation through forming the water safety plans (WSP).***

Worldwide the principal starting points for the setting of water quality standards are the World Health Organization Guidelines (WHO). The Guidelines for Drinking-water Quality WHO (2004) outlines, a preventive management framework for safe drinking-water that comprises five components, three of which combine to form the water safety plan.

Key components in the framework for safe drinking-water are:

- Health based targets (based on an evaluation of health concerns).
- System assessment (to determine whether the water supply chain (from source through treatment to the point of consumption) as a whole can deliver water of a quality that meets the health-based targets.
- Operational monitoring of the control measures in the supply chain, which are of particular importance in securing drinking-water safety.
- Management plans (documenting the system assessment and monitoring; describing actions to be taken in normal operation and incident conditions – including upgrade and improvement), documentation and communication.
- A system of independent surveillance that verifies that the above are operating properly.

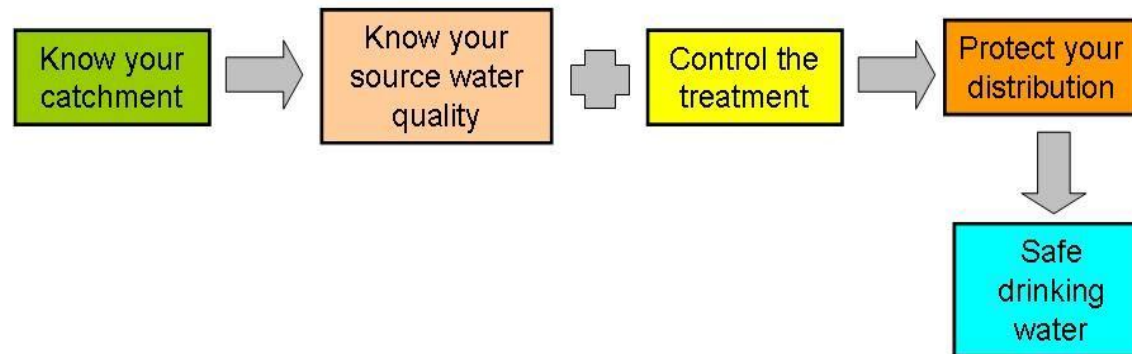
A water safety plan comprises system assessment and design, operational monitoring and management plans (including documentation and communication). The risk management approach is based largely upon HACCP (Hazard Analysis and Critical Control Point). The principles of HACCP (which is a preventive risk management system that has been used in the food manufacturing industry for a number of decades) are based on developing an understanding of the system, prioritising risks and ensuring that appropriate control measures

are in place to reduce risks to an acceptable level. These principles have been refined and tailored to the context of drinking-water following the application of HACCP by several water utilities.

The most cost-effective and protective means of consistently assuring a supply of acceptable drinking-water is the application of some form of risk management based on sound science and supported by appropriate monitoring. It is important that risk management is inclusive and, therefore, needs to cover the whole system from catchment to consumer. Water supply systems can be considered as a number of steps (Figure 9) aimed at assuring the safety of drinking-water, including:

- preventing pollution of source waters;
- selective water harvesting;
- controlled storage;
- treatment prior to distribution;
- protection during distribution; and
- safe storage within the home and, in some circumstances, treatment at the point of use.

These steps can function as barriers, where activities are designed to minimise the likelihood of contaminants entering the water supply or reduce or eliminate contaminants already present in the supply. With the multiple barrier approach, each barrier provides an incremental reduction in the risk of water becoming unsafe. If there is a failure at one point, the other barriers continue to provide protection.



**Figure 9. 'Catchment to consumer' approach to risk management of the safety of drinking water** (after Medema et al. 2003)

As first point of the preventive environmental risk management **effective catchment management** should carry out, such as **drinking water source protection**, because this has many benefits. By decreasing contamination of source water, the amount of treatment and quantity of chemicals needed is reduced. This may reduce the production of treatment by-products and minimise operational costs. Effective resource and source protection include the following elements:

- developing and implementing a catchment management plan, which includes control measures to protect surface and groundwater sources;
- ensuring that planning regulations include protection of water resources (land use planning and water shed management) from potentially polluting activities and are enforced; and
- promoting awareness in the community of the impact of human activities on water quality.

Although WFD and DWD don't require establishment of drinking water safeguard zones to protect resources used for human consumption all countries take part in CC-WARE project have such national regulation that safeguarding is obligatory.

There are several publications on WSP like

Water Safety Plans - Managing drinking-water quality from catchment to consumer. World Health Organization. Geneva, 2005

Bartram J, Corrales L, Davison A, Deere D, Drury D, Gordon B, Howard G, Rinehold A, Stevens M.: Water safety plan manual: step-by-step risk management for drinking-water suppliers. World Health Organization. Geneva, 2009. ISBN 978 92 4 156263 8

Bettina Rickert, Oliver Schmoll, Angella Rinehold and Eva Barrenberg: Water safety plan: a field guide to improving drinking-water safety in small communities. WHO Regional Office for Europe. Copenhagen, 2014. ISBN 978-92-890-5007-4

## 2. GAP (in EU legislation)

***Whether does the 2000/60/EC Water Framework Directive cover all important details of the repealed 75/440/EEC Council Directive and 79/869/EEC Council Directive and 77/795/EEC Council Decision?***

(75/440/EEC Council Directive of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States,

79/869/EEC Council Directive of 9 October 1979 concerning the methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water in the Member States,

77/795/EEC Council Decision of 12 December 1977 establishing a common procedure for the exchange of information on the quality of surface fresh water in the Community)

## 3. GAP (in legislation of Hungary)

The climate change issues are not mentioned and considered in the legislation of water sectors, only the new national strategies developed over the past several years have dealt with the issue of adaptation to climate change.

#### **4. GAP (in legislation of Hungary)**

In Hungary there are too much regulation and on the other hand less success in the implementation of that strict and complicated rules. Although the legislation and policies are regularly updated their applicability is sometimes very difficult and they are not well accepted by practitioners due to their contradictions, complexity etc. The successful application of any policy would require involvement of the stakeholders and a longer (proper) implementation period to be well prepared for it. Some actions are too expensive for implementation but the affordability of the measures usually are not assessed in Hungary.

#### **5. GAP (in legislation of Hungary)**

The source protection regulation (Government regulation No. 123 in 1997 on the protection of the actual and potential sources, and the engineering structures of drinking water supply) and the rules on Water Safety Planning are not harmonised (in Governmental regulation No. 201 in 2001 on drinking water quality and controlling). The WSP based on risk assessment but source protection rules does not consider risk at all in Hungary.

## **4. References**

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2. Electronic access to laws of European Union: <http://eur-lex.europa.eu>
3. Hungarian Central Statistical Office (KSH, 2013): Hungary in Figures 2012
4. Hungarian Central Statistical Office (KSH): Level and structure of household consumption, 2011 preliminary data, Statistical reflections 14/2012

5. Hungarian Central Statistical Office (KSH): Monthly consumption of households, 2013 (based on preliminary data) Statistical reflections 26/2014
6. Barbara Čenčur Curk, Istvan Bogardi (2012): WP7 report of Climate Change and Impacts on Water Supply project (CC-WaterS)
7. Ministry for National Economy (2012): Hungarian overhead expenses in regional comparison
8. United Nations Economic Commission for Europe (UNECE) homepage on Environmental Policy:  
<http://www.unece.org/env/welcome.html>

	PP (country)	Austria	Slovenia	Hungary	Romania	Bulgaria	Greece	Italy	Serbia
Test area location - name			Ljubljana moor						
Water resource type	surface water				x	x			x
	reservoir				x				x
	karst aq	x	x				x		
	bank filtration			x					x
	porous aq confined			x					
	porous aq unconfined	x	x	x					
	fissured aquifer							x	
Topography	mountain	x			x	x	x	x	
	hills	x				x		x	x
	plain	x	x	x	x				x
Landuse (CLC 2006)	agriculture		x						
	forest								
	urban areas		x						
	wetlands		x						
	water		x						
Protected areas	special protected areas		x	x			x		
	DWPA	x	x	x	x	x	x	x	x
ES services aim	surface water quality	x		x	x	x			x
	GW quantity	x	x				x	x	x
	surface water quantity	x			x	x			x
	GW quality	x	x	x			x		x
Eco-regions	acc. To WFD legislation								
Ecosystem type	forest (AT)	x		x	x	x	x	x	x
	grassland (HU)	x		x				x	x
	wetlands (SL)		x	x					
	arable land/agriculture (SR)		x		x				x

# ***ANNEX 5***

## ***NATIONAL LEGISLATION TEMPLATE ITALY***



## **CC - WARE joint WP4 & WP5 template**

**Relevant legislation analyses for improvement of  
land use and water management regulation and  
policies in Italy within the scope of**

**CC - WARE project**

Contribution by Italian Project Partner

Regional Agency for Environmental  
Protection in the Emilia Romagna **ARPA ER** (PP 11)  
region

Bologna, Italy

Prepared by: Demetrio Errigo

**Table 3.1: Drinking water supply and drinking water sources protection**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
Decreto Legislativo n.31/2001	Legislative Decree n.31/2001	X		Ministry of Environment and Protection of Land and Sea	Directive 98/83/EC
Decreto Legislativo n.152/2006 "Norme in materia ambientale"	Legislative Decree n.152/2006 "Environmental Regulations"	X		Ministry of Environment and Protection of Land and Sea	Water Framework Directive 2000/60/EC
Decreto Legislativo n.30/2009	Legislative Decree n.30/2009	X		Ministry of Environment and Protection of Land and Sea	Directive 2006/118/EC

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<sup>1</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>2</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
Decreto Legislativo n.219/2010	Legislative Decree n.219/2010	X		Ministry of Environment and Protection of Land and Sea	Directive 2008/105/EC
Decreto Ministeriale n.260/2010	Ministerial Decree n.260/2010	X		Ministry of Environment and Protection of Land and Sea	Water Framework Directive 2000/60/EC
Programma di Tutela e Uso delle Acque (PTUA)	Water Protection and Use Program (*)		X	Lombardia Region	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006
Piano Generale di Utilizzazione delle Acque Pubbliche (PGUAP)	General Plan of Public Waters Use (*)		X	Autonomous Province of Trento	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
Piano Generale di Utilizzazione delle Acque Pubbliche (PGUAP)	General Plan of Public Waters Use (*)		X	Autonomous Province of Bolzano	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006
Piano di Tutela delle Acque (PTA)	Water Protection Plan (*)		X	Veneto Region	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006
Piano regionale di tutela delle acque (PRTA)	Water Protection Regional Plan (*)		X	Friuli Venezia Giulia Region	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
Piano di Tutela delle Acque (PTA)	Water Protection Plan (*)		X	Emilia-Romagna Region	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006
Piano di Tutela delle Acque (PTA)	Water Protection Plan (*)		X	Umbria Region	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006
Piano di Tutela delle Acque (PTA)	Water Protection Plan (*)		X	Marche Region	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
Piano di Tutela delle Acque (PTA)	Water Protection Plan (*)		X	Abruzzo Region	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006
Piano di Tutela delle Acque (PTA)	Water Protection Plan (*)		X	Molise Region	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006
Piano di Tutela delle Acque (PTA)	Water Protection Plan (*)		X	Puglia Region	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
Piano di Tutela delle Acque (PTA)	Water Protection Plan (*)		X	Basilicata Region	Water framework directive 2000/60/EC  Legislative Decree n.152/1999 & n. 152/2006

**Legislative Decree n.31/2001:** implementation of Directive 98/83/EC on the quality of water intended for human consumption.

**Il Decreto Legislativo n.152/2006:** national measure of reference for environmental impact assessment, soil and water protection, waste management, reducing air pollution and compensation for environmental damage.

**Legislative Decree n.30/2009:** implementation of Directive 2006/118/EC on the protection of groundwater against pollution

**Legislative Decree n.219/2010:** implementation of Directive 2008/105/EC (amending and subsequently repealing Directive 82/176/EEC) on environmental quality standards in the field of water policy.

**Ministerial Decree n.260/2010:** regulation laying down technical criteria for the classification of surface water bodies status.

(\*) **Water Protection Plans:** technical and programmatic tools through which to achieve the objectives of qualitative and quantitative protection, provided by Legislative Decree no. 152/2006 & Legislative Decree no 152/1999.

***Table 3.2: Land use legislation/ polices***

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
Decreto Legislativo n.152/2006 "Norme in materia ambientale"	Legislative Decree n.152/2006 (Environmental Regulations)	X		Ministry of Environment and Protection of Land and Sea	Water framework directive 2000/60/EC

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<sup>3</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>4</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)



Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
Legge Regionale n.12/2005 "Legge per il governo del territorio"	Regional Law n.12/2005 "Law for territory government" (***)		X	Lombardia Region	
Legge Provinciale n.11/2007 "Governo del territorio forestale e montano, dei corsi d'acqua e delle aree protette"	Provincial Law n.11/2007 "Forest and mountain land of river and protected areas" (***)		X	Autonomous Province of Trento	

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
Legge Provinciale n.16/1970 "Tutela del paesaggio"	Provincial Law n.16/1970 "Landscape protection" (***)		X	Provincia Autonoma di Bolzano	
Legge Regionale n.11/2004 "Norme per il governo del territorio"	Regional Law n.11/2004 "Rules for the territory government" (***)		X	Veneto Region	

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
Legge Regionale n.5/2007 "Riforma dell'urbanistica e disciplina dell'attività edilizia e del paesaggio"	Regional Law n.5/2007 "Urban planning Reform and discipline of construction activity and landscaping" (***)		X	Friuli Venezia Giulia Region	
Legge Regionale n.20/2000 "Disciplina generale sulla tutela e l'uso del territorio"	Regional Law n.20/2000 "General regulations on land use and protection" (***)		X	Emilia-Romagna Region	

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
Legge Regionale n.27/2000 "Norme per la pianificazione urbanistica territoriale"	Regional Law n.27/2000 "Standards for territorial urban planning" (***)		X	Umbria Region	
Legge Regionale n.34/1992 "Norme in materia urbanistica, paesaggistica e di assetto del territorio"	Regional Law n.34/1992 "Rules on urban planning, landscaping and land use" (***)		X	Marche Region	

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
Legge Regionale n.1/2009 "Norme in materia di pianificazione per il governo del territorio"	Regional Law n.1/2009 "Rules on planning for the land use" (***)		X	Abruzzo Region	
Legge Regionale n.24/1989 "Disciplina dei piani territoriali paesistico- ambientali"	Regional Law n.24/1989 "Discipline of landscape- environmental spatial plans " (***)		X	Molise Region	

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
Legge Regionale n.20/2001 "Norme generali di governo e uso del territorio"	Regional Law n.20/2001 "General rules for land use and government" (***)		X	Puglia Region	
Legge Regionale n.23/1999 "Tutela, governo ed uso del territorio"	Regional Law n.23/1999 "Land protection, government and use" (***)		X	Basilicata Region	

**Legislative Decree n.152/2006:** in the first part shall lay down the rules on soil protection and acting against desertification.

(\*\*\*) **Regional/Provincial Laws:** lay down the rules on planning for land protection, government and use.

**Table 3.3 : Climate change legislation/policies**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>5</sup>	Interlinkage <sup>6</sup>
Legge n.64/1994 "Ratifica ed esecuzione della Convenzione quadro delle Nazioni Unite sui cambiamenti climatici"	Law n.64/1994 "Ratification and implementation of the United Nations Framework Convention on climate change"	X		Italian Republic President	United Nations Framework Convention on Climate Change
Legge n.120/2002 "Ratifica ed esecuzione del Protocollo di Kyoto"	Law n.120/2002 "Ratification and implementation of the Kyoto Protocol"	X		Italian Republic President	Kyoto Protocol

<sup>5</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>6</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>5</sup>	Interlinkage <sup>6</sup>
Delibera Giunta Regionale n.2262/2010	Regional Council Resolution n.2262/2010		X	Emilia-Romagna Regional Council	Law n.120/2002

**Law n.64/1994:** ratifies and implements the United Nations Framework Convention on climate change on the stabilization of atmospheric concentrations of greenhouse gases at a level that would prevent dangerous anthropogenic interference in the climate system.

**Law n.120/2002:** ratification and implementation of the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC), done at Kyoto 's December 11, 1997.

**Regional Council Resolution n.2262/2010:** funds the initiative called "Climate Plans in Emilia-Romagna", engages provinces and municipalities in the construction and implementation of their own territorial climate plans, as tools for coordination, monitoring, reporting and communication of transversal policies to mitigation.

**Work in progress:** in view of these strategic elements, and in order to define a framework for adaptation measures, the Italian Ministry for the Environment, land and sea (IMELS) decided on the preparation of a "National Adaptation Strategy to Climate Change Impacts" (NAS), still being completed. In April 2013, the Emilia-Romagna Regional Council approved a resolution engaging the Regional Government to implement a process that will lead to define and implement of a climate change mitigation and adaptation Regional Plan, according with procedures already in use in other european countries, with directions of the EU white Paper and with the national strategy being developed by the Ministry of the Environment



***Table 3.4: Water management legislation/policies***

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>7</sup>	Interlinkage <sup>8</sup>
Decreto Legislativo n.152/2006 "Norme in materia ambientale"	Legislative Decree n.152/2006 "Environmental Regulations"	X		Ministry of Environment and Protection of Land and Sea	Water Framework Directive 2000/60/EC

**Legislative Decree n.152/2006:** (repealing the law n.36/1994) redefines the public service as a set of integrated public services of collection, transport and distribution of water for civil use, sewerage and wastewater treatment, and must be managed with efficiency, effectiveness and economy, according to the community and national rules.

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<sup>7</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>8</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

**Table 3.5: River Basin Management Plans**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>9</sup>	Interlinkage <sup>10</sup>
Decreto Legislativo n.152/2006 "Norme in materia ambientale"	Legislative Decree n.152/2006 "Environmental Regulations"	X		Ministry of Environment and Protection of Land and Sea	Water Framework Directive 2000/60/EC
Legge n.13/2009 "Misure straordinarie in materia di risorse idriche e di protezione dell'ambiente"	Law n.13/2009 "Extraordinary measures on water resources and environmental protection"	X		Ministry of Environment and Protection of Land and Sea	Water Framework Directive 2000/60/EC
Piano di Gestione del Distretto Idrografico Alpi Orientali	Eastern Alps District Management Plan (**)		X	<ul style="list-style-type: none"> <li>Adige River Basin Authority</li> <li>Northern Adriatic Basin Authority</li> </ul>	Piano di Gestione del Distretto Idrografico Alpi Orientali

<sup>9</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>10</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>9</sup>	Interlinkage <sup>10</sup>
Decreto Legislativo n.152/2006 "Norme in materia ambientale"	Legislative Decree n.152/2006 "Environmental Regulations"	X		Ministry of Environment and Protection of Land and Sea	Water Framework Directive 2000/60/EC
Piano di Gestione del Distretto Idrografico del Fiume Po	Po River District Management Plan (**)		X	Po River Basin Authority	Piano di Gestione del Distretto Idrografico del Fiume Po
Piano di gestione del Distretto Idrografico dell'Appennino Settentrionale	Northern Apennines District Management Plan (**)		X	Arno River Basin Authority	Piano di gestione del Distretto Idrografico dell'Appennino Settentrionale
Piano di gestione del Distretto Idrografico dell'Appennino Centrale	Central Apennines District Management Plan (**)		X	Tiber River Basin Authority	Piano di gestione del Distretto Idrografico dell'Appennino Centrale
Piano di gestione del Distretto Idrografico dell'Appennino Meridionale	Southern Apennines District Management Plan (**)		X	National Basin Authority of the Liri, Garigliano and Volturno	Piano di gestione del Distretto Idrografico dell'Appennino Meridionale

**Legislative Decree n.152/2006:** community obligations regarding the development of management plans have been transposed into national legislation through Article 117, Part III, of the Legislative Decree 152/2006, which lays down the obligation for each river basin district to adopt a management plan.

