

# DELIVERABLE D.T3.4.3

---

National level policy recommendation  
discussion papers in EN and national  
languages: SLOVENIA

---

Version 1  
07 2021

Prepared: PP5 MBVOD & PP6 Ezavod





## CONTENT

1. Collecting Relevant Data, Defining Existing Gaps, Key Stakeholders and Enablers ....	2
1.1. Summary of laws, regulations and policies.....	2
1.1.1. Legal framework and planned measures addressing water reuse.....	4
1.2. Comparative View .....	5
1.3. Assigned Authorities.....	7
1.4. Levels of Government.....	7
1.4.1. National Public Authorities .....	7
1.4.2. Local public authorities .....	9
1.5. Prioritization.....	9
1.6. Existing Policy Support.....	10
2. Targeted Analysis of Results.....	11
2.1. SWOT Analysis Assessing the Necessity of Adopting Water Conservation Policies, Laws and Regulations .....	11
2.2. PESTLE Analysis Assessing the Necessity of Adopting Water Conservation Policies, Laws and Regulations .....	12
2.2.1. Rainwater use .....	12
2.2.2. Wastewater use.....	13
3. Policy Recommendations.....	15
4. REFERENCES .....	17



# 1. Collecting Relevant Data, Defining Existing Gaps, Key Stakeholders and Enablers

## 1.1. Summary of laws, regulations and policies

In this subchapter, we summarize existing legal framework, regulations and policies, already presented in deliverable D.T3.4.2 Country reports on the assessment of the national level legislative and policy frameworks.

Table 1: Legal framework

NAME	DESCRIPTION
Zakon o vodah - Water Act (Uradni list RS, št. 67/02, 2/04 - ZZdl-A, 41/04 - ZVO-1, 57/08, 57/12, 100/13, 40/14, 56/15 in 65/20)	(1) The act governs the management of marine, inland and ground waters (hereinafter: waters), and the management of water and waterside land. (2) Management of waters and of water and waterside land shall comprise the protection of waters, the regulation of waters and decision-making on the use of waters. (3) This Act also governs public assets and public services in the area of waters, water facilities and installations, and other water-related issues.
Zakon o varstvu okolja - Environmental Protection Act (Uradni list RS, št. 39/06 - uradno prečiščeno besedilo, 49/06 - ZMetD, 66/06 - odl. US, 33/07 - ZPNačrt, 57/08 - ZFO-1A, 70/08, 108/09, 108/09 - ZPNačrt-A, 48/12, 57/12, 92/13, 56/15, 102/15, 30/16, 61/17 - GZ, 21/18 - ZNOrg in 84/18 - ZIURKOE).	This act regulates the protection of the environment against pollution as a basic condition for sustainable development and in this context sets out the basic principles of environmental protection, environmental protection measures, environmental monitoring and environmental information, economic and financial instruments of environmental protection, public environmental protection services and others environmental issues.
Zakon o gospodarskih javnih službah -Services of General Economic Interest Act (Uradni list RS, št. 32/93, 30/98 - ZZLPPO, 127/06 - ZJZP, 38/10 - ZUKN in 57/11 - ORZGJS40)	This Act determines the manner and forms of performing of public utility companies in Slovenia. Public utility service companies provide material public goods (hereinafter: public goods) as products and services whose permanent and uninterrupted production in the public interest is provided by the Republic of Slovenia (hereinafter: the Republic) or a municipality or other local community (hereinafter : local community) to meet public needs when and to the extent that they cannot be provided on the market.
Zakon o financiranju občin- Financing of Municipalities Act (Uradni list RS, št. 123/06, 57/08, 36/11, 14/15 - ZUUJFO, 71/17 in 21/18 - popr. in 80/20 - ZIUOOPE)	This law regulates the financing of tasks within municipal competence. The water management is specially regulated in article 7:(other own resources)  (1) The source of financing of a municipality are also revenues from self-contribution, fees, fines, concession fees, payments for local public services and others, if so, determined by the law governing individual fees or by a regulation issued based on law.  (2) The revenues referred to in the preceding paragraph shall belong to the municipality in the amount determined in the act on their introduction.  (3) Environmental fees prescribed based on the law governing environmental protection due to environmental pollution with wastewater and waste disposal at landfills, which are infrastructure intended for the implementation of the mandatory municipal economic service of environmental protection, are revenue of the municipal budget where an environmental burden has arisen which results in an environmental tax being imposed.