**Law n.13/2009:** conversion into law, with amendments, of Decree Law of 30 December 2008, no. 208, laying down extraordinary measures on water resources and environmental protection.

(\*\*) **River Basin/District Management Plan:** required by Water Framework Directive (Directive 2000/60/EC), is the cognitive, strategic and operational tool through which to plan, implement and monitor measures for surface water bodies and groundwater protection, rehabilitation and enhancement and facilitate the sustainable use of water resources on Hydrographic District (interregional scale).

**Table 3.7: OTHER legislation/policies of relevance for CC - WARE project**

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
Decreto Ministeriale 7 Marzo 2012	Ministerial Decree March 7, 2012	X		Ministry of Environment and Protection of Land and Sea	Directive 92/43/CEE
Decreto del Presidente della repubblica n.357/97	Republic President Decree n.357/97	X		Italian Republic President	Directive 92/43/EEC

**DPR n.357/97:** is a regulation, implementing Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (as amended by Presidential Decree no. 120 of 12 March 2003).

<sup>11</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>12</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

**Ministerial Decree March 7, 2012:** Ministry of Environment and Protection of Land and Sea approved the "fifth updated list of sites of Community importance for the continental biogeographical region in Italy, in accordance with Directive 92/43/EEC".

## 1. Level of relevant EU legislation implementation

The Water Framework Directive 2000/60/EC has been implemented with the Legislative Decree n.152/2006: community obligations regarding the development of management plans have been transposed into national legislation through Article 117, Part III, of the Legislative Decree 152/2006, which lays down the obligation for each river basin district to adopt a management plan. The Ministerial Decree n.260/2010 is also for the implementation of Water Framework Directive 2000/60/EC

Moreover, River Basin/District Management Plan have been developed and approved with reference to 152/2006. They are required by Water Framework Directive (Directive 2000/60/EC), and are the cognitive, strategic and operational tool through which to plan, implement and monitor measures for surface water bodies and groundwater protection, rehabilitation and enhancement and facilitate the sustainable use of water resources on Hydrographic District (interregional scale).

Legislative Decree n.219/2010 of the Ministry of Environment and Protection of Land and Sea in the implementation of Directive 2008/105/EC regarding priority substances.

The Directive 92/43/EEC has been implemented with Republic President Decree DPR n.357/97 and Ministerial Decree (DM) March 7, 2012. The DPR n.357/97: is a regulation, implementing Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (as amended by Presidential Decree no. 120 of 12 March 2003).

Ministerial Decree March 7, 2012: Ministry of Environment and Protection of Land and Sea approved the "fifth updated list of sites of Community importance for the continental biogeographical region in Italy, in accordance with habitats' Directive 92/43/EEC".

## 2. GAPS IDENTIFIED and Proposal/ Idea of actions/measures/ policies that might fill the “GAPS”

Lack of an national legislation regarding adaptation strategy to climate change. To fill this gap there is the need for a strong effort, both on a technical and decision making level, on a national scale.

In the Water Protection Plans (Piano di Tutela delle Acque – PTA - approved by several italian regions with reference to DLgs 152/1999 and 152/2006) there is a lack of details regarding how to account for climate change and the role of ecosystem services. To fill this gap, the activities carried out at transnational scale in CC-WARE are relevant.

Moreover, with respect to protection zones for springs and wells devoted to human consumption, while the procedures for zoning protection areas of wells (geometrical and hydrogeological) can in most cases be considered adequate, the procedures for zoning protection areas of springs located in mountain areas (geometrical or half/time discharge decrease) are often not adequate to fully account for the specific hydrogeological characteristics of each springs considered. To fill this gap, the activities carried out at site-specific scale by PP11 within CC-WARE are relevant, as they are aimed to the adoption of procedures based on Vulnerability indexes based on physical characteristics of springs and continuous monitoring data.



	PP (country)	Austria	Slovenia	Hungary	Romania	Bulgaria	Greece	Italy	Serbia
Test area location - name			Ljubljana moor						
Water resource type	surface water				x	x			x
	reservoir				x				x
	karst aq	x	x				x		
	bank filtration			x					x
	porous aq confined			x					
	porous aq unconfined	x	x	x					
	fissured aquifer							x	
Topography	mountain	x			x	x	x	x	
	hills	x				x		x	x
	plain	x	x	x	x				x
Landuse (CLC 2006)	agriculture		x						
	forest								
	urban areas		x						
	wetlands		x						
	water		x						
Protected areas	special protected areas		x	x			x		
	DWPA	x	x	x	x	x	x	x	x
ES services aim	surface water quality	x		x	x	x			x
	GW quantity	x	x				x	x	x
	surface water quantity	x			x	x			x
	GW quality	x	x	x			x		x
Eco-regions	acc. To WFD legislation								
Ecosystem type	forest (AT)	x		x	x	x	x	x	x
	grassland (HU)	x		x				x	x
	wetlands (SL)		x	x					
	arable land/agriculture (SR)		x		x				x

# ***ANNEX 6***

## ***NATIONAL LEGISLATION TEMPLATE ROMANIA***

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## 1. NATIONAL/REGIONAL

## LEGISLATION

**Table 3.1: Drinking water supply and drinking water sources protection**

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
<b>Legea serviciilor comunitare de utilitati publice, legea 51/2006</b> Publicat in Monitorul Oficial, Partea I nr. 254 din 21/03/2006 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	<b>Law no 51</b> of March 8 2006 for community services public utilities	Romanian Government	Public administration	A.N.R.S.C., according with legal competencies allowed by current legislation, is releasing licensis, elaborating methodologies and framework regulations for public service utilities field from the area of interes covered, as well as the market for these services and is monitoring	Interlinkage with Drinkable water quality

<sup>1</sup> Is there significant interlinkage with other relevant legislative (ESS, land use practices and planning)

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
				the implementation of legislation in charge	
<b>HOTARARE Nr. 662 din 7 iulie 2005</b> privind modificarea Hotararii Guvernului nr. 100/2002 pentru aprobarea Normelor de calitate pe care trebuie sa le indeplineasca apele de suprafata utilizate pentru potabilizare si a Normativului privind metodele de masurare si frecventa de prelevare si analiza a probelor din apele de suprafata destinate producerii de apa potabila <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	<b>Government Decision (GD) no 662/7.07.2005</b> regarding modification of GD no. 100/2002 regarding approval of Quality Normes requested for the use of surface water and of Normes regarding the mothods used for measurments and frequency of sampling and analysis of samples fom surface water intended for production of drinkable – Official Gazette no 616/15.07.2005	Ministry of Environme nt and Climate Changes	Public Health Department Enviornmen t Agency	Ministry of Environment and Climate Changes	Law for community services and utilities

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
<b>Legea nr. 311/2004</b> pentru modificarea și completarea Legii nr. 458/2002 privind calitatea apei potabile Publicat în Monitorul Oficial, Partea I nr. 582 din 30.06.2004. <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	<b>Law no. 311 of 28/06/2004</b> amended and supplemented by Law no. 458/2002 regarding drinkable water quality	Ministry of Environme nt and Climate Changes Ministry of Health National Administra tion Romanian Waters	Public Health Department Environmen t Agency	Ministry of Environment and Climate Changes	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption
<b>Hotărâre nr. 1435 din 18/11/2009</b> <b>Publicat în Monitorul Oficial, Partea I nr. 1 din 04/01/2010</b> privind aprobarea listei obiectivelor de investiții și a indicatorilor tehnico-economici ai acestora din etapa a III-a a Proiectului de infrastructură municipală, prevăzut prin Legea nr. 167/2005 privind Acordului de parteneriat dintre România și Banca Internațională pentru Reconstrucție și Dezvoltare pentru finanțarea Proiectului privind închiderea minelor, refacerea mediului și regenerarea socioeconomică, semnat la București la 28 ianuarie 2005  <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	<b>Hotărâre nr. 1435 of 18/11/2009</b> <b>Published in Official Gazette nr. 1 of 04/01/2010</b> regarding the approval of the list of investment objectives and technical and economic indicators of these from the third stage of the Municipal Infrastructure Project, provided for by Law no. 167/2005 regarding the Partnership Agreement between Romania and the International Bank for Reconstruction and Development for the financing of the Project regarding the closure of mines, restoration of the environment and socio-economic regeneration, signed in Bucharest on 28 January 2005	Ministry of Public Health Department Environmen t Agency	Public Health Department Environmen t Agency	Ministry of Environment and Climate Changes	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
<b>HOTĂRÂRE nr. 745 din 11 iulie 2007</b> pentru aprobarea Regulamentului privind acordarea licențelor în domeniul serviciilor comunitare de utilități publice <b>PUBLICAT ÎN:</b> MONITORUL OFICIAL nr. 531 din 6 august 2007 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	Decision no. 745 of 11/07/2007 Published in Official Gazette, Part 1, no 531 of 06/08/2007 regarding the approval of Regulation for licensed areleased for community services for public utilities	Ministry of Environme nt and Climate Changes	Public Health Department Environmen t Agency	Ministry of Environment and Climate Changes	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption
<b>ORDIN nr. 1.450 din 10 septembrie 2010</b> pentru aprobarea Ghidului de finanțare a Programului vizând protecția resurselor de apă, sisteme integrate de alimentare cu apă, stații de tratare, canalizare și stații de epurare <b>PUBLICAT ÎN: MONITORUL            OFICIAL nr. 670 din 1            octombrie 2010</b> <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	Order no. 1450 of 10/09/2010 Published in Official Gazette, Part 1, no 670 of 01/10/2010 Applied from: 01/10/2010 regarding approval of Funding Guide for the Program related to the protection of water resources, water supply intergrated systems, water treatment plant and sewerage systems. Published on	Ministry of Environme nt and Climate Changes	Public Health Department Environmen t Agency	Ministry of Environment and Climate Changes	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
	01/10/2010				
<b>Hotărârea nr. 342/2013</b> privind modificarea și completarea Hotărârii Guvernului nr. 974/2004 pentru aprobarea Normelor de supraveghere, inspecție sanitară și monitorizare a calității apei potabile și a Procedurii de autorizare sanitară a producției și distribuției apei potabile <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	Decision no. 342/2013 ammended and supplemented by Government Decision no. 974/2004 regarding approval of Surveillance, sanitary inspection and monitoring of drinkable water quality Norms, and the sanitary authorization for production and distribution of drinkable water	Ministry of Environment and Climate Changes	Public Health Department Environment Agency	Ministry of Environment and Climate Changes	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption
<b>Legea serviciului de alimentare cu apă și de canalizare nr. 241/2006</b> , republicata 2013 Republicat in Monitorul Oficial, Partea I nr. 85 din 8 februarie 2013 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	Law for water supply services and sewerage no. 241/2006, republished in 2013	Ministry of Environment and Climate Changes National Agency for Environment National Guard for Environment	Public Health Department Environment Agency	Ministry of Health Ministry of Environment and Climate Changes	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption
<b>ORDONANȚĂ DE</b>	Emergency Ordinance	Ministry of	Suppliers	Ministry of	Law no. 51/2006



Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
<b>URGENȚĂ</b> pentru modificarea și completarea Legii serviciilor comunitare de utilități publice nr. 51/2006 și a Legii serviciului de alimentare cu apă și de canalizare nr. 241/2006 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	no. 13 of 20 <sup>th</sup> February 2008 for amending a supplementing of Law for community services for public utilities no 51/2006 and of Law for water supply and sewerage services no. 241/2006	Environment and Climate Changes	for public utility services	Environment and Climate Changes	and Law no. 241/2006
<b>ORDIN nr. 65 din 28 februarie 2007</b> privind aprobarea Metodologiei de stabilire, ajustare sau modificare a prețurilor/tarifelor pentru serviciile publice de alimentare cu apă și de canalizare PUBLICAT ÎN: MONITORUL OFICIAL nr. 192 din 20 martie 2007 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	Order of the President of A.N.R.S.C. no. 65 from 28 <sup>th</sup> February 2007 regarding the approval of the Methodology for establishing, adjusting and modifying the prices/tariffs for public services for water supply and sewerage.	Romanian Government	Local Administration	Suppliers for public utility services	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption
<b>H.G. 188/ 20.03.2002</b> pentru aprobarea unor norme privind condițiile de descărcare în mediul acvatic a apelor uzate, MODIFICATA SI COMPLETATA prin H.G.	Government Decision no. 188/2002 for approval of some norms about discharge condition of waste water into the aquatic	Ministry of Environment		National Administration "Romanian Waters"	

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
352/11.05.2005 Publicat: Monitorul Oficial, Partea I nr. 187 din 20.03.2000 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	environment				
<b>ORDIN nr. 88 din 20 martie 2007</b> pentru aprobarea Regulamentului-cadru al serviciului de alimentare cu apa și de canalizare PUBLICAT ÎN: MONITORUL OFICIAL nr. 324 din 15 mai 2007 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	President Order of A.N.R.S.C. no. 88 from 20 <sup>th</sup> March 2007 regarding the approval of Framework-Regulation for water supply and sewerage services	Romanian Governme nt	Local Administrati on	Suppliers for public utility services	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
<b>ORDIN Nr. 245 din 26 martie 2005</b> pentru aprobarea Metodologiei de evaluare a riscului substantelor periculoase din listele I si II si al substantelor prioritare/prioritar periculoase in mediul acvatic prin modelare matematica si a Metodologiei de evaluare a impactului substantelor periculoase din listele I si II si al substantelor prioritare/prioritar periculoase asupra mediului acvatic prin teste ecotoxicologice - alge verzi, dafnia, pesti MONITORUL OFICIAL NR. 565 din 1 iulie 2005 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	Order of Minister of Environment and Water Management, no.245/26.03.2005 on approval of Risk Assessment Methodology of the dangerous substances from List I and List II of priority/dangerous priority substances in the aquatic medium				
<b>Legea 458 2002 privind calitatea apei potabile publicata</b> in Monitorul Oficial nr. 552 din 29.7.2002 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	Law. no 458 (r1) of 08/07/2002 regarding quality of drinkable water (republished and consolidated on 24/01/2012)	Ministry of Environme nt and Climate Changes	Public Health Department Administrati on for Water Basins	Ministry of Health Ministry of Environment and Climate Changes	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
<b>HOTĂRÂRE nr. 472 din 9 iunie 2000</b> privind unele măsuri de protecție a calității resurselor de apă PUBLICAT ÎN: MONITORUL OFICIAL nr. 272 din 15 iunie 2000 <a href="http://www.monitoruloficial.ro">www.monitoruloficial.ro</a>	GD no. 472/2000 regarding some measures for water resources quality protection – Official Gazette no. 272/15.06.2002	Ministry of Health Ministry of Environment and Climate Changes National Administration "Romanian Waters"	Public Health Department Administration for Water Basins	Ministry of Health Ministry of Environment and Climate Changes National Administration "Romanian Waters"	Directive 2000/60/CE establishing the community framework action for water policies, amended by Directive 2008/32/CE– totally transposed

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
<b>HOTARARE Nr. 974 din 15 iunie 2004</b> pentru aprobarea Normelor de supraveghere, inspectie sanitara si monitorizare a calitatii apei potabile si a Procedurii de autorizare sanitara a productiei si distributiei apei potabile  <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	GD 974/2004 Rules for surveillance, sanitary inspection and monitoring of drinkable water	Ministry of Environment and Climate Changes National Administration "Romanian Waters"	Public Health Department	Ministry of Health Ministry of Environment and Climate Changes	<i>Framework Directive 2000/60/EC of European Parliament and Council establishes the framework action for EU countries in the field of water policies and is recognizing the hydrographic basin as natural and fundamental for the unit for water creation, utility and protection</i>
<b>O R D I N Nr. 1563 din 08.06.2011</b> pentru reglementarea activității de inspecție și control în domeniul gospodăririi apelor <a href="http://www.monitoruloficial.ro">www.monitoruloficial.ro</a>	Order No. 1563 of 08.06.2011 regarding reglementation of inspection and control activity for water management	Ministry of Environment and Climate Changes National Administration "Romanian Waters"	Administration of Water Basins	Ministry of Environment and Climate Changes National Administration "Romanian Waters"	Directive 2000/60/CE establishing the community framework action for water policies, amended by Directive 2008/32/CE – totally transposed
<b>ORDIN Nr. 299 din 8 aprilie 2010</b>	Order MH no. 299/2010 – grant	Ministry of Health	Water Basins	Ministry of Health Ministry of	Directive 80/923/EEC,

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
privind aprobarea Metodologiei de acordare a derogarilor pentru parametrii chimici, în conformitate cu prevederile art. 9 din Legea nr. 458/2002 privind calitatea apei potabile ACT EMIS DE: MINISTERUL SANATATII PUBLICAT IN: MONITORUL OFICIAL NR. 290 din 4 mai 2010 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	derogation methodology	(MH) Ministry of Environme nt and Climate Changes National Administra tion "Romanian Waters"	Administrati on	Environment and Climate Changes National Administration "Romanian Waters"	amended by Directive 98/83/EC, regarding water quality for human consumption
<b>ORDIN Nr. 764 din 15 iulie 2005</b> pentru aprobarea procedurii de inregistrare la Ministerii Sanatatii a laboratoarelor care efectueaza monitorizarea calitatii apei potabile in cadrul controlului oficial al apei potabile ACT EMIS DE: MINISTERUL SANATATII PUBLICAT IN: MONITORUL OFICIAL NR. 729 din 11 august 2005 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	Order MH no. 764/2005 – registration procedure to Ministry of Health of laboratories that are monitoring the quality of drinkable water	Ministry of Health Ministry of Environme nt and Climate Changes National Administra tion "Romanian Waters"	Water Basins Administrati on	Ministry of Health Ministry of Environment and Climate Changes National Administration "Romanian Waters"	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
<b>Ordinul nr. 341/2007</b> pentru aprobarea normelor de igienă și a procedurii de notificare a apelor potabile îmbuteliate, altele decât apele minerale naturale sau decât apele de izvor, comercializate sub denumirea de apă de masă EMITENT: MINISTERUL SANATATII PUBLICE PUBLICAT ÎN: MONITORUL OFICIAL nr. 149 din 1 martie 2007 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	Order MH no. 341/2007 - hygiene rules and the procedure for notification of bottled drinkable waters	Ministry of Health Ministry of Environme nt and Climate Changes National Administra tion "Romanian Waters"	Water Basins Administrati on	Ministry of Health Ministry of Environment and Climate Changes National Administration "Romanian Waters"	Directive 80/923/EEC, amended by Directive 98/83/EC, regarding water quality for human consumption
<b>Hotărâre nr. 100</b> din 7 februarie 2002 pentru aprobarea Normelor de calitate pe care trebuie să le îndeplinească apele de suprafață utilizate pentru potabilizare și a Normativului privind metodele de măsurare și frecvența de prelevare și	GD 100/2002	Ministry of Health Ministry of Environme nt and Climate Changes National Amdinistra tion "Romanian	Water Basins Administrati on	Ministry of Health Ministry of Environment and Climate Changes National Administration "Romanian Waters"	Directive 79/869/E EC regarding methods of sampling ad analyzing surface water used for drinkable water (*)