Table 2: Decrees

NAME	DESCRIPTION
Uredba o emisiji snovi in toplote pri odvajanju odpadnih voda v vode in javno kanalizacijo -Decree on the emission of substances and heat when discharging wastewater into waters and the public sewage system (Uradni list RS, št. 64/12, 64/14 in 98/15)	This Regulation lays down emission limit values for substances and heat, evaluation of emissions of substances and heat, measures to prevent emissions of substances and heat in wastewater discharge, measures to reduce emissions of substances and heat in wastewater discharge, defines conditions for wastewater discharge and obligations of investors and plant operators related to obtaining an environmental permit and operation of the plant
Uredba o odvajanju in čiščenju komunalne odpadne vode - Decree on the discharge and treatment of urban wastewater (Uradni list RS, št. 98/15, 76/17 in 81/19)	This Decree, regarding the emission of substances in the discharge of wastewater from municipal treatment plants, provides: <ul style="list-style-type: none"> <li>- sensitivity criteria for surface water bodies,</li> <li>- emission limit values for substances,</li> <li>-measures to reduce emissions of substances from urban wastewater discharges, and</li> <li>- monitoring the condition of water bodies into which municipal wastewater is discharged.</li> </ul>
Uredba o metodologiji za oblikovanje cen storitev obveznih občinskih gospodarskih javnih služb varstva okolja - Decree on the methodology for determining prices of obligatory municipal public services for environmental protection (Uradni list RS, št. 87/12, 109/12,76/17 in 78/19)	(1) This Decree lays down the methodology for pricing the services of compulsory municipal public utility services for environmental protection (hereinafter: public services), namely for: <ul style="list-style-type: none"> <li>- drinking water supply,</li> <li>- drainage and treatment of municipal and storm water,</li> <li>- collection of certain types of municipal waste,</li> <li>-treatment of certain types of municipal waste, and</li> <li>- disposal of residues from the recovery or disposal of municipal waste.</li> </ul> (2) This Decree also determines measures and norms related to the calculation of prices of public service services to their users.
Uredba o okoljski dajatvi za onesnaževanje okolja zaradi odvajanja odpadnih voda- Decree on the environmental tax on pollution due to the waste water discharge (Uradni list RS, št. 80/12 in 98/15)	This Decree defines the types of pollution for which an environmental tax is paid for environmental pollution due to waste water discharge (hereinafter: environmental tax), the basis for calculating the environmental tax, recipients of the environmental tax, taxpayers and payers of the environmental tax, load units and the method of calculating load units for an individual type of environmental tax and the method of calculating, assessing and paying an individual type of environmental tax.
Uredba o uporabi blata iz komunalnih čistilnih naprav v kmetijstvu- Decree on the management of sewage sludge from the urban waste water treatment plants (Uradni list RS, št. 62/08)	This Regulation, in accordance with Council Directive (86/278 / EEC) of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture (OJ L 181, 4.7.1986, p. 6), as last amended by Council Regulation (EC) No Regulation (EC) No 807/2003 of the European Parliament and of the Council of 14 April 2003 (OJ L 122, 16.5.2003, p. 36), lays down measures and restrictions on sewage sludge when used as an agricultural fertilizer in relation to such use and the obligation to report to the European Commission.
Uredba o predelavi biološko razgradljivih odpadkov in uporabi komposta ali digestate- Decree on the treatment of biodegradable waste and the use of compost or digestate	(1) This Regulation lays down rules of conduct and other conditions relating to the recovery of biodegradable waste and the use of compost or digestate in accordance with Directive 2008/98 / EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L No 312 of 22.11.2008, p.3) and placing on the market of compost or digestate.  (2) The regulation governing waste shall apply to issues concerning the processing of biodegradable waste, the use of compost or digestate and the placing of compost or digestate on the market, which are not specifically regulated by this Decree.