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
analiză a probelor din apele de suprafață destinate producerii de apă potabilă Publicat în Monitorul Oficial, Partea I nr. 130 din 19 februarie 2002 <a href="http://www.monitoruloficial.ro">www.monitoruloficial.ro</a>		Waters"			
<b>HOTARARE Nr. 662 din 7 iulie 2005</b> privind modificarea Hotararii Guvernului nr. 100/2002 pentru aprobarea Normelor de calitate pe care trebuie sa le indeplineasca apele de suprafata utilizate pentru potabilizare si a Normativului privind metodele de masurare si frecventa de prelevare si analiza a probelor din apele de suprafata destinate producerii de apa potabila Publicat: MONITORUL OFICIAL NR. 616 din 15 iulie 2005 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	GD no. 662/7.07.2005 regarding the amendment of GD no. 100/2002 for approval of quality Rules to be accomplished by surface water used for drinking water and the Rules for measurements measures and sampling and analyzing frequency for samples of surface water to be used as drinkable water – Official Gazette no. 616/15.07.2005	Ministry of Health Ministry of Environme nt and Climate Changes National Administra tion "Romanian Waters"	Water Basins Administrati on	Ministry of Health Ministry of Environment and Climate Changes National Administration "Romanian Waters"	Directive79/869/E EC regarding the methods of sampling and analyzing ground water to be used as drinkable water (*)
<b>LEGEA APELOR Nr. 107 din 25 septembrie 1996</b>	Law for water no. 107 of September 25 1996	Ministry of Health	Water Basins	Ministry of Health Ministry of	Directive 79/869/EEC



Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
Publicata: M. Of. nr. 377 din 3 mai <b>2006</b> <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	and Law no. 310 of June 28, 2004 amending and supplementing Law for water no. 107/1996	Ministry of Environme nt and Climate Changes National Administra tion "Romanian Waters"	Administrati on	Environment and Climate Changes National Administration "Romanian Waters"	regarding the methods of sampling and analyzing ground water to be used as drinkable water (*)
<b>ORDIN nr. 1.072 din 19 decembrie 2003</b> privind aprobarea organizării Monitoringului suport național integrat de supraveghere, control și decizii pentru reducerea aportului de poluanți proveniți din surse agricole în apele subterane și de suprafață și pentru aprobarea Programului de supraveghere și control corespunzător și a procedurilor și instrucțiunilor de evaluare a datelor de monitorizare a poluanților proveniți din surse agricole în apele de suprafață și în apele subterane	ORDER No. 1072 /19.12.2003 for approval of organizing the water monitoring	Ministry of Health Ministry of Environme nt and Climate Changes National Administra tion "Romanian Waters"	Standards in force (STAS 8900/1- 1971, SR ISO 7890/1,2,3 – 2000, STAS 12299 – 1991). -H.G. nr. 100/2002, establishing limited values	National Administration "Romanian Waters" and Ministry of Agriculture	FRAMEWORK DIRECTIVE WATER Directive 98/83/CE regarding water quality for human consumption

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
<b>EMITENT:</b> MINISTERUL AGRICULTURII, PĂDURILOR, APELOR ȘI MEDIULUI <b>PUBLICAT ÎN:</b> MONITORUL OFICIAL nr. 71 din 28 ianuarie 2004 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>					

Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction	Interlinkage <sup>1</sup>
<p><b>Legea 226/2013</b> privind aprobarea OUG 164/2008 pentru modificarea si completarea OUG 195/2005 privind protectia mediului. Lege nr. 226/2013</p> <p>Publicat in Monitorul Oficial, Partea I nr. 438 din 18 iulie 2013 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a></p>	<p>Law 226/2013 for approval of Emergency Government Decision -OUG 164/ 2008 completed with O.U.G. no. 195/2005 regarding environment protection</p>	<p>Ministry of Health Ministry of Environment and Climate Changes National Administration "Romanian Waters</p>	<p>Water Basins Administration</p>	<p>Ministry of Health Ministry of Environment and Climate Changes National Administration "Romanian Waters</p>	<p>Directive 98/83/CE regarding water quality for human consumption</p>
<p><b>Ordonanta nr. 40/2006</b> din 09/08/2006 pentru aprobarea si finantarea programelor multianuale prioritare de mediu si gospodarie a apelor Publicat in Monitorul Oficial, Partea I nr. 707 din 17/08/2006 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a></p>	<p>GO 40/2006 priority multi-annual programme for environment and water administration</p>	<p>Ministry of Health Ministry of Environment and Climate Changes National Administration "Romanian Waters</p>	<p>Water Basins Administration</p>	<p>Ministry of Health Ministry of Environment and Climate Changes National Administration "Romanian Waters</p>	<p>WATER FRAMEWORK DIRECTIVE Directive 98/83/CE regarding water quality for human consumption</p>

Please, highlight in a few sentences the most relevant issues in the above listed legislation(s) related to CC-WARE project.

In Romania, the legislative, administrative and economical service supported sustainable development of water supply and sewerage and water supply systems and wastewater networks.

Measures taken in the central public administration authorities responsible must lead to achieving the following objectives:

a) the development and expansion of the water supply and sanitation at country level in order to improve the living conditions of local communities;

b) the development of a service and a modern urban infrastructure , capable of sustaining economic and social development of villages , to attract private investment and stimulate sustainable development of local communities;

c) the conservation and protection of the environment and public health.

Establishment, organization , coordination, management, monitoring and control of supply / service prestarii regulated water supply and sewerage in villages, towns, cities, counties, and administration, operation and the operation of public water supply systems and wastewater networks are exclusive competences of local governments.

They set their own development strategies and operation on short, medium and long service water and sewer , taking into account:

-urbanism and landscaping

- socio-economic development programs of the administrative- territorial;

- international commitments in the field of environmental protection.

Water supply services and sewerage services are provided by local operators subordinates local governments .

Activities specific to water supply and sewerage are made on the basis of a regulation and a service specification , developed and approved by the local government in accordance with the Framework Regulation , namely the specification of the service framework water supply and sewerage , developed by the **National Regulatory Authority for Community Services Public Utilities ( ANRSC )** , and approved by order of the president's .

### **Law for water supply services and sewerage no. 241/2006, republished in 2013**

**Article 1.** - (1) This Act establishes uniform legal framework on the establishment, organization, management, financing, operation, monitoring and control of the supply / provision of regulated public water service and sanitation of settlements.

(1) (2) The provisions of this law shall apply to the public service of water supply and sanitation organized in communes, towns, municipalities, counties or, if applicable, for common development associations of water and sanitation.

(2) (21) The public water supply and sanitation is part of the public services sector utilities, as they were defined by Law no. 51/2006, and includes all actions and activities that ensure local needs, provided in art. 1 para. (2). a), b) and c) of Law no. 51/2006.

**Article 2 .** - (1) The public water supply and sanitation , hereinafter water service and sanitation , are set up, organized and managed under the direction , coordination, control and responsibility of local authorities and aims water supply, sewerage and wastewater treatment for all users across localities.

( 2 ) ( 2 ) Service water supply and sanitation is provided / providing by exploiting a specific urban infrastructure, called the public water supply and sewerage.

( 3 ) ( 3 ) public water supply systems and sewage treatment, referred to as water supply systems and sanitation , technological and functional are integrated assemblies covering the entire circuit technology to capture the water source gross

to discharge treated wastewater into emissaries .

only water service , provided that wastewater collection systems other individual.

**Law no. 311 of 28/06/2004** amending and supplementing Law no. 458/2002 on drinking water quality for the amendment and completion of Law no. 458/2002 on drinking water quality

#### ARTICLE I

Law no. 458/2002 on drinking water quality published in the Official Gazette of Romania, Part I, no. 552 of 29 July 2002 , modified and completed as follows:

One . In Article 2, after point b ) of paragraph 1 shall enter the letter c ) as follows:

" c) water from local sources, such as wells, springs and so on ,used for drinking, cooking or other domestic purposes, depending on specific local conditions , public health authorities county or Bucharest may make an exception to quality parameter values, but without endangering the health of consumers."

Two . In Article 5, paragraph ( 1) shall read as follows:

" Art. 5 - (1) Drinking water quality must match the values set for the parameters listed in Annex no. 1 . Regarding the parameters in Table 3 of Annex 1, their values are set in order to evaluate the quality of drinking water in monitoring programs in order to satisfy the requirements of art. 8."

Decision no. 1435 of 18/11/2009

Published in the Official Gazette, Part I no. 1 of 04/01/2010

Article 1 . - (1) To approve the list of investment objectives of phase III of the Municipal Infrastructure Program, part of the socio-economic regeneration project subcomponent on mine closure, environmental restoration and economic regeneration, financed by the Loan Agreement between Romania and the International Bank for reconstruction and Development signed in Bucharest on January 28, 2005, ratified by Law no. 167/2005, conducted by the Romanian Agency for Sustainable Development of Industrial Areas (ARDDZI) provided in Annex 1.

(2) To approve the main characteristics and technical-economic indicators of the investment objectives specified in par. (1) provided in the Appendices 2-24 .

Article 2. - Financing the investment objectives contained in Annex. 1 shall take the form of grant of an external credit granted by the International Bank for Reconstruction and Development to finance the project referred to in art. 1 para. (1) provided under Art. 14 of Government Emergency Ordinance no. 64/2007 on public debt, approved with amendments by Law no. 109/2008, as amended and supplemented from state budget through the Ministry of Economy, the amounts approved annually for this purpose, the local contribution from local budgets sums legally constituted for this purpose, and the contribution money community members collected voluntarily through a transparent process of collection, and other funds legally constituted under programs public investment law.

**Decision no. 745 of 11/07/2007**

Published in Official Gazette, Part I no. 531 of 06/08/2007

## Approving the Regulation on licensing in the field of Article 1

This regulation is issued in accordance with Art. 21 para. ( 3) Community Services Act No public utility 51/2006 .

## Article 2

National Regulatory Authority for Community Services Public Utilities is authorized as competent authority to grant, modify, suspend, withdraw licenses or withdraw permission to perform/supply service/activity in a territorial unit to:

- a) public service of water supply and sanitation;
- b) public service water;
- c) public sewage service;
- d) The sanitation public service;
- e) public lighting service;
- f) public service supply thermal energy, except thermal power cogeneration.
- g) Scope

## Article 3

This Regulation applies to Romanian legal persons, legal persons registered in other Member States of the European Union or foreign legal persons requiring extra issue of a license for a public utility service or for one or more of its specific activities. basins.

**GD. 662/7.07.2005** amending GD. 100/2002 for the approval of quality that must meet the surface water used for drinking water and norms concerning the methods of measurement and frequencies of sampling and analysis of samples of surface water intended for drinking water production.

**Law no. 458 of 08/07/2002 on drinking water quality (as republished and consolidated 24/01/2012)**

**Last updated through Ordinance no. 1/2011 - amending and supplementing Law no. 458/2002 on water quality January 29, 2011 - Official Gazette 69/2011 - (Annex no. 1 APPENDIX. 2 APPENDIX. 3)**

Ordinance no. 11/2010 - amending and supplementing Law no. 458/2002 on drinking water quality - July 9, 2010 - Official Gazette 69/2010 (Article 14, Annex no.1 Annex 2)

Ordinance no. 11/2010 - amending and supplementing Law no. 458/2002 on water quality February 1, 2010 - Official Gazette 69/2010 (Article 9, Article 91, Article 92, Article 11, Article 14, Annex no. 1)

Law no. 311/2004 - amending and supplementing Law no. 458/2002 on drinking water quality - July 3, 2004 - Official Gazette 582/2004 (Article 2, Article 5, Article 6, Article 7, Article 8, Article 13, Article 141, Article 142, Article 143, Article 15, Annex no. 1 Annex. 3).

## Article 1

This law regulates the quality of drinking water, with the objective of protecting human health against any type of contamination of drinking water by providing clean water and its quality sanogenous.

## Article 2

In this law, the following terms are defined as follows:

1. potable water means water intended for human consumption as follows:

- a) any water in its natural state or after treatment, used for drinking, food preparation or other domestic purposes, regardless of its origin and whether it is supplied through distribution network, tank or distributed in bottles or in other containers;
- b) all water used as a food source for the manufacture, processing, preservation or marketing of products or substances intended for human consumption unless the Ministry of Health, Ministry of Agriculture and Rural Development \*\*) approved the use of water and it is shown that water used not affect the quality and healthiness of food in the form of finite;

\*\*) During 2002-2011, the Ministry of Agriculture and Rural Development, former Minister of Agriculture, Food and Forestry was reorganized several times. In this regard, see: Government Emergency Ordinance no. 64/2003 on some measures regarding the organization, reorganization or operation of structures within the work of the Government, ministries and other specialized bodies of the central government and public institutions, approved by Law no. 194/2004, as amended, the Government Emergency Ordinance no. 11/2004 regarding some measures to reorganize the central government, approved with amendments by Law no. 228/2004, as amended and supplemented, the Emergency Ordinance no. 221/2008 for the establishment of measures to reorganize the central government, approved by Law no. 186/2009 and Government Emergency Ordinance no. 115/2009 regarding some measures to reorganize the central government.

c) water from local sources, such as wells, springs, etc., used for drinking, cooking and other domestic purposes, depending on the specific local public health authorities county or Bucharest may be exceptions to the parameter values quality, but without endangering the health of consumers.

2. The indoor distribution system or facility means all pipes, fittings, valves and devices installed between the water normally used for human consumption and external distribution network, but only when they are the responsibility of the water supplier, as to the manufacturer and / or distributor of water in accordance with the law.

## Article. 3

(1) The provisions of this Act shall not apply to the following waters:

- a) natural mineral waters recognized as such by the competent authorities in accordance with law;
- b) waters have therapeutic properties for the purposes of provisions laid down by law, regulation or administrative procedures relating to pharmaceuticals.

(2) exempts from the provisions of this Act:

- a) water intended exclusively uses special conditions, for which the Ministry of Health is satisfied with its quality, and does not influence directly or indirectly the health of consumers for whom it is intended;
- b) drinking water from individual water producer, supplying more than 10 m<sup>3</sup> average / day or serving fewer than 50 persons, unless the water is produced as part of a commercial or public activity.

(3) In cases referred to in para. (2). b) the authority of the District Public Health Bucharest that will inform people concerned about the exemptions and of any measures that can be taken to protect health from the adverse effects resulting from any drinking water contamination. where it shows that the quality of such water it could be a potential health hazard, the



population affected will soon be necessary  
sanitary inspection of drinking water quality monitoring.

recommendations with national surveillance and

**Water Law. 107/1996, updated by GEO. 3/2010**, establishes procedures for the protection of water courses throughout the country and includes the concepts of public possession of watercourses and water resources in general. Article 31 of the Water Law. 107 of September 25, 1996.

(1) forests with special protection functions of the catchments of lakes, the river and torrential highly prone to erosion of river floodplains, dam-shore areas and forest bands situated neîndiguite along rivers belong to the group of forests with special protection waters and are managed as such through intensive treatment, prohibiting cuttings or treatments short period of regeneration.

(2) water protection forests, the protection of soils, situated on rocks, debris, eroded soils on land steeper than 35 degrees and other such housekeeping forests in special protection.

(3) the perimeters set in par. (1) and (2) will perform works by soil erosion, fire torrents and special rules shall apply to maintenance work performed.

**GEO 195/2005 filled with O.U.G. No. 114/2007 on environmental protection**, Chapter IX refers Protection of waters and aquatic ecosystems. Protection of surface and groundwater and aquatic ecosystems is to maintain and improve their quality and biological productivity in order to avoid negative effects on the environment, human health and material goods (Article 55, para. 1).

According to Law no. 458/2002 supplemented and amended, roles in the implementation of Directive 98/83/EC and services have the following institutions:

- Ministry of Health: drinking water quality control, informing the population at risk the health, disposition taking corrective action, granting exemptions;
- Local authorities: coordination elaborating compliance plans, including the timing and cost of measures necessary to ensure compliance of manufacturers and distributors of drinking water quality requirements;
- Interior Ministry centralization, monitoring and enforcement of compliance plans;
- Drinking Water Manufacturers: ensuring quality drinking water, preparing compliance plans.

#### **GEO 40/2006 multiannual priority environment and water management**

A. Article.1.-

(1) This ordinance establishes the mechanism for financial support of public administration central and local investment projects contained in multiannual priority environment and water management

(2) The purpose of the multiannual priority is to improve environmental infrastructure in order to fulfill the commitments assumed by Romania in the accession negotiations to the European Union on the head. 22 "Environmental Protection".

Article 2. - To approve the multiannual priority environment and water management targets containing environmental infrastructure investments, as follows:



mining activity - tailing ponds and waste dumps;

- a) closure and rehabilitation of areas affected by
- b) pilot program for the rehabilitation of hot Zlatna and Copsa Mica;
- c) modernization of water and wastewater in the basin Cris , Vaslui county and city of Ploiesti;
- d) integrated waste management in the city of Iasi , Satu Mare and Sibiu;
- e) integrated environmental information system;
- f) Increasing the safety of dams;
- g) completion of works to ensure water resources and flood protection;
- h) new flood defense works;
- i) rehabilitation works of the coastal zone;
- j) the sustainable development of the Biosphere Reserve "Danube Delta".

## **GD 974/2004**

### **ARTICLE. 1**

Norms surveillance, health inspection and monitoring of drinking water quality provided in Annex. 1

### **ARTICLE 2**

To approve the authorization of sanitary procedure for drinking water production and distribution, provided in Annex. 2.

GEO 69/2013 amending and supplementing Law no water. 107/1996. Emergency Ordinance no. 69/2013

Given the need to modify and complete the Law no water . 107/1996, as amended and supplemented, in a very short term so that they can perform urgent work needed for infrastructure and water management in particular flood defense works, considering that dangerous meteorological phenomena led to the deterioration of local infrastructure works, the urgent need to support their recovery, considering that due to failure to adopt legislation changes there is a risk of further damage to infrastructure and water management to economic and social objectives protected by this infrastructure, as well as delays in repairing local infrastructure, taking into account the need to modify and complete law no. 107/1996, as amended and supplemented, targeting the public interest and constitute an extraordinary emergency, under art. 116 para. (4) of the Constitution of Romania, republished, Government of Romania adopts this Emergency Ordinance.

### **Article.I**

Water Law. 107/1996, published in Official Gazette of Romania, Part I, no. 244 of October 8, 1996, as amended and supplemented, modified and completed as follows:

1. Article 33 (4) and (4 ^ 1) shall be amended as follows:

"(4) The right of exploitation of mineral aggregates required local public interest is given, within the maximum amount of 5,000 m3 per year, of which 1,000 m3 per year free of charge, local public administration through water management permit. Such permit shall be issued annual free at the request of local councils. exploitation rates for d scribed that is passed through or along their infrastructure in administrating public institutions/ national companies/national companies/companies/autonomous administrations, transport, construction and tourism at a distance less than that stipulated in the regulations in force, from the protection zone, their opinion is required.