(Uradni list RS, št. 99/13, 56/15 in 56/18)	
---	--

Table 3: Rules

NAME	DESCRIPTION
Pravilnik o občutljivih območjih- Rules on sensitive areas (Uradni list RS, št. 98/15)	These Rules classify surface water bodies as sensitive areas due to the reduction of environmental pollution in the discharge of wastewater (hereinafter: sensitive areas).
Pravilnik o prvih meritvah in obratovalnem monitoringu odpadnih voda- Rules on initial measurements and operational monitoring of wastewater (Uradni list RS, št. 94/14 in 98/15).	These rules determine the parameters, types and scope of the first measurements and operational monitoring of wastewater and the methodology of sampling, measurement and analysis of samples, methodology of measuring the flow of wastewater, evaluation, content of the report on first measurements and operational monitoring of wastewater initial measurements and operational monitoring of wastewater.

### 1.1.1. Legal framework and planned measures addressing water reuse

Legal framework that is addressing/mentioning the rainwater and wastewater management and use in general. We need to emphasize that in Slovenia, we do not have specific regulation that would address the water re-use.

Water re-use s mentioned in following regulations:

- Water Act
- Environmental Protection Act
- Decree on the emission of substances and heat when discharging wastewater into waters and the public sewage system
- Decree on the discharge and treatment of urban wastewater
- Decree on the emission of substances in the discharge of meteoric water from public roads
- Rules on initial measurements and operational monitoring of wastewater.

Specific measure related to rainwater and wastewater are included in the national water management action programme 2016-2021:

**NAME OF THE MEASURE: Odvajanje in čiščenje padavinske odpadne vode (Drainage and treatment of rainwater)**

**DESCRIPTION:** The Decree on the emission of substances and heat in the discharge of wastewater into water and public sewers sets out measures for rainwater. The owner of the facility must ensure that rainwater that drains from the roof of the facility is discharged directly or indirectly into water where technically feasible, unless he uses this water as an additional source of water for purposes where it is not necessary to ensure drinking water quality, for example, flushing toilets, washing clothes or watering, and ensuring that the rainwater wastewater used in this way implements the measures prescribed for urban wastewater. Rainwater that drains from the pavements, paved or other material-covered surfaces of buildings and contains sedimentary substances must be captured and mechanically treated by the operator of these buildings.



The investor or operator of areas intended for parking or storage of motor vehicles for the purpose of carrying out activities of trade in used motor vehicles, maintenance or repair of motor vehicles, collection or decommissioning of end-of-life vehicles, storm water runoff from these areas an oil trap or a wastewater treatment plant.

In agglomerations, drainage and treatment of rainwater that is discharged into the public sewerage network from roofs, public areas or private paved areas not exceeding 100 m<sup>2</sup> and belonging to the facility from which municipal wastewater or stormwater is discharged with roof, provided by the public service provider, if so, determined by the municipal regulation governing the public service.

Article 92 of the Water Act stipulates that the local community shall take care of protection against the harmful effects of rainwater in the regulatory areas of settlements. Protection against the harmful effects of rainwater includes, in particular, measures to reduce the runoff of rainwater from urban areas and measures to limit the discharge of municipal and rainwater.

**IMPLEMENTER:** Owner of the facility, operator of paved or other material-covered surfaces of facilities, investor or operator of areas intended for parking or storage of motor vehicles for the purpose of carrying out activities of trade in used motor vehicles, maintenance or repair of motor vehicles, collection or decommissioning of used motor vehicles roads.

**NAME OF THE MEASURE:** Odvajanje in čiščenje komunalne odpadne vode iz aglomeracij s skupno obremenitvijo, enako ali večjo od 2.000 PE (Discharge and treatment of urban wastewater from agglomerations with a total load equal to or greater than 2,000 PE)

**DESCRIPTION:** The Decree on Discharge and Treatment of Municipal Wastewater sets supply standards and requirements related to the discharge and treatment of municipal wastewater from agglomerations with a total load equal to or greater than 2000 PE, and mandatory tasks of the municipal public service of municipal wastewater collection and treatment. water in these agglomerations.

**IMPLEMENTER:** Local communities

**NAME OF THE MEASURE:** Odvajanje in čiščenje komunalne odpadne vode iz aglomeracij s skupno obremenitvijo, manjšo od 2.000 PE (Discharge and treatment of municipal wastewater from agglomerations with a total load of less than 2,000 PE)

**DESCRIPTION:** The Decree on Urban Wastewater Discharge and Treatment sets supply standards and requirements related to the discharge and treatment of municipal wastewater from agglomerations with a total load of less than 2,000 PE, and the mandatory tasks of the obligatory municipal public utility service for municipal these agglomerations.