**Ministry of Health (MH) Order no. 299/2010** - the methodology for granting exemptions - request of approval of the General Directorate of Public Health, health care and programs no. 3422 Ministry of Health, with the provisions of art. 9 of Law no. 458/2002 on drinking water quality, as amended and supplemented, and art. II and III of the Government Ordinance no. 11/2010 amending and supplementing Law no. 458/2002 on drinking water quality, pursuant to Art. 7 paragraph. (4) of Government Decision no. 144/2010 on the organization and functioning of the Ministry of Health, with additions, and art. 15 para. (4) of Government Decision no. 1.635/2009 regarding the organization and functioning of the Ministry of Environment and Forests

**Minister of Health and Minister of Environment and Forests** issued the following order:

Article 1. - (1) To approve the methodology for granting exemptions for chemical parameters in accordance with Art. 9 of Law no. 458/2002 on the quality of drinking water, with subsequent amendments set out in the annex which is an integral part of this Order.

(2) The methodology provided in par. (1) establishes administrative and technical conditions under which the county public health departments, and Bucharest and the National Institute of Public Health may approve, at the request of the manufacturer or distributor of water, exemptions for a period of time from the chemical parametric values set the table. 2 of the Schedule. 1 of Law no. 458/2002 on drinking water quality, as amended and supplemented, or pursuant to art. 5 para. (2) of the act.

**MH Order no. 764/2005 - Registration procedure at the Ministry of Health laboratories performing water quality monitoring**

**Article 1.**

- (1) approve the procedure for registration of laboratories performing water quality monitoring in water under official control .
- (2) The procedure referred to in para. (1) contains administrative and technical conditions under which laboratories are registered with the Public Health Department of the Ministry of Health, hereinafter DSPMS.
- (3) The procedure set out in para. (1) , Ministry of Health, through DSPMS , develop and maintain the register of laboratories to monitor the quality of drinking water, hereinafter called the Registry.

**Article 2**

For the purposes of this Order , the following definitions shall apply:

- a) record - the Ministry of Health official recognition that a laboratory is competent to perform specific tests and measurements certain part of the official control laboratories are drinking water quality;
- b) Register - list of laboratories registered with the Ministry of Health, which performs sampling and analysis of drinking water monitoring program in order to achieve the official control of drinking water quality;
- c) Public Health Department of the Ministry of Health ( DSPMS ) - direction which , as state authority , coordinates health in relation to environmental factors;

- d) client - any person or entity that require drinking water quality analysis in official control of water quality, as defined in Law no. 458/2002 on drinking water quality , as amended and supplemented;
- e) Review - specialist in public health institutes / health center , which prepares the assessment report of a laboratory within its registration procedure at the Ministry of Health;
- f) monitoring program - monitoring and audit control of drinking water quality leaving the treatment plant to the consumer of bottled water in bottles or in other containers, food ice made from water and water used in the food industry;
- g) assessment report - the document prepared by the assessor appointed , after analyzing the documents submitted by the applicant and a site visit , which underlies the registration process and contains recommendations based on the Ministry of Health records laboratories;
- h) applicant - legal person shall act with the legislation in force for the registration of the laboratory whose legal representative is .

**Ordinance 3/2010 for amending and supplementing L 107/96** sell the necessity of amending and completing Law water no 107/1996, as amended and supplemented, amended and supplemented, in a timely fashion so that Romania to comply with the letter of the Commission of the European Communities (the Commission ) on the formal notice for failure to transpose complete and correct to Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water taking into account that , due to failure to adopt legislation changes, the Commission sent a reasoned opinion to Romania on failure to complete and correct transposition of Directive 2000/60/EC of the European Parliament and of the Council, given the fact that the delay fulfillment correct and complete transposition of Directive 2000/60/EC of the European Parliament and of the Council will seriously harm Romania, as the next stage of the infringement procedure is triggered by the Commission's contentious phase of the action against Romania taking into account that Romania Romanian had to transpose Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks until November 26, 2009, and the failure of this term leads to start other infringement procedures, taking into account the need for correct and complete transposition of the two European directives aimed at the public interest and constitute an extraordinary emergency, pursuant to **art . 115** para. ( 4) of the Romanian Constitution.

## GD 100/2002

Norms of quality that must be met by surface waters used for drinking water and norms concerning the methods of measurement and frequencies of sampling and analysis of surface water samples for the production of drinking water Published in the Official Gazette, Part I no. 130 of 19 February 2002.

Pursuant to art . 107 of the Constitution and art. 15 para. ( 2) Water Law . 107/1996

Government of Romania adopts this decision .

Article 1 . - Norms of quality that must meet surface waters used for drinking water, NTPA -013 , provided in Annex 1.

Article 2 . - To approve the norm regarding methods of measurement and frequencies of sampling and analysis of samples from surface waters for drinking water production, NTPA- 014, provided in Annex 2.

Article 3 . - Annexes . 1 and 2 are part of this decision,

Article 4 . - The central public authority in the field of water and environment means the Ministry of Waters and Environmental Protection , and the competent authority in water management means the National Company "Romanian Waters" - SA

### **ORDER No. 1563 of 08.06.2011 for regulating the inspection and water management**

Article 1 - This order establishes the regulation of inspection and control water management.

Article 2 - Inspection of water management and control is survey conducted by Territorial Waters organized at work / office organizational structure of the National Administration "Romanian Waters", in accordance with the Water Law no.107/1996, as amended and supplemented, the Government Emergency Ordinance no. 244/2000 concerning dam safety approved and amended by Law 466/2001 , republished and Emergency Ordinance Government no. 107/2002 on the establishment of the

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>2</sup>	Interlinkage <sup>3</sup>
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National Administration "Romanian Waters" approved by Law 400/2003, as amended and supplemented.

Article 3 - Flood and Water Management Authority of the Ministry of Environment and Forests verify and coordinate the Department hydrographic basins, the

inspection and control of water management carried out by the National Administration "Romanian Waters" by inspection Territorial Waters.

Article 4 - This order shall be communicated to all concerned by the Planning Department

***Table 3.2: Land use legislation/ polices***

<sup>2</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<b>Legea 46 2008</b> <b>Codul silvic</b> , publicată în Monitorul Oficial nr. 238 din 27 martie 2008 <a href="http://www.monitoruloficial.ro/">www.monitorul oficial.ro/</a>	Law 46 / 2008 – Forest Code	Ministry of Environ ment and Climate Changes	Local authoriti es	Central Public Authority for Forestry	Directive of Environment and Climate Changes
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<sup>3</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

Please, highlight in a few sentences the most relevant issues in the above listed legislation(s) related to CC-WARE project.

**According to L46/2008, Art 25**

(1) in relation to the functions performed, forests fall into two functional groups:

- a) Group I, which includes forests with special protection waters, soil, climate and national interest objectives;
- b) Group II, which includes production and protection forests with;

(2) The forest management of each group differs in relation to the intensity and nature of its functions, established by silviculture.

TITLE IV L46/2008 - Sustainable development of national forest and the provisions of other legislation are for:

- promoting sustainable forest management with the protective role of water, soil and biodiversity against destructive natural and anthropogenic, and recreational functions of forests developing (and increasing their surface);
- compensating owners of forest land for the disadvantages caused an by the conservation of protected areas.

***Table 3.3 : Climate change legislation/policies***

Please, highlight in a few sentences the most relevant issues in the above listed legislation/policies related to CC-WARE project. **National Strategy for Climate Changes (2013-2020) – to be finalized**

2 main components: reducing the concentration of greenhouse gases(Mitigation) adaptation to climate change (Adaptation)

13 vulnerable sectors: industry, agriculture and fishing, tourism, public health, constructions and infrastructure, transport, WATER RESOURCES, forests, energy, biodiversity, insurance, leisure activities, education.

Measures to be implemented:

- adaptation measures to ensure the source water availability
- adaptation measures to water uses
- measures to be implemented at hydrographic basin level
- measures to be implemented for flood risk management
- measures to be implemented for draught mitigation.

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementation Jurisdiction <sup>4</sup>	Interlinkage <sup>5</sup>
<b>Strategia Nationala</b> a României privind Schimbarile Climatice 2013 – 2020 aprobata prin Hotărârea nr. 529/2013 pentru aprobarea Strategiei naționale a României privind schimbările climatice, 2013-2020 Publicat în Monitorul Oficial, Partea I nr. 536 din 26.08.2013 <a href="http://www.monitoruloficial.ro">www.monitoruloficial</a>	<b>National Strategy for Climate Changes</b> (2013-2020 approved through GO 529/2013)	Ministry of Environment and Climate Changes	County Councils	Ministry of Environment and Climate Changes	Directive of Environment and Climate Changes

<sup>4</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>5</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

**Table 3.4: Water management legislation/policies<sup>6</sup>**

<b>Ordinul nr. 276/1997</b> al MAPPM privind Metodologia de elaborare a planurilor de restricții și folosirea apei în perioade deficitare Publicat: M.Of. nr. 100 bis/26.05.1997 <a href="http://www.monitorul oficial.ro/">www.monitorul oficial.ro/</a>	<b>Order no. 276/1997</b> of MAPPM regarding the Methodology for elaboration of restriction and water utility plans during deficient periods- Official Gazette. no. 100 bis/26.05.1997	Ministry of Agriculture and Ministry of Environment and Climate Changes		Ministry of Environment and Climate Changes	Water Directive
<b>Decizia ministrului agriculturii 21130/DC/14.</b>	Decision 21130/DC/14.10 2010. Action program for	Ministry of Agriculture	County Councils	Ministry of Agriculture and local authorities	

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<sup>6</sup> Only those which are not listed before



10 2010 de aprobare a programului de Actiune pentru zonele vulnerabile la nitrati din surse agricole	vulnerable areas to nitrates from agricultural sources				
<b>Ordinul nr. 31/2006</b> privind aprobarea Manualului pentru modernizarea și dezvoltarea Sistemului de Monitoring Integrat al Apelor din România (SMIAR) Publicat: Monitorul Oficial, Partea I nr. 234 din 15.03.2006	<b>Order of Minister of Environment and Water Management no.31/13.01.200</b> 6 concerning on approval of the Manual for updating and development of the Water Integrated Monitoring System.	Ministry of Environ ment and Climate Changes	Romani an Waters	Ministry of Environment and Climate Changes	Water Directive

Please, highlight in a few sentences the most relevant issues in the above listed legislation/policies related to CC-WARE project.

**Table 3.5: River Basin Management Plans**

Name of river basin	National level	Regional level	Implementation Jurisdiction <sup>7</sup>	Approval status
BUZAU-IALOMITA BASIN Management Plan from Buzau-Ialomita hidrografic area Plan de Management al Bazinului Hidrografic Buzau-Ialomita	National Administration "Romanian Waters"	Regional water Administration	National Administration "Romanian Waters"	approved and implemented
<b>Danube River basin, Danube Delta.</b> <b>Costal waters</b> <b>Management Plan of Danube River, Danube Delta, hydrographic area</b> Dobrogea and coastal waters <b>Plan de Mangement al Deltei Dunarii, Fluviului</b>	National Administration "Romanian Waters"		National Administration "Romanian Waters"	

<sup>7</sup> Competent authority for implementation e.g. government, ministry

Dunarea Bazinului hidrografic Dobrogea si al apelor costale				
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Please, highlight in a few sentences the most relevant issues in the RBMP related to CC-WARE project.

The National Management Plan for the national bank of the Danube international basin, is a synthesis of basin / catchment areas Management Plans, developed in December 2009, includes an overview and characteristics of surface water bodies for each of the sub-basins analyzed . (Banat, Jiu, Olt, Arges-Vedea, Buzau-Ialomita, Prut, Dobrogea - littoral). The Danube River Basin plan presents chapters on characterization of groundwater bodies, identification of significant pressures, identification and mapping of protected areas and aspects of economic analysis. The plan followed the Strategic Environmental Assessment (SEA) in accordance with the requirements of Directive 2001/42/EC on the assessment of certain plans and programs on the environment.

***Table 3.7: OTHER legislation/policies of relevance for CC - WARE project***

Legislation / policy original title	Legislation/ policy title in English	National level	Regional level	Implementatio n Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
<b>Strategia Nationala</b> pentru Dezvoltare Durabila a României Orizonturi 2013-2020- 2030 aprobata prin Hotărârea nr. 1460/2008 Publicat în Monitorul Oficial, Partea I nr. 824 din 08.12.2008 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	<b>National Strategy for Sustainable Development</b> of Romania horizons 2013–2020–2030 approved through GO 1460/2008	Ministry of Environment and Climate Changes		Government and ministries	
<b>Strategia Deltei Dunarii</b> 2011-2015 Aprobata prin Hotărârea nr. 1069/2007 Publicat în Monitorul Oficial, Partea I nr. 781 din 19.11.2007 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro/</a>	2011-2015 - Danube Delta Strategy approved through GO 1069/2007 Authority in charge for implementation e.g. ministry, municipality, etc Significant linkage with other relevant policy (ESS, land use practices and planning,	Ministry of Environment an Changesd Climate		Ministry of Environment an Changesd Climate CC, WFD, IWRM, etc.)	
Directiva-cadru „Strategia pentru mediul marin”) aprobata prin Legea nr. 6/2011 Publicata in Monitorul Oficial nr. 159 din 4 martie 2011	Framework Directive – Marine Environment Strategy (2008/56/CE) approved through	Ministry of Environment an Changesd Climate		Ministry of Environment an Changesd Climate	2008/56/CE

<a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro /</a>	Law no.6/2011				
<b>Strategia Nationala de management al riscului la Inundatii pe termen mediu si lung</b> (2010-2035) aprobata prin Hotărârea nr. 846/2010 Publicat în Monitorul Oficial, Partea I nr. 626 din 06.09.2010. <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro /</a>	<b>Medium and Long Term National Strategy</b> for Flood Risk Management (2010 – 2035) approved through GD 846/2010	Ministry of Environment an Changesd Climate	Local authorities – County Committees for Emergency Situations	Ministry of Environment an Changesd Climate and Ministry of Interior Affairs	
<b>STRATEGIA NAȚIONALĂ DE GESTIONARE A DEȘEURILOR</b> aprobata prin HG nr. 870/2013 Publicat: Monitorul Oficial, Partea I, nr. 750 din 04.12.2013 <a href="http://www.monitoruloficial.ro/">www.monitoruloficial.ro /</a>	<b>National Strategy for Waste</b> (SNGD) approved through GD 870/2013	Ministry of Environment an Changesd Climate	Local authorities	Ministry of Environment an Changesd Climate	

Please, highlight in a few sentences the most relevant issues in the above listed legislation(s) related to CC-WARE project.

Please, highlight in a few sentences the most relevant issues in the above listed legislation(s) related to CC-WARE project.  
**National Strategy for Sustainable Development of Romania Horizons 2013–2020–2030**

#### Sub chapter 1.4. Natural resources management and

#### conservation

##### Specific objectives:

- (a) To improve the quality of, and access to infrastructure for water supply and wastewater treatment by providing safe potable water and sewerage services to the majority of urban areas by 2015 and establishing efficient regional structures for water and waste water management..
- (b) To develop integrated waste management systems by improving waste processing and reducing the number of historically polluted areas in at least 30 counties by 2015.
- (c) To reduce the negative environmental impact of urban heating systems and to minimize their effect on climate change in the most polluted townships by 2015.
- (d) To preserve biodiversity and the natural heritage by supporting the management of protected areas, including the implementation of the Natura 2000 Network.
- (e) To reduce the risks of natural disasters affecting the population through the implementation of preventive measures in the most vulnerable areas. The main objectives cover the implementation of sustainable systems for flood control in the most exposed areas and the protection and rehabilitation of the Black Sea coast.

#### **2011-2015 – Danube Delta Strategy**

Infrastructures development programs in rural areas are targeting:

- villages water supply in centralized system;
- development of drainage and purge systems;
- treating wastewater;
- development/modernization of waste platforms.

#### **Medium and Long Term National Strategy for Flood Risk Management (2010 – 2035)**

Prevention measures:

- potential flood risk areas presented in urbanism documentation and prohibit construction;
- structural measures implementation (dams, banks consolidation);
- non-structural measures implementation (basin risk reduction plans, implementation of insurance system, awareness and alarm systems implementation);
- detailed identification of the flood risk areas and enrollment into urban plans;
- appropriate land use practices promotion

## Level of relevant EU legislation implementation

Since 1989, Romania has acceded to several international environmental treaties, which call for the implementation of treatment plants emissions, pollutant monitoring the quality of the environment and the integration of national networks in the European Monitoring environmental protection.

Relevant European Directives contained in the *acquis Communautaire* include:

- \* 75/440/EE Directive on the quality required of surface water abstraction for drinking water purposes;

- \* 80/778 EEC and amendments 98/83/EC: Drinking Water Directive.

Romania has ratified a series of international treaties on the protection of water quality

4.1.1. Szeged Agreement on the Tisza river protection against pollution and its tributaries;

4.1.2. Convention from Helsinki on the protection and use of transboundary water courses and international lakes , 1992; Sofia;

4.1.3. Cooperation Agreement on the Protection of the Danube;

4.1.4. Convention from Bucharest on the Strategic Action Plan regarding the Black Sea 1996.

**Black Sea Biodiversity and Landscape** Conservation Protocol Adopted By Romania in December 2011

**Protocolul privind conservarea biodiversității și a cadrului natural al Mării Negre**, semnat la Sofia la 14 iunie 2002, la Convenția privind protecția Mării Negre împotriva poluării, semnat la București la 21 aprilie 1992 ratificat prin LEGEA Nr. 218 din 24 noiembrie 2011

PUBLICATĂ ÎN: MONITORUL OFICIAL NR. 859 din 6 decembrie 2011

## 2. GAPS IDENTIFIED and Proposal/ Idea of actions/measures/ policies that might fill the "GAPS"

- Existing legislation is not unitary and could not be properly implemented;
- There are not available maps regarding the water resources, existing maps do not treat the subject properly.
- Steps already taken to include the water transportation infrastructure into "critical infrastructure domain" in order to ensure a better protection.
- No established contribution of ecosystems in terms of quantity and quality of water and therefore not distributed properly their value;
- Is not monitored and respected the water protection legislation (the environment - in general) in areas with private land
- Not allocated sufficient funds for water protection measures (torrents, afforestation, restoration of degraded ecosystems etc.)
- Not clearly defined responsibilities of local authorities on water management and maintaining their health and prevent pollution

### ***Recommendations of actions/measures/ policies that might fill the "GAPS"***

- Integrated system for monitoring of water quality and quantity;
- The legislation harmonisation for establishing the value of water ecosystem services;
- The implementation of the methodologies from projects.



	PP (country)	Austria	Slovenia	Hungary	Romania	Bulgaria	Greece	Italy	Serbia
Test area location - name			Ljubljana moor						
Water resource type	surface water				x	x			x
	reservoir				x				x
	karst aq	x	x				x		
	bank filtration			x					x
	porous aq confined			x					
	porous aq unconfined	x	x	x					
	fissured aquifer							x	
Topography	mountain	x			x	x	x	x	
	hills	x				x		x	x
	plain	x	x	x	x				x
Landuse (CLC 2006)	agriculture		x						
	forest								
	urban areas		x						
	wetlands		x						
	water		x						
Protected areas	special protected areas		x	x			x		
	DWPA	x	x	x	x	x	x	x	x
ES services aim	surface water quality	x		x	x	x			x
	GW quantity	x	x				x	x	x
	surface water quantity	x			x	x			x
	GW quality	x	x	x			x		x
Eco-regions	acc. To WFD legislation								
Ecosystem type	forest (AT)	x		x	x	x	x	x	x
	grassland (HU)	x		x				x	x
	wetlands (SL)		x	x					
	arable land/agriculture (SR)		x		x				x

# ***ANNEX 7***

## ***NATIONAL LEGISLATION TEMPLATE SERBIA***

Relevant national legislation analyses for  
improvement of land use and water  
management regulation and policies in  
Republic of Serbia within the scope of  
CC - WARE project

Contribution by  
Institute for water resources development -  
Jaroslav Černi (IPA 1)

Prepared by:  
Branislava Matić  
Đulija Boreli – Zdravković  
Dragana Pejović

## 1. NATIONAL/REGIONAL LEGISLATION

***Table 3.1: Drinking water supply and drinking water sources protection***

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
1.	Zakon o vodama („Službeni glasnik RS“, br. 30/2010 i 93/2012)	Water Act („Official Gazette RS“, no. 30/2010 and 93/2012)	+		Ministry of Agriculture and Environmental Protection	WFD
2.	Zakon o sanitarnom nadzoru („Službeni glasnik RS“, br. 125/2004)	Sanitary Inspection Act („Official Gazette RS“, no. 125/2004)	+		Ministry of Health	Water Act
3.	Zakon o komunalnim delatnostima („Službeni glasnik	Public Utility Regulatory Act („Official Gazette RS“,	+		Ministry of Agriculture and Environmental Protection, Ministry of Construction,	

<sup>1</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>2</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	RS", br. 88/2011)	no. 88/2011)			Transport and Infrastructure	
4.	Zakon o lokalnoj samoupravi ("Službeni glasnik RS", br. 129/2007)	Local Government Act ("Official Gazette RS", no. 129/2007)	+		Ministry of Public Administration and Local Self-Government	
5.	Zakon o glavnom gradu ("Službeni glasnik RS", no. 129/2007)	Capital City Act ("Official Gazette RS", no. 129/2007)	+		Ministry of Public Administration and Local Self-Government	
6.	Zakon o iskorišćavanju i zaštiti izvorišta vodosnabdevanja – važe samo delovi zakona ("Službeni glasnik SRS", br. 27/77, 24/85, 29/88, 49/89 i " Službeni glasnik RS", br. 46/91)	Drinking water supply sources management and protection Act ("Official Gazette SRS", no. 27/77, 24/85, 29/88, 49/89 and "Official Gazette RS", no. 46/91)	+		Ministry of Agriculture and Environmental Protection	WFD Water Act
7.	Zakon o zaštiti životne sredine („Službeni glasnik	Environmental protection Act and Act on amendments and	+		Ministry of Agriculture and Environmental Protection	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	RS", br. 135/04, 36/09 i 72/09 – 43/11-ustavni sud)	additions to the Act on environmental protection „Official Gazette RS“, no. 135/04, 36/09 and 72/09 –43/11- constitutional court)				
8.	Zakon o rudarstvu i geološkim istraživanjima  („Službeni glasnik“, br. 88/11)	Act on Mining and geological surveys  („Official Gazette RS“, no. 88/11)	+		Ministry of Mining and Energy	
9.	Zakon o integrisanom sprečavanju i kontroli zagađivanja životne sredine  ("Službeni glasnik RS", br. 135/2004)	Integrated pollution prevention and control Act  ("Official Gazette RS", no. 135/2004)	+		Ministry of Agriculture and Environmental Protection	IPPC
10.	Nacionalna strategija održivog razvoja, Vlada Srbije, Beograd, 2008.  („Službeni glasnik	National strategy for sustainable development, Serbian Government, Belgrade, 2008.	+		Serbian Government	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	RS", br. 57/08)	(„Official Gazette RS“, no. 57/08)				
11.	Nacionalni program zaštite životne sredine  („Službeni glasnik RS“, br. 12/10)	National programme for environmental protection  („Official Gazette RS“, no. 12/10)	+		Ministry of agriculture and environmental protection	Environmental Protection Act  Water Act  WFD
12.	Nacionalna strategija o održivom korišćenju prirodnih resursa i dobara  („Službeni glasnik RS“, br. 33/2012)	National strategy for sustainable use of natural resources  („Official Gazette RS“, no. 33/2012)	+		Serbian Government	Environmental Protection Act  Water Act
13.	Plan za zaštitu voda od zagađivanja  („Službeni glasnik RS“, br. 6/91)	Water protection plan  („Official Gazette RS“, no. 6/91)	+	+	Ministry of agriculture and environmental protection	Water Act,  Environmental Protection Act
14.	Uredba o utvrđivanju vodoprivredne osnove Republike Srbije  („Službeni glasnik	Water management plan decree  („Official Gazette RS“, no. 11/2002)	+		Ministry of agriculture and environmental protection	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	RS", br. 11/2002)					
15.	Pravilnik o higijenskoj ispravnosti vode za piće  ("Službeni glasnik SRJ", br. 42/98, 44/99)	Drinking water sanitation standards regulation  ("Official Gazette SRJ", no. 42/98, 44/99)	+		Ministry of Health	Water Act
16.	Pravilnik o određivanju referentnih uslova za tipove površinskih voda  ("Službeni glasnik RS", br. 67/2011)	Surface water types and reference conditions regulation  ("Official Gazette RS", no. 67/2011)	+		Ministry of agriculture and environmental protection	Water Act Environmental Protection Act
17.	Pravilnik o parametrima ekološkog i hemijskog statusa površinskih voda i parametrima hemijskog i kvantitativnog statusa podzemnih	Regulation on surface water ecological and chemical status parameters and groundwater chemical and quantitative status parameters  ("Official Gazette RS"	+		Ministry of agriculture and environmental protection	Water Act Environmental Protection Act



No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	voda („Službeni glasnik RS“, br. 74/2011)	no. 74/2011)				
18.	Uredba o graničnim vrednostima zagađujućih materija u površinskim i podzemnim vodama i sedimentu i rokovima za njihovo dostizanje  („Službeni glasnik RS“, br. 50/2012)	Decree on Maximum contaminant level in surface and ground water and sediments and deadlines for achievement decree („Official Gazette RS“, no. 50/2012)	+		Ministry of agriculture and environmental protection	Water Act
19.	Uredba o graničnim vrednostima emisije zagađujućih materija u vode i rokovima za njihovo dostizanje  („Službeni glasnik RS“, br. 67/2011 i 48/2012)	decree on Maximum emission levels to water and deadlines for achievement  („Official Gazette RS“, no. 67/2011 and 48/2012)	+		Ministry of agriculture and environmental protection	Water Act
20.	Uredba o graničnim vrednostima prioritetnih i	Decree on priority and priority hazardous substances Maximum	+		Ministry of agriculture and environmental protection	Water Act

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	prioritetnih hazardnih supstanci koje zagađuju površinske vode i rokovima za njihovo dostizanje  („Službeni glasnik RS“, br. 24/2014)	levels in surfae waterand deadlines for achievement  („Official Gazette RS“, no. 24/2014)				
21.	Pravilnik o načinu određivanja i održavanja zona sanitarne zaštite izvorišta vodosnabdevanja  („Službeni glasnik RS“, br.92/08)	Regulation on Establishment and management of drinking water source protection zones („Official Gazette RS“, no.92/08)	+		Ministry of Agriculture and Environmental Protection	Water Act WFD
22.	Pravilnik o sadržini i načinu vođenja vodnog informacionog sistema, metodologiji, strukturi, kategorijama i načinima sakupljanja podataka kao i o	Regulation on Water information system that deffines data collection methodology, staructure, cathegories and procedures, and form of information to be presented to public  („Official Gazette RS“	+		Ministry of Agriculture and Environmental Protection	WFD

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	sadržini podataka o kojima se obaveštava javnost  („Službeni glasnik RS“ br. 54/2011)	no. 54/2011)				
23.	Stokholmska konvencija – POPs, Zakon o potvrđivanju Stokholmske konvencije o dugotrajnim organskim zagađujućim supstancama donet je u “Službenom glasniku RS” – Međunarodni ugovori, br. 42/2009. Ovaj zakon se primenjuje kroz Zakon o hemikalijama (“Službeni glasnik RS”, br. 36/2009) i	Ratification of Stockholm convention act (“Official Gazette RS” – International contracts, no. 42/2009). This Act is enforced through Chemicals Act (“Official Gazette RS”, no. 36/2009) and Law on biocidal products (“Official Gazette RS”, no. 36/2009)	+	+	Ministry of Agriculture and Environmental Protection	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	Zakon o biocidnim proizvodima ("Službeni glasnik RS", br. 36/2009)					

The most important law regulating the entire water sector is the **Water Act** (OG RS No. 30/2010) that replaced the previous 1991 Water Act, amended by by-laws in 1993, 1994, 1996 and 2005. Actually this Act covers surface water and ground water, including drinking water, wastewater, thermal and mineral water, internal and transboundary water, and inland water bodies in Serbia. This Law prescribes and regulates:

- water assets (definition), water facilities/ structures,
- integrated water management
- defines water acts and documentation (e.g. water criteria , water approvals, water permits, water orders , water journal and water register ),
- bans, limiting rights and obligations of the owners and beneficiaries/users of water land and water facilities;
- entities in water management,

- information and water information system,
- funding of water management,
- (inspection) supervision,
- penalty provisions.

The Water Act foresees the development of following strategic and planning documents to govern the water sector:

- The water management strategy is a planning document that sets a long-term direction of water management and contains: an assessment of the current situation in water management, objectives and guidelines for the water management, implementation measures to achieve the set objectives and a projection on the development of water management. This document has to be harmonized with other strategic documents on the Republic's level in the field of spatial planning, sustainable development, utilization of natural heritage and resources, and environmental protection. The strategy should be adopted during the year 2015.
- Water management plans for water management are developed for a period of six years and should be adopted, in compliance with the above strategy, for the Danube River Basin and for other water regions Sava River, Belgrade, Morava River, Danube River, Srem, Backa and Banat, Kosovo and Metohija). The water management plans contain, among other things, in most general terms, the analysis of current state of water resources, environmental objectives for surface and ground water, as well as a presentation of the approved program of activities, measures as well as ways and means as to how the set goals will be achieved in all areas of water management (water usage, water protection, and protection from harmful effects of water).

The ***Law on Environmental Protection*** (Official Gazette of RS 135/2004) regulates integral system of environmental protection, which shall ensure human right to live and develop in a healthy environment with a balanced economic growth.

The main principles of the Law on environmental protection are:

- The principle of Environmental Liability, according to which a legal or natural entity who is involved in environmental pollution by illegal or improper activities, as well as in the case of liquidation or bankruptcy, is responsible for the environmental damage. Accordingly, the polluter or its legal successor shall be bound to eliminate the cause of pollution or the consequences of direct or indirect environmental pollution. In addition, changes in the ownership of companies or other legal entities or other changes in the ownership structure shall include assessment of the environmental status and allocation of liability for environmental pollution as well as settlement of debts of the ex-owner on account of pollution and/or damage to the environment.
- The “Polluter pays” principle which means that the polluter shall pay the charges for environmental pollution if it causes or may cause, in particular if he produces, utilizes or markets raw material, semi finished or final product containing material dangerous for the environment. Moreover, the polluter shall bear the total costs of measures for prevention and reduction of pollution, including cost related to the restoration/remediation of the damaged environment. This principle has been fully included into the new Law on Water.
- The “User pays” principle which means that a person who utilizes natural values (in particular water) shall pay real cost for their abstraction as well as for the restoration of the exploited or damaged resource. For water this implies that the cost related to water purification and distribution, as well as wastewater collection and treatment shall be borne by the users. This principle has been fully included into the new Law on Water, especially through the recovery of cost for water services.

- The principle of Subsidiary Liability according to which that State authorities, within their financial abilities, shall eliminate the consequences of environmental pollution and reduce damages when the polluter is unknown and when pollution originates from the sources outside the territory of the Republic.
- The principle of Environmental Incentives which obliges State authorities, as well as those of the autonomous province and local self-governing units to take the measures for the preservation and sustainable management of environmental capacities, particularly by reduced utilization of raw materials and energy and prevention or reduction of environmental pollution via economic instruments and other measures, by the best available techniques, facilities and equipment which does not require excessive costs and through selection of products and services. The new law on Water provides for the description of incentives measure in the Water Management Plans.

General guidelines relating to the water protection are regulated by provisions of the Article 23 of the Law on Environmental Protection. Considering that protection and use of waters is realized within integrated water management (“implementation of measures for preservation of surface and ground waters and its reserves, quality and quantity as well as riverbed protection, coastal area and basins”), the provision has general character since it refers to the implementation of the Water Act (RS 30/2010).

***Water protection acts*** in Serbia are generally passed at the national level, with the exception of the o-called “decisions” which are issued at the local, municipal level. Examples of water protection acts issued at the local level are decisions on the establishment of sanitary protection zones. Based on these decisions, 3 protection zones must be provided for both groundwater and surface water abstraction facilities used for drinking water purposes. These decisions provide a detailed description of the established protection zones (boundaries, area), as well as the protection measures which have to be

enforced and how the zones are to be maintained. Being local legal acts, these decisions are published in the Official Gazettes of the respective cities and municipalities, and they come into force on the date they are published.

***By-law on Drinking Water Source Protection Zones Establishment and Management*** requires the establishment of 3 protection zones for groundwater sources whose perimeter is defined using criteria based on the time of travel of water through the saturated zone (the maximum time it takes for a contaminant to reach the abstraction point). This is a widely used criterion that should provide confidence that the concentration of contaminants will have been reduced to an acceptable level.

Based on this by-law, physical protection of groundwater abstraction facilities must be provided in the 1st protection zone, in order to prevent rapid ingress of contaminants or damage to the wellhead. The 2nd protection zone is based on a minimum 50-day travel time (for porous aquifers), sufficient to reduce pathogens to an acceptable level that can be further removed in the treatment process. The 3rd zone is based on a minimum 200-day travel time (for porous aquifers), estimated to be needed for natural purification processes (dilution and effective attenuation of slowly degrading substances). This document underlines difference between aquifer types (porous, fissured and karstic), mostly based on different travel times. For karstic and fissured unconfined aquifers, the 2nd protection zone is based on a minimum 1-day travel time, and the 3rd zone covers whole catchment area. For confined karstic and fissured aquifers, the 2nd protection zone is minimum 500 m from water the water abstraction object, and the 3rd zone is minimum 1000 m.

***The Law on Integrated Prevention and Pollution Control*** – IPPC regulates criteria and procedure for Integral permit for facilities and activities which could negatively impact human health, the environment or material goods, types of activities and plants, monitoring and other issues important for integrated environmental pollution prevention and control.



**Act on Local Self Governance** regulates liabilities of the municipalities and cities on enactment of development programs, urban plans and budgets as well as setting and ensuring a significant number of activities on their own territory. According to this law, local authorities are obliged to set the conditions and provide performance and development of utility services such as treatment and distribution of waters, evacuation and treatment of waste waters and maintenance of cleanliness in the cities and settlements.

**Table 3.2: Land use legislation/ policies**

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
1.	Zakon o planiranju i izgradnji ("Službeni glasnik RS", br. 72/2009, 81/2009, 64/2010 – odluka US, 24/2011, 121/2012, 42/2013 - odluka US, 50/2013 - odluka US i 98/2013 - odluka US)	Act on Planning and Construction ("Official Gazette RS", no. 72/2009, 81/2009, 64/2010 – constitution court decision, 24/2011, 121/2012, 42/2013 - constitution	+		Ministry of Construction, Transport and Infrastructure	

<sup>3</sup> Authority in charge for implementation e.g. ministry, municipality, etc.

<sup>4</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
		court decision, 50/2013 - constitution court decision and 98/2013 - constitution court decision)				
2.	Zakon o prostornom planu Republike Srbije od 2010. do 2020. Godine  ("Službeni glasnik RS", br. 88/2010)	Act on Republic of Serbia spatial plan from 2010 to 2020  ("Official Gazette RS", no. 88/2010)			Serbian Government	
3.	Zakon o javno privatnom partnerstvu i koncesijama ("Službeni glasnik RS", br. 88/2011)	Public-private partnerships and concessions Act ("Official Gazette RS", no. 88/2011)				
4.	Zakon o zaštiti prirode ("Službeni glasnik RS", br. 36/09 i 88/10 i ispravka 91/10)	Nature protection act ("Official Gazette RS", no. 36/09 and 88/10 and correction 91/10)			Ministry of Agriculture and Environmental Protection	
5.	Zakon o poljoprivrednom zemljištu ("Službeni glasnik RS", br. 62/2006, 65/2008 – dr.zak. i 41/2009)	Agricultural Land Act ("Official Gazette RS", no. 62/2006, 65/2008 – other act and 41/2009)			Ministry of Agriculture and Environmental Protection	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
6.	Zakon o Šumama („Službeni glasnik RS”, br. 30/2010)	Act on Forests (“Official Gazette RS”, no. 30/2010)	+		Ministry of Agriculture and Environmental Protection	
7.	Zakon o energetici („Službeni glasnik RS”, br. 57/11 i 80/11-ispr.)	Energy regulatory Act (“Official Gazette RS”, no. 57/11 and 80/11- correction)			Ministry of Mining and Energy	
8.	Strategija razvoja energetike Republike Srbije do 2015. godine, Vlada Republike Srbije, Beograd 2005. („Službeni glasnik RS”, br. 44/05)	Energy development strategy of Republic of Serbia until 2015, Serbian Government, Belgrade 2005. („Official Gazette RS”, no. 44/05)			Ministry of Mining and Energy	
9.	Strategija prostornog razvoja Republike Srbije 2009-2013- 2020  Ministarstvo životne sredine i prostornog planiranja, Republička Agencija za prostorno planiranje, Beograd 2009.	Spatial development strategy of Republic of Serbia 2009-2013- 2020  Ministry of environment and spatial plannig, Republic Agency for spatial planning, Belgrade 2009			Ministry of Agriculture and Environmental Protection, Ministry of Construction, Transport and infrastructure	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
10.	Strategija poljoprivrede i ruralnog razvoja Republike Srbije (2014 – 2024), Ministarstvo poljoprivrede i zaštite životne sredine, Beograd 2014.	Agricultural and rural development strategy of Republic of Serbia (2014-2024), Ministry of agriculture and environmental protection, Belgrade 2014.			Ministry of Agriculture and Environmental Protection	
11.	<i>Strategija razvoja šumarstva Republike Srbije</i> , Vlada Republike Srbije, Ministarstvo poljoprivrede, šumarstva i vodoprivrede, Uprava za šume ,2006	Republic of Serbia Strategy for forestry development			Ministry of Agriculture and Environmental Protection	

The ***Act on Planning and Construction*** regulates the conditions and modalities of spatial planning, regulation and usage of construction land and construction of facilities.

The Law regulates: the field of urban and spatial planning, construction land; construction of facilities (with the content, type and development of technical documentation); building approval and construction; utilization of constructed facility and other works important for construction of facilities and execution of works. The Law provides for liability that all planning documents (spatial and urban plans) include environmental protection measures which result from an environmental impact assessment.

Before the start of development of technical documentation for construction of facilities for which the building permit is necessary adequate preliminary activities must be performed. In particular these activities comprise: research and obtaining data and conditions on engineering-geological, geodesic, technical, technological, economic, water management conditions, environmental protection conditions and other conditions important for construction and use of constructed facility.

***Act on Forests*** define conditions for sustainable management of the forests and forests land with the main goal to provide and improve their productivity, biological diversity, renewability and improvement of forests potentials to climate change adaptation as well as their economical, ecological and social function without adverse effects on other ecosystems. According to the article 50 water regime in forests should not be altered by drainage or some other activities that have adverse effects on the water regime. During the development of projects for water source protection in the forests ecosystems the biological minimum has to be maintained. Before mentioned activities are permitted if the projects are authorized by Ministry.