**IMPLEMENTER:** Local communities.

## 1.2. Comparative View

As member state of European Union, the following European legal framework is valid in Slovenia:

- Water Framework Directive (2000/60/EC),
- Floods Assessment and Management Risks Directive (91/676/EEC),
- Drinking Water Directive (98/83/EC)
- Bathing Water Directive (76/160/EEC),
- Fish and Shellfish Water Directives (78/659/EEC, 79/923/EEC, 2006/113/EC, 2006/44/EC),
- Groundwater Directive (80/68/EEC, 2006/118/EC),
- Nitrates Directive (91/676/EEC),



- Urban Wastewater Treatment Directive (91/271/EEC),
- Discharges of Dangerous Substances Directive (76/464/EEC).
- Directive on industrial emissions (201/75/EU).

Although the EU legal framework in Slovenia is valid, the Environmental Implementation Review (EIR) 2019, Country Report Slovenia<sup>1</sup> mentions, that since 2017 EIR, following challenges for the implementation of EU environmental policy and laws were identified:

- to streamline the legal planning and environmental assessments framework in compliance with EU legislation;
- to preserve Slovenia's extensive Natura 2000 network by integrating nature considerations in the planning and environmental assessment system;
- to prioritise wastewater investments so that Slovenia can fulfil its Accession Treaty obligations.

#### **Progress on meeting challenges since the 2017 EIR:**

- Slovenia has passed new spatial planning legislation (the Spatial Planning Act and the Construction Act) to become fully compliant with EU law on environmental assessment and access to justice.
- On nature conservation, Slovenia has made good progress in mapping and assessing its ecosystem services. However, more work is needed to safeguard the country's rich natural heritage. In this area, there are shortcomings in managing Natura 2000 sites and ensuring compliance with the nature directives.
- The 2019 EIR shows that Slovenia needs to make particular efforts to comply with the Urban Wastewater Treatment Directive. It needs to adopt a realistic action plan to prioritise wastewater investments, complete the delineation of agglomerations (i.e. population centres or places of economic activity) and ensure an adequate budget for staff and other resources. The analysis of The 2019 EIR shows that Slovenia has strengthened its economic instruments to increase the budget available for residual waste treatment.

---

<sup>1</sup> The Environmental Implementation Review 2019, COUNTRY REPORT SLOVENIA. European Commission. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions The EU Environmental Implementation Review 2019: A Europe that protects its citizens and enhances their quality of life. Brussels, 4.4.2019 SWD(2019) 131 final



### 1.3. Assigned Authorities

Identified institutions in Slovenia that could enable, support, authorize, or otherwise provide a legal basis for any supporting or restrictive measures for circular water (re)use.

<b>National Public Authorities</b>
<ul style="list-style-type: none"> <li>Ministry of the Environment and Spatial Planning (MOP)</li> </ul>
<b>Sectoral agencies</b>
<ul style="list-style-type: none"> <li>Slovenian Environment Agency (ARSO)</li> <li>Surveying and Mapping Authority of the Republic of Slovenia (GURS)</li> </ul>
<b>National Institutions</b>
<ul style="list-style-type: none"> <li>Institute for Water of the Republic of Slovenia</li> <li>National Laboratory of Health, Environment and Food</li> <li>Slovenian National Building and Civil Engineering Institute</li> </ul>
<b>Local Public Authorities of Maribor FUA</b>
<ul style="list-style-type: none"> <li>Municipality of Maribor and 16 municipalities of Maribor FUA (Ruše, Selnica ob Dravi, Hoče-Slivnica, Miklavž na Dravskem polju, Duplek, Pesnica, Šentilj, Kungota, Lenart, Sveta Ana, Benedikt, Sveta Trojica v Slovenskih goricah, Sveti Jurij v Slovenskih goricah, Cerkevjak in Gornja Radgona).</li> </ul>

### 1.4. Levels of Government

In this subchapter we identified the roles and responsibilities of national and local levels of government.

#### 1.4.1. National Public Authorities

##### Ministry of the Environment and Spatial Planning:

- Prepares and adopt relevant legislation, national strategies and plans (National Environment Protection Programme with programmes of measures until 2030, National Water management action programme 2016-2021, Water management plan for the Danube river basin district for the period 2016-2021 and Water management plan in the Adriatic Sea basin for the period 2016-2021 and Operational program for drainage and treatment of municipal wastewater)
- Managing cross- border cooperation with neighbouring countries in the framework of basin commissions for the Danube water basin and for the Adriatic water basin.