***Table 3.3: Climate change legislation/policies***

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional Level	Implementation Jurisdiction <sup>5</sup>	Interlinkage <sup>6</sup>
1.	Belgrade SEE Climate Change Initiative (2007)	Belgrade SEE Climate Change Initiative (2007)	+	+	Ministry of Agriculture and Environmental Protection	
2.	South East European Climate Change Framework Action Plan for Adaptation (2008)	South East European Climate Change Framework Action Plan for Adaptation- SEE/CCFAP-A (2008)	+	+	Ministry of Agriculture and Environmental Protection	
4.	Ratifikacija okvirne konvencije UN o klimatskim promenama (2001)	UNFCCC ratified in 2001	+	+	Ministry of Agriculture and Environmental Protection	
5.	Ratifikacija Kjoto Protokola	The Kyoto Protocol ratified in 2007	+	+	Ministry of Agriculture and Environmental	

<sup>5</sup> Competent authority for implementation e.g. government, ministry, municipality, etc.

<sup>6</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

	(2007)				Protection	
7.	Prva (inicijalna) nacionalna komunikacija (2010)	The First Nacional communication ( report) to the United Nations Framework Convention on CC (2010)	+		Ministry of Agriculture and Environmental Protection	
8		South East European Climate Change Centre (SEEVCC) within the National Hydrometeorological Service of Serbia	+			
9		UNESCO II category centre "Water for Sustainable Development and Adaptation to Climate Change" located at the at the "Jaroslav Cerni" Institute for the Development of Water Resources in Belgrade	+			

10.	Strategija ICPDR-a za adaptaciju na klimatske promene na nivou Dunavskog sliva (2013)	ICPDR Strategy on Adoption to Climate Change (2013)	Transboundary	Ministry of Agriculture and Environmental Protection	WFD
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**Belgrade SEE Climate Change Initiative** main goal is to improve n cooperation in the region of Southeast Europe in the field of climate change and concluded an elaboration of Southeast European Climate Change Framework - Action Plan for Adaptation.

The development of the **SEE/CCFAP-A** follows the first recommendation within the Belgrade Initiative for the enhancement of sub-regional cooperation in the field of climate change and represents the outcome of a joint effort of the interested South East European (SEE) countries in creating a common platform for sub-regional cooperation in climate change. It is developed by experts from Republic of Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Montenegro and the Republic of Serbia, with purpose to ensure that the SEE population build their resilience capacity to the risks and impacts of climate change through implementing adaptation actions; improving understanding of climate change and its effects; education and awareness raising; improving decision making and good governance; developing and strengthening partnership and cooperation; and to support the SEE Countries in the implementation of Articles 5 and 6 of the United Nations Framework Convention on Climate Change (UNFCCC) and its Framework for Capacity Building and the Nairobi Programme of Work on Impacts, Vulnerability and Adaptation. The objectives are to:

- understand the main characteristics of climate variability and hazards in the SEE region;



- understand existing programmes/projects and institutional arrangements for addressing climate change; and
- identify adaptation activities to climate hazards and climate change. The SEE/CCFAP-A will establish a framework for current and future regional project initiatives in terms of adaptation to the impacts of climate change.

It will be revised and updated to reflect changes in climate sciences and in economic conditions in the SEE countries and emerging technologies. By taking action to address climate change, the SEE Governments

***The First National Communication (report) to the United Nations Framework Convention on Climate Change***

adopted in November 2010, was the first document that dealt with climate change in Serbia in a comprehensive way. It included calculations of greenhouse gases emissions, vulnerability assessments in certain sectors and adaptation possibilities, mitigation assessments concerning climate change, further an overview of research and education in that field, the implementation status of UNFCCC stipulations and a summary of financial and technological needs. This detailed report incorporates all relevant data related to the issue of climate change in Serbia. It also included defined adaptation measures for some sectors, although it did not mention the institutions which were responsible for them, or the timeframe for their implementation. The Second National Communication is still pending, but based on the first draft, the water, agricultural and forest sector vulnerability will be addressed in more details in comparison with the first national communication, since these sectors are identified as the most vulnerable to climate changes.

The most comprehensive analysis of potential climate change in relation to waters of the Danube River basin was done within the project “**The study of Danube River – Adaptation to Climate Change**” on behalf of the International Commission for the Protection of the Danube River” (ICPDR), carried out by the Ludwig- Maximilian-University in Munich in 2011 (Mauser et al, 2012). Numerous international and local projects and studies (over 60) on climate change in Central and Southeast Europe, the Danube River Basin and its tributaries area were analyzed within this study. The study aimed to elucidate the current state

of knowledge in regard to the climate change in this part of Europe and to suggest possible adaptation measures on potential climate change that would be harmonized by all countries in the Danube River Basin and serve as a basis for future cycles within the suitability framework for the Water Management Plan of the Danube River Basin.

***Table 3.4: Water management legislation/policies<sup>7</sup>***

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
1.	Uredba o utvrđivanju vodoprivredne osnove Republike Srbije ("Službeni glasnik RS", br. 11/2002)	Decree on determination of Water management master plan of the Republic of Serbia, Official gazette of RS, no. 11/2002)	+		Ministry of Agriculture and Environmental Protection	
2.	Zakon o vodama („ Službeni glasnik “, br. 30/2010 i 93/2012)	Water Act („Official Gazette RS“, no. 30/2010 and 93/2012)	+		Ministry of Agriculture and Environmental Protection	WFD

<sup>7</sup> Only those which are not listed before

<sup>8</sup> Competent authority for implementation e.g. government, ministry, municipality, etc.

<sup>9</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

3.	Odluka o određivanju granica vodnih područja („Službeni glasnik RS“, br. 73/2010)	Water districts delineation resolution („Official Gazette RS“, no. 73/2010)	+		Ministry of Agriculture and Environmental Protection	WFD
4.	Odluka o utvrđivanju Popisa voda I reda („Sužbeni glasnik RS“, br. 83/2010)	Resolution on I grade water bodies („Official Gazette RS“, no. 83/2010)	+		Ministry of Agriculture and Environmental Protection	WFD
5.	Pravilnik o određivanju granica podslivova („Official Gazette RS“, no. 54/2011)	Regulation on sub river basins delineation („Official Gazette RS“, no. 54/2011)	+		Ministry of Agriculture and Environmental Protection	WFD
6.	Pravilnik o sadržini i načinu vođenja Katastra vodnih objekata („Sužbeni glasnik RS“, br. 34/2011)	Regulation on water facilities/ structures cadastre („Official Gazette RS“, no. 34/2011)	+		Ministry of Agriculture and Environmental Protection	WFD
7.	Pravilnik o utvrđivanju vodnih tela površinskih i podzemnih voda („Sužbeni glasnik RS“, br. 96/2010)	Regulation on delineation of surface and ground waters water bodies („Official Gazette RS“, no. 96/2010)	+		Ministry of Agriculture and Environmental Protection	WFD
8.	Pravilnik o sadržini i načinu vođenja vodnog informacionog sistema, metodologiji, strukturi,	Regulation on Water information system that defines data collection	+		Ministry of Agriculture and Environmental Protection	WFD

	kategorijama i načinima sakupljanja podataka kao i o sadržini podataka o kojima se obaveštava javnost („Sužbeni glasnik RS“ br. 54/2011)	methodology, structure, categories and procedures and form of information to be presented to public („Official Gazette RS“ no. 54/2011)				
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The legal disposition concerning water management planning are ruled by the ***Water Management Master Plan of the Republic of Serbia (WMMP)*** which was adopted in year 2002. The WMMP establishes long term plan for maintenance and development of a water regime on the territory of the Republic of Serbia at one or more water areas or its parts. It was planned to be revised in 2012. The basic strategic goal of the water management master plan is the maintenance and development of a water regime which provides the best and most suitable technical, financial and ecological solutions for unique water management, protection of adverse effects of the waters, water protection and water usage.

Water in watercourses and ground waters, as a part of overall water represents a unique water management sub-system and its quantities and qualities have to be in accordance with society needs and environmental protection.

One of the basic starting points in water use is that regulated water regimes must not be endangered (qualitative and quantitative components), and that the life and health of people, flora and fauna, natural and cultural values and goods as well as rational requirements of downstream users shall not be jeopardized.

***The Water Management Strategy*** is a planning document that needs to set forth the long-term direction of water management and contain: an assessment of the current water management situation, water management objectives and

guidelines, implementation measures to achieve set objectives, and a projection of the future development of water management. This document needs to be harmonized with other strategic documents at the national level, such as those relating to spatial planning, sustainable development, use of natural heritage and resources, and environmental protection. The planning period for the Water Management Strategy is 20 years.

The Water Management Strategy is currently in its final stages of development and formal adoption is expected in 2015.

**Water Act** is already described in previous section.

**Table 3.5: River Basin Management Plans**

No.	Name of river basin Legislation / policy original title	Name of river basin Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>10</sup>	Approval status
1.	Plan upravljanja za sliv reke Dunav (2010)	The Danube River Basin Management Plan (2010)	Transboundary , National		Ministry of agriculture and environmental protection	Approved
2.	Plan upravljanja rekom Savom (2013)	Sava River Basin Management Plan	Transboundary , National		Ministry of agriculture and environmental protection	Approved
3.	Integralni Plan upravljanja za sliv reke Tise (2011)	Integrated Tisza River Basin Management Plan (2011)	Transboundary , National		Ministry of agriculture and environmental protection	Approved

The new Water Law of the Republic of Serbia transposes the main principles of the EU Water Framework Directive. According to the Water Act, **River Basin Management Plans** are to be developed for a period of six years and need to be adopted, in compliance with the above Strategy, for the Danube River Basin and 6 water districts (Belgrade, Morava, Lower Danube, Srem, Bačka and Banat, and the Kosovo and Metohija). River Basin Management Plans contain: an assessment of the current

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<sup>10</sup> Competent authority for implementation e.g. government, ministry

state of water resources, environmental objectives for surface water and groundwater, a program of measures, and methods for achieving set objectives in all water management segments (water use, water protection and protection against the adverse effects of water).

The River Basin Management Plans for the transboundary River basins (Danube, Sava and Tisza) are developed, and for them activities that would contribute to the update of the First plans are ongoing. At the National level, River Basin Management Plans are still pending.

It is essential that all these planning documents, primarily the Water Management Strategy that should anticipate developments through the year 2034, define possible solutions for all water sector segments, with special emphasis on measures that will ensure adaptation to potential climate change impacts. Specific adaptation measures are to address three main areas: water use, water protection and protection against the adverse effects of water.

***Table 3.6: OTHER legislation/policies of relevance for CC - WARE project***

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
1.	Zakon o javnim preduzećima ("Službeni glasnik RS", br. 119/2012, 116/2013 i 4/2014)	Public companies Act ("Official Gazette RS", no. 119/2012, 116/2013 and 44/2014)	+	+	Ministry of state administration and local government	Water Act Environmental Protection Act
2.	Zakon o potvrđivanju Konvencije o saradnji na zaštiti i održivom korišćenju reke Dunav  („Službeni glasnik SRJ” –	Act of ratification of Danube River Protection Convention  („Official Gazette SRJ” – International contracts , no. 2/2003)			Ministry of Agriculture and Environmental Protection	Water Act WFD Environmental Protection Act

<sup>11</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>12</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)



No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
	Međunarodni ugovori, br. 2/2003)					
3.	Zakon o ratifikaciji Okvirnog sporazuma o slivu reke Save  („Službeni glasnik SCG“, Međunarodni ugovori, br. 12/04)	Act on ratification of Framework Agreement on the Sava River Basin  („Official Gazette SCG“, International contracts, no. 12/04)			Ministry of Agriculture and Environmental Protection	WFD
4.	Memorandum o razumevanju za saradnju na slivu reke Tise (2004)	Memorandum of Understanding - Towards a River Basin Management Plan for the Tisza river supporting sustainable development of the region(2004)			Ministry of Agriculture and Environmental Protection	Water Act WFD Environmental Protection Act
5.	Zakon o slobodnom pristupu informacijama od javnog značaja  ("Službeni glasnik RS", br. 120/2004, 54/2007, 104/2009 i 36/2010)	Act on free access to information of public importance  ("Official Gazette RS", no. 120/2004, 54/2007, 104/2009 and 36/2010)	+	+	Ministry of Agriculture and Environmental Protection	The Aarhus Convention The Water Act Environmental Protection Act

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
	Zakon o potvrđivanju Konvencije o zaštiti i korišćenju prekograničnih vodotoka i međunarodnih jezera i amandmana na čl. 25 i 26. Konvencije o zaštiti i korišćenju prekograničnih vodotoka i međunarodnih jezera (Sl. gl. RS - međunarodni ugovori, br. 1/2010)	Act on ratification of Convention On The Protection And Use Of Transboundary Watercourses And International Lakes  ("Official Gazette RS", International contracts, no. 135/2004 and 36/2009)	+		Ministry of Agriculture and Environmental Protection	Water Act WFD
6.	Zakon o potvrđivanju Okvirne konvencije o zaštiti i održivom razvoju Karpata, („Službeni glasnik RS » Međunarodni ugovori“, br. 102/2007);	Act on ratification of Carpathian Convention ("Official Gazette RS" International contracts, no. 102/2007)				

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
7.	Zakon o proceni uticaja na zivotnu sredinu, ("Sl. glasnik RS", br. 135/2004 i 36/2009)	Environmental Impact Assesment Act  ("Official Gazette RS", no. 135/2004 and 36/2009)	+	+	Ministry of Agriculture and Environmental Protection	EIA Directive  Environmental Protection Act
8.	Zakon o strateškoj proceni uticaja na životnu sredinu ("Sl. glasnik RS", broj 135/04)	Strategic Environmental Assesment Act  ("Official Gazette RS", 135/04)	+		Ministry of Agriculture and Environmental Protection	SEA Directive 2001/42/EC  Environmental Protection Act  Water Act
9.	Zakon o meteorološkoj i hidrološkoj delatnosti  ("Sl. glasnik RS", broj 88/2010)	Act on meteorological and Hidrological activities (treba neka lepsa rec ali su oni tako stavili na njihov sajt)  ("Official Gazette RS", 88/2010)	+		Republic Hydrometeorological Service	WFD  Water Act  Environmental protection Act
10.	Zakon o upravljanju otpadom  ("Sl. glasnik RS", broj 36/09)	Waste Management Act  (Official Gazette of RS No. 36/09)	+	+	Ministry of Agriculture and Environmental Protection	

**Strategic Environmental Assessment Act** applies to a wide range of public plans and programmes (e.g. on land use, transport, energy, waste, agriculture, etc). Plans and programmes in the sense of the SEA Directive must be prepared or adopted by an authority (at national, regional or local level) and be required by legislative, regulatory or administrative provisions. Plans and programmes in the sense of the SEA Directive must be prepared or adopted by an authority (at national, regional or local level) and be required by legislative, regulatory or administrative provisions. However, it does not address climate change and ecosystem services.

**Act on meteorological and hydrological activities** regulate meteorological and hydrological activities, organization and manner of performing meteorological and hydrological activities of interest for the Republic of Serbia and other meteorological and hydrological activities, meteorological and hydrological disasters early warning system, meteorological and hydrological data information fund, protection of Hydrological Information System, international cooperation, as well as other issues of importance for meteorological and hydrological activities. Of the particular interest for the CC WARE project are hydrological and meteorological networks that collect data on water quality and quantity, precipitation, temperature, etc. In this Act, climate change is addressed within the general statement.

The **Waste Management Act** is listed in this review as a result of the adverse effects that improper waste disposal has on water resources, ecosystem services and land uses. It aims to establish integral waste management system, starting from waste collection, transport, storage, treatment and ultimate disposal. The Law represents a framework defining the latest principles, types and classification of waste, waste management planning, competences in the field of waste management, waste management organizations, management of special waste flows, waste management permits, transboundary movement of waste, waste-related reporting and database formation, as well as waste management financing. The Act provides and stipulates conditions for:

- Prevention of waste generation, through development of clean technologies and more rational use of natural resources, as well as mitigation of hazardous characteristics and effects of those wastes whose generation cannot be avoided;
- Waste reuse and recycling, extraction of secondary raw materials from waste and waste use as energy source;
- Waste disposal; and
- Remediation and rehabilitation of uncontrolled waste disposal sites.

The Act defines planning and implementation of waste management system, waste handling during collection, transport, storage, reuse, treatment and disposal of waste, special waste type management, control, as well as other issues important for waste management.

## 2. Level of relevant EU legislation implementation

The number of EU Directives, or their parts are transposed into the Serbian legislation and policies (EU WFD, The Aarhus Convention, SEA Directive 2001/42/EC , etc). However the implementation proces is ongoing, and it is realistic to say that implementation process will continue for the next 20 years.

The National regulation for water resources in Serbia includes a number of acts and sub legal acts that are mostly in line with the European regulations related to this sector. This is particularly true after the enactment of regulations that are implemented since year 2004 (Law on environmental protection, Law on planning and construction, Law on waters, Law on mining and other).

The Water Act is mainly based on recommendations given in the EU Directives. More generally, the legislation related to environmental protection is in a process of harmonization with the EU Directives. In this context, the full implementation of Water Act will take some time. Number of by-laws is in an intensive process of preparation with a view to fulfil the requirements related to the accession of the Republic of Serbia to the EU. As these by-laws will progressively repeal existing legal and regulatory framework, the Water Management Strategy will be developed in accordance with the principles which are being established in the new in-progress legislation.

Number of by-laws listed in table above are in line with EU directives requirements and will contribue to implemetation of WFD and other EU water directives in Serbia.

### 3. GAPS IDENTIFIED and Proposal/ Idea of actions/measures/ policies that might fill the “GAPS”

With respect to objectives of the CC WARE project, there are several gaps that should be considered in Serbia. First of all, the transposition of the EU legal framework without comprehensive consideration of the national priorities and characteristics might be time and money consuming. At the moment, it is estimated that around 10 Billion euros are needed just for water sector to fulfill strict requirements. The similar apply to all sectors, so the lack of funding is a huge issue with respect to ESS, CC, land use practices, drinking water supply. Although the roles of ecosystems are recognized in sectoral legislation, e.g., Act on Forests, ecosystem services with respect to provision of drinking water are not recognized in majority of sectoral legislation and policies.

There is contradiction among sectoral laws. Two significant laws, important for land use practices (among the others) in the terms the exploitation permit issuance the Act on planning and construction and the Act on water are not coordinated. In the former the exploitation permit is issued within the period of seven days upon the reception of positive report by the Commission for Technical control without reference if the Water permit has been previously issued. According to the latter the exploitation permit cannot be issued without Water permit.

Coordination among different inspections has to be improved and jurisdictions should be better specified.

Despite the numerous of legislation documents they are not always implemented. As an example, drinking water sources protection zones are not always considered properly, and illegal building happened close to them.

There is sectoral cooperation at the state level, however it should be improved.

The horizontal coordination is weak, and end beneficiaries and stakeholders at the local level are not always included in decision making process. Moreover, the capacity building at all levels is necessary.

In summary, the legislation and policies in general terms advocate multidisciplinary approach and inter-sectoral cooperation but it is not applied in practice.

When it comes to climate change, the national strategies developed over the past several years have generally mentioned the issue of adaptation to climate change. Thus, the National Strategy for Sustainable Development<sup>94</sup>, National Environmental Protection Programme and Biodiversity Strategy<sup>95</sup> has paid special attention to climate change and framework adaptation measures have been recommended. The Strategy for Scientific and Technological Development has identified environment and climate change as one of the seven priority fields in the domain of science and technology.

In the earlier adopted sectoral documents, such as the Forestry Development Strategy, Energy Sector development Strategy by 2015 and Agriculture Development Strategy, climate change was only recognized as one of several important factors, but no special attention was paid to the planning of actual measures for climate change mitigation and sectoral adaptation to changed climate conditions.

One of the question that still remains open given the scope of the CC WARE is do we regulate too much? Although the legislation and policies are regularly updated their applicability is sometimes very difficult and they are not well accepted by practitioners due to their contradictions, complexity etc. The full application of any policy requires involvement of the end users at the early stages of the policy development and comprehensive consideration of the practitioners' opinions on their applicability.



# ***ANNEX 8***

## ***NATIONAL LEGISLATION TEMPLATE SLOVENIA***



# Relevant national legislation analyses for improvement of land use and water management regulation and policies in Republic of Serbia within the scope of CC - WARE project

Contribution by PP3 (University of Ljubljana) and  
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## 1. NATIONAL/REGIONAL LEGISLATION

**Table 3.1: Drinking water supply and drinking water sources protection**

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
1.	Zakon o varstvu okolja	Environmental Protection Act (UL RS 39/2006)	X		National Assembly	Ministry for Agriculture and the Environment
2.	Zakon o vodah	Water Act (UL RS 67/2002)	X		National Assembly	Ministry for Agriculture and the Environment
3.	Uredba o oskrbi s	Decree on drinking	X		National Assembly	Ministry for Agriculture and the

<sup>1</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>2</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	pitno vodo	water supply (UL RS 88/2012)				Environment
4.	Pravilnik o pitni vodi	Rules on drinking water (UL RS 19/2004)	X		Ministry of Health	
5.	Pravilnik o zdravstveni ustreznosti pitne vode	Rules on drinking water quality (UL RS 46/1997)	X		Ministry of Health	
6.	Pravilnik o katastrih gospodarske javne infrastruktura javnih služb varstva okolja	Rules on the cadastres of public infrastructure for environmental public services	X		Ministry for Agriculture and the Environment	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
		(UL RS 28/2011)				
7.	Odlok o oskrbi s pitno vodo	Decree on drinking water supply (MOL) (UL RS 17/2006)		X	City Council	
8.	Pravilnik o kriterijih za določitev vodovarstvenega območja	Rules on criteria for the designation of a water protection zone (UL RS 64/2004)	X		Ministry for Agriculture and the Environment	Ministry of Health
9.	Uredba o vodovarstvenem območju za vodno telo vodonosnikov Ljubljanskega barja in okolice	Decree on determining the drinking water protection area for the Ljubljansko barje in okolice Ljubljane	X		National Assembly	Ministry for Agriculture and the Environment

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
	Ljubljane	(UL RS 115/2007)				
10.	Uredba o emisiji snovi pri odvajanju odpadne vode iz komunalnih čistilnih naprav	Decree on the emission of substances in waste water discharged from urban waste water treatment plants (UL RS 45/2007)	X		National Assembly	Slovenian Environmental Agency, Ministry for Agriculture and the Environment
11.	Uredba o emisiji snovi pri odvajanju odpadne vode iz malih komunalnih čistilnih naprav	Decree on the emission of substances in the discharge of waste waters from small urban waste water treatment plants (UL RS 98/2007)	X		National Assembly	Ministry for Agriculture and the Environment

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
12.	Uredba o emisiji snovi in toplote pri odvajanju odpadnih vod v vode in javno kanalizacijo	Decree on the emission of substances and heat in the discharge of wastewater into waters and public sewage system  (UL RS 47/2005)	X		National Assembly	Ministry for Agriculture and the Environment
13.	Uredba o emisiji snovi in toplote pri odvajanju odpadnih voda iz virov onesnaževanja	Decree on the emission of substances and heat in the discharge of waste water from pollution sources  (UL RS 35/1996)	13.	Uredba o emisiji snovi in toplote pri odvajanju odpadnih voda iz virov onesnaževanja	Decree on the emission of substances and heat in the discharge of waste water from pollution sources  (UL RS 35/1996)	13.

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>1</sup>	Interlinkage <sup>2</sup>
14.	Pravilnik o obratovalnem monitoringu onesnaževanja podzemne vode	Rules on the operational monitoring of underground water pollution  (UL RS 49/2006)	14.	Pravilnik o obratovalnem monitoringu onesnaževanja podzemne vode	Rules on the operational monitoring of underground water pollution  (UL RS 49/2006)	14.
15.	Pravilnik o prvih meritvah in obratovalnem monitoringu odpadnih voda ter o pogojih za njegovo izvajanje	Rules on initial measurements and operational monitoring of waste water and on conditions for its implementation  (UL RS 54/2011)	15.	Pravilnik o prvih meritvah in obratovalnem monitoringu odpadnih voda ter o pogojih za njegovo izvajanje	Rules on initial measurements and operational monitoring of waste water and on conditions for its implementation  (UL RS 54/2011)	15.



1. *Environmental Protection Act*: The Act manages the protection of the environment against burdens as a basic condition for sustainable development. Within this framework defines basic environmental protection principles, environmental protection measures, environmental monitoring and informations, economic and financial instruments for environmental protections, public services of environmental protections and other related questions.
2. *Water Act*: Basic document for water resource management as well as environmental and water quality standards. It is dealing with marine, inland and ground waters as well as water and waterside land. Management of water and waterside land includes water protection, water regulation and decision of water use. The Law also manages public assets and public services within the water areas, water facilities and instruments as well as other water related questions.
3. *Decree on drinking water supply*: The roles determine the duties that have to be carried out to run the public drinking water service. It has to be organized by local community on its area with exception when the elevation is above 1500 m or there live less than 50 residents. For use the surface or groundwater for public drinking supply the water permission has to be gotten. In the rules also the standards for public service is determined.
4. *Rules on drinking water*: It defines the request for public drinking water supply to protect human health against harmful effects due to any kind of drinking water pollution.
5. *Rules on drinking water quality*: This regulation prescribes the requirements for drinking water quality and conditions for its provision for the protection of human health.

6. *Rules on the cadastres of public infrastructure for environmental public services:* This policy determines the contents of individual registers of public infrastructure public environmental services (public infrastructure) for which the owner of the public infrastructure of national and local significance transmit data to Geodetic Administration of the Republic of Slovenia for enrollment in the consolidated cadastre of public infrastructure.
7. *Decree on drinking water supply (MOL):* This ordinance regulates the area of the Municipality of (MOL) method to provide required public services supply of drinking water by setting: (1) organizational and spatial design of public service, (2) nature and extent of public goods of public services and their spatial, (3) conditions for the provision of water supply, (4) rights and obligations of users, (5) sources of financing of public services and the way of their design and (6) the nature and extent of facilities necessary for public service.
8. *Rules on criteria for the designation of a water protection zone:* The rule treats the water bodies and their parts that are used for drinking water. It defines (1) criteria to define exterior boundary of water protection area, (2) criteria to define internal boundary of water protection area, (3) criteria to define water protection regime in frame of activities in the environment that present the limit risk for water body pollution, and (4) other questions for defining water protection areas.
9. *Decree on determining the drinking water protection area for the Ljubljansko barje in okolice Ljubljane:* This decree determines: (1) the drinking water protection zones, (2) measurements, interdictions and limitations for water use and construction, (3) inspection and penal provisions, (4) regulate the forest and land management and (5) marking the protection areas. (Ljubljansko barje (moor) is included in CC-WARE project as a test area.)

10. *Decree on the emission of substances in waste water discharged from urban waste water treatment plants:* It defines: (1) the limits of waste water parameters, (2) the limits of cleaning effects of waste water, (3) special provisions for planning and working waste water treatment plants, and (4) special activities with drawing off industrial waste water. The decree also defines sensitive areas and their contributing provinces.
11. *Decree on the emission of substances in the discharge of waste waters from small urban waste water treatment plants:* The Decree defines the conditions for emission from small urban water treatment plant and conditions for building permit.
12. *Decree on the emission of substances and heat in the discharge of wastewater into waters and public sewage system:* The Decree defines the limits of emissions substance and heat, evaluation of emissions, prohibitions, restrictions and other provisions to reduce the emissions and content of environmental protection consent
13. *Decree on the emission of substances and heat in the discharge of waste water from pollution sources:* This regulation defines the pollution sources from which waste water is discharged: (1) emission limit values of substances into surface water and in coastal waters or into sewers, (2) limits emissions of heat to the liquid surface water, (3) evaluation of emissions of substances and heat and (4) prohibition and other measures to reduce emissions to waters and soil in relation to the discharge of wastewater. This regulation does not regulate the emission of radioactive substances in the wastewater discharged from pollution sources.

14. *Rules on the operational monitoring of underground water pollution:* It defines the groundwater quality parameters that are subject of operational monitoring of groundwater pollution, methodology for its implementation and the form for the reporting the data to the ministry. It also defines the conditions for earning the authorisation and reasons for its suppression.
15. *Rules on initial measurements and operational monitoring of waste water and on conditions for its implementation:* It defines the parameters of waste water that are subject of first measurements and operational monitoring of waste water, the methodology for sampling and measuring the quality parameters and quantity and form for the reporting the data to ministry.

**Table 3.2: Land use legislation/ policies**

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
1.	Zakon o varstvu okolja	Environment Protection Act (UL RS 39/2006)	X		National Assembly	Ministry for Agriculture and the Environment
2.	Zakon o prostorskem načrtovanju /ZPNačrt/	Spatial Planning Act (UL RS 33/2007)	X		National Assembly	Ministry for Agriculture and the Environment
3.	Zakon o urejanju prostora /ZUreP-1/	Spatial Management Act	X		National Assembly	Ministry for Agriculture

<sup>3</sup> Authority in charge for implementation e.g. ministry, municipality, etc.

<sup>4</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
		(UL RS 110/2002)				and the Environment
4.	Pravilnik o monitoringu ponorov in emisij toplogrednih plinov zaradi rabe tal, spremembe rabe tal in gozdarstva	Rules on monitoring of land use, land use change and forestry (UL RS 50/2010)	X		Ministry for Agriculture and the Environment	
5.	Zakon o kmetijstvu /ZKme- 1/	Agriculture Act (UL RS 45/2008)	X		Ministry of Agriculture, forestry and food	
6.	Pravilnik o evidenci dejanske rabe kmetijskih in gozdnih zemljišč	Rules on evidence of actual agricultural and forestal land use (UL RS 90/2006)	X		Ministry of Agriculture, forestry and food	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
7.	Zakon o kmetijskih zemljiščih /ZKZ/	Agricultural Land Act (UL RS 59/1996)	X		National Assembly	
8.	Zakon o gozdovih /ZG/	Act on Forests (UL RS 30/1993)	X		National Assembly	Ministry for Agriculture and the Environment, Ministry of Agriculture, forestry and food
9.	Pravilnik o varstvu gozdov	Rules on the protection of forests (UL RS 92/2000)	X		Ministry of Agriculture, forestry and food	

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
10.	Zakon o varstvu pred naravnimi in drugimi nesrečami /ZVNDN/	Protection Against Natural and Other Disasters Act  (UL RS 64/1994)	X		National Assembly	Ministry of Defence, Administratio n for civil protection and disaster relief
11.	Operativni program: Program upravljanja območj Natura 2000 za obdobje 2007-2013	Operational programme - Natura 2000 management programme for the period from 2007 to 2013	X		Ministry for Agriculture and the Environment	
12.	Uredba o posebnih varstvenih območjih	Decree on special protection areas	X		National Assembly	Ministry for Agriculture



No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>3</sup>	Interlinkage <sup>4</sup>
	(območjih Natura 2000)	(Natura 2000 areas)  (UL RS 49/2004)				and the Environment
13.	Zakon o stavbnih zemljiščih /ZSZ/	Construction Land Act  (UL RS 44/1997)	X		National Assembly	Ministry of Finance
14.	Zakon o graditvi objektov /ZGO-1/	Construction Act  (UL RS 110/2002)	X		National Assembly	Ministry of Infrastructure and Spatial Planning

1. *Environment Protection Act*: Already described.

2. *Spatial Planning Act*: This act regulates spatial planning as part of spatial planning by providing both types of spatial planning documents, their contents and their relations as well as processes for their preparation and adoption. It is also regulates

building land and the establishment and operation of a spatial information system. With this act, the requirements of Directive 2001/42/EC of the European Parliament and of the Council were included in the legal system of the Republic of Slovenia. Requirements are related to the assessment of the effects of certain plans and programs on the environment, which relate to the obligation to ensure the quality of environmental reports.

3. *Spatial Management Act*: This act regulates spatial planning and spatial enforcement measures for the implementation of the planned spatial arrangements, provision of building land for the construction and management of spatial databases. It defines the conditions for carrying out the activities of spatial planning and provides offenses relating to spatial planning and spatial planning activities.
4. *Rules on monitoring of land use, land use change and forestry*: This policy provides design, object and methodology for monitoring sinks and greenhouse gas emissions from land use, land use change and forestry. This policy also specifies the reporting requirements for sinks and greenhouse gas emissions from land use, land use change and forestry (due to the implementation of Decision No. 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring greenhouse gas emissions and for implementing the Kyoto Protocol).
5. *Agriculture Act*: This act defines the objectives of agricultural policy, planning agricultural and rural development, agricultural policy measures, the safety of food of plant origin in primary production, food quality at all stages of production, processing and transport, protection of consumer interests and consumer, marking agricultural products and foodstuffs, transport of agricultural products and foodstuffs, the conservation of biodiversity in agriculture, supplementary activities on

farms, utilities, databases and information in the field of agriculture, the procedures and authorities for the implementation of this law, research, education, development and technical tasks and inspection.

6. *Rules on evidence of actual agricultural and forestal land use:* This regulation defines detailed type of the actual use of agricultural and forest land, form and manner of establishing and keeping records of actual use of agricultural and forest land, availability of data records, the detailed content of the records, the method of determining the actual use of agricultural and forest land, way of obtaining data, the minimum area covered information, coordination of information, the way of changes and maintenance of records of actual use of agricultural and forest land.
7. *Agricultural Land Act:* This act regulates the use of agricultural land, their protection, marketing and leasing, agrarian operations and common pastures. The provisions of this act shall apply meaningful also to the forests, if not otherwise provided by law.
8. *Act on Forests:* This act regulates the protection, cultivation, exploitation and use of forests and disposal of forests as a natural resource with the aim to ensure sustainable and multifunctional management in accordance with the principles of environmental protection and natural values, sustainable and optimal functioning of the forest as ecosystem as well as the exercise of their functions. It is also regulates the economic conditions of forest area as well as with individual forest trees and groups of forest trees outside of a settlement to their role in the environment to maintain and strengthen.
9. *Rules on the protection of forests:* This policy governs the conditions for the sustainable management and use of forests (exploitation of forest functions), the conservation of biological balance of the forest ecosystem, planning measures to prevent adverse impacts on forest, monitoring damage to forests and protection of forests against fires.

10. *Protection Against Natural and Other Disasters Act*: This act regulates the protection of people, animals, property, cultural heritage and the environment against natural and other disasters. The aim of protection against natural and other disasters is to reduce the number of accidents and prevent or reduce casualties and other consequences of these accidents. Government, municipalities and other local authorities (local communities) organize the protection against natural and other disasters as a single, integrated system in the country. The system of protection shall include programming, planning, organizing, implementing, monitoring, financing measures and activities for protection against natural and other disasters.
11. *Operational programme - Natura 2000 management programme for the period from 2007 to 2013*: The basic purpose of the operational programme is to detail the implementation of obligations under the protection of special protected areas – Natura 2000 sites for the period 2007–2013, as imposed on Slovenia by the Habitats Directive and Birds Directive. Slovenia will thus be able to attain one of the EU's objectives, namely, the provision of a favorable conservation status of plant and animal species and habitat types important at the European level. By implementing the operational programme, the Government of the Republic of Slovenia will contribute to attaining sustainable development objectives. The operational programme designates protection objectives and measures at Natura sites, as well as the competent sectors and responsible implementers of these protection measures. A further goal in this respect is to enable horizontal links with strategic plans and development programmes.
12. *Decree on special protection areas (Natura 2000 areas)*: This decree regulates special protection areas (Natura 2000 sites) and protection objectives in these areas and protection policies to maintain or achieve a favorable status of wild flora and fauna, their habitats and habitat types, which conservation is in the interest of the European Union, and other rules of conduct for the conservation of these areas. This regulation also provides for potential special areas of conservation and the way of

their care. It is also transposes part of Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, and of Council Directive 79/409/EEC on the conservation of wild birds.

13. *Construction Land Act*: This act provides the building sites, public economic and built a public good as well as the conditions for the management of construction land.
14. *Construction Act*: This act regulates the conditions for the construction of buildings, defines essential requirements and meet them regarding to the properties of objects, prescribe the manner and conditions for carrying out activities in the field of construction, regulates the organization and the working area of two professional associations, governed by the inspection and supervision, which provides for penalties for offenses in connection with the construction of facilities and regulating other matters associated with the construction of facilities. The construction of the facility under this act comprises the design, construction and maintenance of the facility. The provisions of this act shall not apply to the construction of facilities that are necessary for imminent natural disasters or in order to prevent or minimize their consequences for facilities for protection, rescue and relief from natural and other disasters and to build military engineering projects, shelters and other protective facilities during emergency or state of war. The provisions of this act shall not apply to the construction and maintenance of buildings in mining area, which are in direct connection with the exploration, exploitation or cessation of mineral extraction.

**Table 3.3: Climate change legislation/policies**

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional Level	Implementation Jurisdiction <sup>5</sup>	Interlinkage <sup>6</sup>
1.	Strategija prilagajanja slovenskega kmetijstva in gozdarstva podnebnim spremembam	Adaptation strategy of Slovene agriculture and forestry to CC (2008)	X		Ministry of Agriculture, forestry and food	
2.	Akcijski načrt strategije prilagajanja slovenskega kmetijstva in gozdarstva podnebnim spremembam za leti 2010 in 2011	Action plan for adaptation strategies of Slovenian agriculture and forestry to climate change for 2010 and 2011	X		Ministry of Agriculture, forestry and food	

<sup>5</sup> Competent authority for implementation e.g. government, ministry, municipality, etc.

<sup>6</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

3.	Strategija prehoda slovenije v nizkoogljično družbo do leta 2050 (osnutek)	Strategy for the Transition of Slovenia to a low carbon society by 2050 (draft)	X		Ministry of Agriculture and Environment	
4.	Zakon o podnebnih spremembah - osnutek	Climate change act (draft)	X		National Assembly	Government office of the Republic of Slovenia for Climate Change
5.	Zakon o vodah	Water Act (UL RS 67/2002)	X		National Assembly	Ministry for Agriculture and the Environment

1. *Adaptation strategy of Slovene agriculture and forestry to CC (2008)*: In the future we expect in addition to increased air temperature and soil also changed rainfall regime, increasingly scarce water resources and increased intensity and frequency of extreme weather events. The projected climate change may be timely prepared as to mitigate the negative effects. The purpose of adaptation is to reduce the risk and damage from current and future adverse effects of climate change in a way that is cost-effective or exploiting potential benefits. Adaptation can encompass national or regional strategies and practical measures to be

implemented at the community level or by individuals. Concrete measures in the public and private sectors are very diverse and can include mild and relatively inexpensive measures, eg. water conservation, efficient use of scarce water changes in crop rotations, sowing dates and use of drought tolerant crops, maintenance of adaptive potential of forest tree species to changes in the environment, adapting management of natural ecosystems and response to disturbance, public planning, and awareness raising as well as costly defense and relocation measures. Measures are also needed in the public sector, for example adaptation of land use or update strategies for dealing with natural disasters and early warning systems.