##### Slovenian Environment Agency (ARSO)

- Agency supports performs professional, analytical and administrative tasks in the field of environment at the national level. It monitors water quality, climate change, high waters,. Most of these tasks are performed within the national services for meteorology, hydrology, oceanography
- Prepares expert bases with suggestions on how to adapt to changes in the environment and mitigate their negative effects.





- Monitors the state of the environment and provide quality public environmental data, protect the environment as required by regulations, preserve natural resources and biodiversity, and ensure the sustainable development of the country. For these purposes, over two hundred different types of administrative procedures imposed by domestic and European environmental legislation.

#### **Surveying and Mapping Authority of the Republic of Slovenia (GURS)**

- Scope of work includes the tasks of the State Geodetic Service, which include the establishment, management and maintenance of databases in the field of basic geodetic system, real estate registration, mass real estate valuation, state border, spatial units and house numbers, collective cadastre of public infrastructure and topographic and cartographic system.

#### **Institute for Water of the Republic of Slovenia**

- Applied Research and Solutions
- Monitoring and Assessment of the waters
- Expert basis for determining the impacts of waters
- Projects and development solutions
- Organization of the educational and awareness raising events
- Laboratory Services: sampling and field measurements of water, chemical analyses of water and micro-plastics analyses.

#### **National Laboratory of Health, Environment and Food**

- central and largest Slovenian public health laboratory that handles environmental protection, diagnostic and public health microbiological activities, chemical and microbiological analyses of different types of samples, and also performs research activities. The laboratory provides services for the needs of the state, especially for the needs of monitoring public health factors, as well as official inspection and supervision under the competence of the Ministry of Health, the Ministry of Agriculture, Forestry and Food, the Ministry of the Environment and Spatial Planning, and the Ministry of Defence.

#### **Slovenian National Building and Civil Engineering Institute**

- is the leading Slovenian Institute in the field of building and civil engineering. Through high-quality work it successfully promotes the progress-orientated Slovenian applied science and technical expertise on a global scale.
- Its main activities include fundamental and applied research in the fields of building materials and structures, development of new methods of testing and measurement, certification and attestation of conformity of products, materials and executed works, training of research and technical staff in particular technical fields, participation in the preparation of technical codes and standards.



## 1.4.2. Local public authorities

### Municipalities:

- protect drinking water sources, determine the locations for bathing (bathing areas) and the duration of the season for bathing on surface waters, show the assessment of the quality of surface bathing water and perform the classification and determine the profile of bathing water, own companies responsible for water supply, sewerage and wastewater treatment (decide on the program of construction of utility infrastructure, introduction of the fee for development, program of maintenance of facilities and devices of utility infrastructure, confirmation of the price of utility service proposed by utility operators; public drainage, connection to the public water supply system, connection fees).

### Infrastructure and (public) service providers

- Water supply companies: water supply, protection of water resources, maintenance of connections and water supply network, water quality control sustainable development of water supply and raising consumer awareness.

### Utility companies (for wastewater management)

- maintenance and management of the sewage system, implementation of construction and other works for the needs of municipal infrastructure, accredited activity - testing laboratory.

## 1.5. Prioritization

In Slovenia “National Environment Protection Programme” with programmes of measures until 2030 including National Water Management Strategy already exists and it includes “Goals in water protection and use”. These goals are following:

- sustainable water use that enables different types of use, considering the long-term protection of available resources and their quality,
- programming, planning and implementation of water use in a way that does not aggravate the status of waters, to provide protection against harmful effects of water, the preservation of natural processes and natural balance of aquatic and riparian ecosystems,
- protection, improvement, and renewal of groundwater bodies and ensuring a balance between the abstraction and restoration of groundwater,
- implementation of the principle “polluter pays the costs caused by the pollution of the environment” and “user pays for the use of a natural resource”.

The necessary legal framework also exists, so the new rules are not necessary, but the update of the existing norms is necessary, with special regards to the water re-use and rainwater management.

The challenging part in Slovenia, remains the implementation and financing of all legal frameworks and mentioned Programme goals.