2. *Action plan for adaptation strategies of Slovenian agriculture and forestry to climate change for 2010 and 2011:* As realization plan of Adoption strategy of Slovene agriculture and forestry to CC (2008).
3. *Strategy for the Transition of Slovenia to a low carbon society by 2050:* The draft Strategy for the transition of Slovenia to a low carbon society by 2050 has been prepared and put to public consultation. The national long-term Climate Strategy aims to set long-term guidelines and within that context it also provides a framework for actions of adaptation to the inevitable consequences of climate change. It includes climate change adaptation proposals as follows: (1) long-term goals of Slovenia to adaptation to climate change; the general long-term goal of Slovenia in relation to the adaptation to climate change is to ensure that the vulnerability to the effects of climate change does not increase above present level for the country. (2) vulnerability assessment of the country to the effects of climate change; The first step for determining the vulnerability of the country to climate change is to undertake an assessment of exposure to potential threats posed in different areas and activities. A vulnerability assessment is seen as the second step as it consists not only of the analysis of the risks posed by the effects of climate change but also of an assessment of adaptive capacity of the environment, society and the economy. (3) funding of climate-related measures in developing countries; The basis for funding of climate-related measures in developing countries is



addressed within the current draft Climate Strategy which also includes funding programmes and projects for climate change adaptation in developing countries. (4) reporting and monitoring of progress; Monitoring of the progress has been prescribed on a regular basis, reports should be prepared at least every six years and adopted by the National Assembly together with proposed changes to the Climate Strategy.

4. *Climate change act (draft)*: This act defines (1) the objectives of the Republic of Slovenia in relation to climate change mitigation and adaptation, (2) governed by fundamental principles in relation to climate change mitigation and adaptation, (3) determine a climate change mitigation measures and legal instruments for their implementation, a certain adaptation measures to climate change and legal instruments for their implementation, (4) regulates the programming of climate change mitigation and adaptation and regulates other issues related to climate change mitigation and adaptation. The purpose of the act is to regulate climate change mitigation and adaptation in the Republic of Slovenia to be in Slovenia greenhouse gas emissions reduced and that the negative impact of climate change on society and the environment in smaller and at the same time to encourage and enable the development to go new economic and non-economic activities, related to climate change mitigation and adaptation.
5. *Water Act*: Already described.

**Table 3.4: Water management legislation/policies<sup>7</sup>**

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>8</sup>	Interlinkage <sup>9</sup>
1.	Zakon o vodah	Waters Act (UL RS 67/2002)	X		National Assembly	
2.	Pravilnik o monitoringu podzemnih voda	Rules on groundwater monitoring (UL RS 31/2009)	X		Ministry for Agriculture and the Environment	
3.	Uredba o stanju podzemnih voda	Decree on groundwater status	X		National Assembly	Ministry for Agriculture and the Environment

<sup>7</sup> Only those which are not listed before

<sup>8</sup> Competent authority for implementation e.g. government, ministry, municipality, etc.

<sup>9</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

		(UL RS 25/2009)				
4.	Uredba o kakovosti podzemne vode	Decree on the quality of underground water  (UL RS 11/2002)	X		National Assembly	Ministry for Agriculture and the Environment, Environmental Protection Agency
5.	Pravilnik o monitoringu stanja površinskih voda	Rules on surface water status monitoring  (UL RS 10/2009)	X		Ministry for Agriculture and the Environment	
6.	Uredba o stanju površinskih voda	Decree on surface water status  (UL RS 14/2009)	X		National Assembly	Ministry for Agriculture and the Environment
7.	Pravilnik o obratovalnem monitoringu stanja površinskih voda	Rules on surface water status monitoring  (UL RS 91/2013)	X		Ministry for Agriculture and the Environment	

8.	Pravilnik o obratovalnem monitoringu onesnaževanja podzemne vode	Rules on the operational monitoring of underground water pollution (UL RS <a href="#">49/2006</a> )	X		Ministry for Agriculture and the Environment	
9.	Uredba o vsebini in načinu priprave podrobnejšega načrta zmanjševanja ogroženosti pred poplavami	Decree on establishment of flood risk management plans (UL RS <a href="#">7/2010</a> )	X		Ministry for Agriculture and the Environment	
10.	Uredba o kriterijih za določitev ter načinu spremljanja in poročanja ekološko sprejemljivega pretoka	Decree on criteria for determination and on the mode of monitoring and reporting of ecologically acceptable flow	X		National Assembly	Ministry for Agriculture and the Environment

		(UL RS 97/2009)				
11.	Pravilnik o kriterijih za določitev vodovarstvenega območja	Rules on criteria for the designation of a water protection zone  (UL RS 64/2004)	X		Ministry for Agriculture and the Environment	Ministry for Health
12.	Pravilnik o vrstah in obsegu nalog obveznih državnih gospodarskih javnih služb urejanja voda	Rules on the types and scope of tasks of mandatory state public utility services in the field of water management  (UL RS 57/2006)	X		Ministry for Agriculture and the Environment	
13.	Pravilnik o določitvi vodnih teles podzemnih voda	Rules on determining water bodies of groundwater	X		Ministry for Agriculture and the Environment	

		(UL RS 63/2005)				
14.	Pravilnik o določitvi in razvrstitvi vodnih teles površinskih voda	Rules on determining and classification for water bodies on surface water  (UL RS 63/2005)	X		Ministry for Agriculture and the Environment	

1. *Water Act*: Already described.
2. *Rules on groundwater monitoring*: The method and extend for groundwater monitoring is prescribed in the Rules. The groundwater monitoring includes monitoring of groundwater chemical status and monitoring of groundwater quantity. The monitoring sites have to be selected in the way that the chemical status in each catchment area is noted and the long term trends of rising pollutants concentration are detected. The Rules define the range of chemical parameters, the monitoring sites, the frequency of monitoring, sampling and analysis methods. The purpose of groundwater quantity monitoring is to control the groundwater level oscillation regime and to define the quantative status of groundwater bodies.
3. *Decree on groundwater status*: The Decree defines the procedure for determine the threshold values for groundwater quality, parameters for chemical and quantative state, groundwater quality standards, threshold values for groundwater quality,

conditions to reach the good quality and quantity state, criteria to determine the pollution trends and criteria to determine the groundwater body pollution load.

4. *Decree on the quality of underground water:* The Decree defines the chemical status of the groundwater, the threshold values for good quality groundwaters, the standards to determine the chemical state and measurements to determine the excessive pollution of groundwater body and its long-term changes.
5. *Rules on surface water status monitoring:* In regulation the methods, extent and terms to carry out the surface water monitoring are defined. It prescribes the way and the form to prepare the report about surface water state monitoring.
6. *Decree on surface water status:* The Decree defines the criterion for surface water quality status, environmental quality standards to determine the chemical and ecological status of surface water body and types of surface water monitoring. The decree includes the provisions to define chemical and ecological status of surface water body.
7. *Rules on surface water status monitoring:* This document provides for operational monitoring of surface water parameters, scope, methodology, sampling, measurement and analysis of samples, evaluation of the impact on the status of surface water content as well as the report and the manner and form of recording and reporting of operational monitoring of surface. It specifies the sampling sites, parameters and scope of the operational monitoring of surface water in order to determine the impact of waste disposal at the landfill. This policy specifies the technical conditions to be met by a person to obtain authorization for operational monitoring of surface water, and detailed reasons for the withdrawal of authorizations for operational monitoring of surface water .

8. *Rules on the operational monitoring of underground water pollution:* This policy defines the parameters of groundwater, subject to operational monitoring of groundwater pollution, the methodology of its implementation and the manner and form of reporting data to the ministry. It also provides the conditions that must be met by operational monitoring to obtain authorization and the reasons for its withdrawal.
9. *Decree on establishment of flood risk management plans:* This regulation defines the content and method of preparing a detailed plan to reduce flood risk, which also includes timelines for the preparation of the plan and its individual contents.
10. *Decree on criteria for determination and on the mode of monitoring and reporting of ecologically acceptable flow:* This regulation shall apply for the special use of surface water, which can cause a reduction in water flow, lowering the water level and deterioration of water. It shall apply for special use surface water from springs. This regulation shall also apply to the use of surface water for groundwater recharge because of the specific uses of groundwater to supply the population with drinking water. For such use of surface water is also considered the abstraction of water from bank filtrate, which is powered directly from the stream.
11. *Rules on criteria for the designation of a water protection zone:* This policy relating to water bodies or their parts, that is used or intended for the abstraction of water, provides (1) criteria for determining the external borders of its water protection areas, (2) criteria for determining the boundaries of internal areas of water protection areas, (3) criteria for determining water protection regime in relation to interventions in the environment, which, according to the criteria for determining the limit the risk of contamination of the water body, and (4) other issues necessary for the determination of water protection areas.



12. *Rules on the types and scope of tasks of mandatory state public utility services in the field of water management:* This policy specifies the type and scope of tasks of compulsory national utilities of water management. It also defines: (1) types of emergency measures, the manner of their implementation and operation of public services in a time of heightened threat level of water damage and (2) conditions for the formation and termination of the elevated level of threat of water damage and the manner of their publication.
13. *Rules on determining water bodies of groundwater:* This document defines the underground water bodies. Rules determine the body of groundwater as a distinct volume of groundwater within an aquifer or aquifers.
14. *Rules on determining and classification for water bodies on surface water:* This document defines the surface water bodies, classifies the types of bodies and defines their names. It also includes the definition of artificial water bodies and candidates for modified water bodies. Rules determine the body of surface water as a discrete and significant element of surface water such as a lake, a reservoir, a stream, river or canal, part of a stream, river or canal, transitional water or a stretch of coastal water.

**Table 3.5: River Basin Management Plans**

No.	Name of river basin Legislation / policy original title	Name of river basin Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>10</sup>	Approval status
1.		River Basin Management Plan Danube-Adriatic water regions 2009- 2015	X			
2.		Decree on provisional river basin management plan	X		National Assembly	
3.		Decree on the	X		National Assembly	

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<sup>10</sup> Competent authority for implementation e.g. government, ministry

		detailed content and method of drawing up a water management plan				
4.		Decree on the river basin management plan for the Danube Basin and the Adriatic Sea Basin	X		National Assembly	Ministry for Agriculture and the Environment

1. *River Basin Management Plan Danube-Adriatic water regions 2009-2015*: The EU WFD requires that all waters reach at least good status by 2015 (or at the latest by 2027). The DRBM Plan focuses on the main transboundary problems, the Significant Water Management Issues, that can directly or indirectly affect the quality of rivers and lakes as well as transboundary groundwater bodies, namely pollution by organic substances, pollution by nutrients, pollution by hazardous substances and hydromorphological alterations. Based on the detailed picture we now have of the Danube Basin waters, the DRBM Plan outlines visions for each issue to achieve an improved and sustainable water environment.
2. *Decree on provisional river basin management plan*: The Decree defines the basis for implementing the water management and catchment management plan. It defines the term of surface water and groundwater body, how to review the different types

of load of surface water and groundwater body, how to review the different impacts on surface water and groundwater bodies, how to review the areas with special request and how to review the monitoring network and monitoring results.

3. *Decree on detailed content and method of drawing up a water management plan:* Decrees specify objectives for river basin management plan on river Danube catchment areas and Adriatic sea river basin district. For each river basin district, a river basin planning process must be set up. The first milestone of this planning process (analysis, monitoring, objective-setting and consideration of measures to maintain or improve water status) is the initial river basin management plan. The whole process of river basin management planning includes the preparation of programmes of measures at basin level for achieving the environmental objectives of the Water Framework Directive cost-effectively. Basic measures include control of pollution at source through the setting of emission limit values as well as through the setting of environmental quality standards. The use of economic instruments, such as water pricing, is part of the basic measures. Here, in particular, the 'polluter pays' principle should be taken into account. The directive aims to ensure that pricing policies improve the sustainable use of water resources. The planning process together with the implementation of the programme of measures is often referred to as river basin management.
4. *Decree on the river basin management plan for the Danube Basin and the Adriatic Sea Basin:* With this decree the river management plan of Danube catchment areas and Adriatic sea river basin district was accepted. The decree defines terms for reaching good quality status and good ecological potential of single water body and possible purposed deviations due to technical or natural conditions.

**Table 3.6: OTHER legislation/policies of relevance for CC - WARE project**

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
1.	Nacionalni program varstva okolja /NPVO/	National Environment Protection Action Programme (NPVO) (UL RS 83/1999)	X		National Assembly	Ministry for Agriculture and the Environment
2.	Pravilnik o metodologiji za določanje vodnih teles podzemnih voda	Rules on methods for determining water bodies of underground water (UL RS 65/2003)	X		Ministry for Agriculture and the Environment	

<sup>11</sup> Authority in charge for implementation e.g. ministry, municipality, etc

<sup>12</sup> Significant linkage with other relevant policy (ESS, land use practices and planning, CC, WFD, IWRM, etc.)

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
3.	Pravilnik o metodologiji za določanje vodnih teles površinskih voda	Rules on methods for determining water bodies of surface water (UL RS <a href="#">65/2003</a> )	X		Ministry for Agriculture and the Environment	Slovenian Environment Agency
4.	Uredba o vnosu nevarnih snovi in rastlinskih hranil v tla	Decree on the input of dangerous substances and plant nutrients into the soil (UL RS <a href="#">68/1996</a> )	X		National Assembly	Ministry of Agriculture, forestry and food; Slovenian Environment Agency
5.	Uredba o mejnih vrednostih vnosa nevarnih snovi in gnojil v tla	Decree on the limit input concentration values of dangerous substances and fertilizers in soil	X		National Assembly	Ministry for Agriculture and the Environment

No.	Legislation / policy original title	Legislation/policy title in English	National level	Regional level	Implementation Jurisdiction <sup>11</sup>	Interlinkage <sup>12</sup>
		(UL RS 84/2005)				
6.	Uredba o varstvu voda pred onesnaževanjem z nitrati iz kmetijskih virov	Decree concerning the protection of waters against pollution caused by nitrates from agricultural sources  (UL RS 113/2009)	X		National Assembly	Ministry for Agriculture and the Environment
7.	Uredba o odpadkih	Decree on waste  (UL RS 103/2011)	X		National Assembly	Slovenian Environment Agency; Ministry for the environment and Spatial planning

1. *National Environmental Action Programme (NEAP)*: NEAP is focused on solving the most important problems in the environment and is only the first step towards long-term management of the problem of the relationship between nature and society. The basic objective of the NEAP is a better environment to live in Slovenia and enforcement of the environment as a boundary and incentive for development. With this objective NEAP contains a coherent set of instruments of environmental protection, focusing on the current rate of environmental degradation especially in the elimination of the most important problems. NEAP aims to contribute to the strengthening of institutions whose primary concern is to ensure an adequate level of protection of the environment and in this way to implement principles of sustainable development in the transition to the state of modern type. The NEAP is a basic policy document of environmental protection in the Republic of Slovenia, which is aimed at providing the certain objectives.
2. *Rules on methods for determining water bodies of underground water*: The document presents the methodology for defining water bodies and groups of underground water bodies as the base units for reliable assessing groundwater quality status and environmental goals.
3. *Rules on methods for determining water bodies of surface water*: Rules define the methodology for determining the water body in the way that we can reliably describe its quantity and quality status.
4. *Decree on the input of dangerous substances and plant nutrients into the soil*: This regulation defines of intake of substances into the soil when entering sewage sludge, compost or sludge from riverbeds and lakes, as well as input material for plant irrigation and fertilization, in particular limits the annual release of hazardous substances and plant nutrients in the soil or on



the ground level of reducing intake and other measures relating to the entry. This regulation applies to any type of soil in the Republic of Slovenia.

5. *Decree on the limit input concentration values of dangerous substances and fertilisers in soil:* This regulation defines limits of intake of dangerous substances and fertilizers into the soil when entering sewage sludge, compost or sludge from riverbeds and lakes and limits the introduction of dangerous substances and fertilizers in the soil or on the soil irrigated crops and fertilization, methods of implantation significant reduction in intake and other measures relating to the entry of dangerous substances and fertilizers in soil. The purpose of this regulation is to reduce and prevent water pollution caused by nitrates from agricultural sources and to regulate the use of sewage sludge, compost or sludge in such a way as to prevent harmful effects on soil, plants, animals and people, and to encourage proper use.
6. *Decree concerning the protection of waters against pollution caused by nitrates from agricultural sources:* This regulation defines maximum levels of nitrogen from agricultural sources into the ground or floor and measures to reduce and prevent water pollution caused by nitrates from agricultural sources.
7. *Decree on waste:* This regulation with a view to protecting the environment and human health protection regulates rules of conduct and other requirements for preventing or reducing the adverse impacts of waste generation and management of waste as well as reduce the overall impact of the use of natural resources and improve the efficiency of use of natural resources. It is also specify the list of wastes.

## 2. Level of relevant EU legislation implementation

The main EU legislations:

- Water Framework Directive, WFD (2000/60/EC); *All groundwater bodies should have good water quality by 2015.*
- Urban Waste Water Treatment Directive (91/271/EEC)
- Nitrates Directive (91/676/EEC)
- Drinking Water Directive (98/83/EC)
- Bathing Water Directive (2006/7/EC)
- Protection of Groundwater Directive (2006/118/EC)
- REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) Directive (regulation EC No 1907/2006)
- Flood Risk Directive (2007/60/EC)
- IPPC (Integrated Pollution Prevention and Control) Directive (2008/1/EC)
- Environmental Quality Standards in the Field of Water Policy Directive (2008/118/EC)
- Green Paper: Adapting to CC in Europe – options for EU action (SEC(2007) 849)

- White Paper: Adopting to CC – Towards a European framework for action (SEC(2009) 386, 387, 388)
- Blueprint to Safeguard European Water

3. GAPS IDENTIFIED and Proposal/ Idea of actions/measures/ policies that might fill the “GAPS”



	PP (country)	Austria	Slovenia	Hungary	Romania	Bulgaria	Greece	Italy	Serbia
Test area location - name			Ljubljana moor						
Water resource type	surface water				x	x			x
	reservoir				x				x
	karst aq	x	x				x		
	bank filtration			x					x
	porous aq confined			x					
	porous aq unconfined	x	x	x					
	fissured aquifer							x	
Topography	mountain	x			x	x	x	x	
	hills	x				x		x	x
	plain	x	x	x	x				x
Landuse (CLC 2006)	agriculture		x						
	forest								
	urban areas		x						
	wetlands		x						
	water		x						
Protected areas	special protected areas		x	x			x		
	DWPA	x	x	x	x	x	x	x	x
ES services aim	surface water quality	x		x	x	x			x
	GW quantity	x	x				x	x	x
	surface water quantity	x			x	x			x
	GW quality	x	x	x			x		x
Eco-regions	acc. To WFD legislation								
Ecosystem type	forest (AT)	x		x	x	x	x	x	x
	grassland (HU)	x		x				x	x
	wetlands (SL)		x	x					
	arable land/agriculture (SR)		x		x				x