## 1.6. Existing Policy Support

Below, you can find existing strategies and policies in Slovenia that are considered in elaboration.

NAME	DESCRIPTION
National Environment Protection Programme with programmes of measures until 2030	Programme has three strategic orientations: protect, conserve and improve Slovenia's natural capital, ensure the transition to a low-carbon and resource-efficient society that prevents waste and treats generated waste efficiently, protect the population from environment-related risks (environmental risks).
National Water management action programme 2016-2021	National water management measures programme is adopted by the Government of the Republic of Slovenia for the implementation of the objectives defined in the National water management Strategy and the Water Management Plan for the Danube and Adriatic Sea water areas (hereinafter: NUV). It Represents a set of basic and complementary measures to achieve environmental objectives of surface water bodies and groundwater. The basic measures relate to the following areas: <ul style="list-style-type: none"> <li>• protection of surface and groundwater,</li> <li>• water management,</li> <li>• use of surface and groundwater,</li> <li>• management of state - owned water and coastal land; and</li> <li>• economic instruments.</li> </ul>
Water management plan for the Danube river basin district for the period 2016-2021 and Water management plan in the Adriatic Sea basin for the period 2016-2021	The plans include overview of description of administrative arrangements, List of regulations and international or international agreements in the field water management, description of the starting situation in the area of the management plan, description of monitoring and assessment of water bodies surface and groundwater, OVERVIEW OF IMPORTANT WATER MANAGEMENT MATTERS, DETAILED DEFINITION OF THE OBJECTIVES OF THE MANAGEMENT PLAN WATER, summary of measures and financing details
Operational program for drainage and treatment of municipal wastewater	The Operational Program for the Discharge and Treatment of Municipal Wastewater relates to the entire territory of the Republic of Slovenia (RS) and is one of the key documents for achieving the objectives in the field of protection of water against pollution through the discharge of municipal wastewater. It is a program document which, for each individual agglomeration, for which the equipment with public infrastructure must be provided within the prescribed deadlines or, if the prescribed conditions are met, with other appropriate infrastructure for drainage and treatment of municipal wastewater, specifies the requirements regarding drainage and urban wastewater treatment and deadlines for meeting these requirements. The operational program for the collection and treatment of municipal wastewater also specifies the obligations related to the equipping of individual facilities in areas outside the agglomeration, or in areas that are not equipped with public sewerage and for which equipping with public sewerage is not prescribed.



## 2. Targeted Analysis of Results

### 2.1. SWOT Analysis Assessing the Necessity of Adopting Water Conservation Policies, Laws and Regulations

STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none"> <li>▪ Good water quality</li> <li>▪ Adaptation of existing EU Regulation related to water use and management</li> <li>▪ Available legal framework and strategic documents and action plans about water conservation</li> <li>▪ Established water monitoring</li> <li>▪ Examples of pilot good practices that can be used for further knowledge know-how and wider use</li> <li>▪ Good public awareness about importance of the water as important resource</li> <li>▪ Active civil society related to nature protection</li> </ul>	<ul style="list-style-type: none"> <li>▪ Higher water reuse by adopting EU Regulation on minimum requirements of water reuse</li> <li>▪ Introducing more incentives and educational programmes as “citizens’ science” measure to boost water re-use among citizens, farmers and businesses</li> <li>▪ to preserve Slovenia’s extensive Natura 2000 network by integrating nature considerations in the planning and environmental assessment system;</li> </ul>
WEAKNESSES	THREATS
<ul style="list-style-type: none"> <li>▪ The need to streamline the legal planning and environmental assessments framework in compliance with EU legislation;</li> <li>▪ to prioritise wastewater investments so that Slovenia can fulfil its Accession Treaty obligations.</li> <li>▪ The need to improve urban landscape planning and management</li> <li>▪ Water losses due to deteriorated infrastructure</li> <li>▪ The need to improve environmental governance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Extreme weather events and climate change</li> <li>▪ Increasing density of population in urban areas</li> <li>▪ Water consumption is increasing</li> <li>▪ Occasional flooding makes pressure on the sewer systems and causes water overflow</li> </ul>



## 2.2. PESTLE Analysis Assessing the Necessity of Adopting Water Conservation Policies, Laws and Regulations<sup>2</sup>

### 2.2.1. Rainwater use

POLITICAL ISSUES	ECONOMIC ISSUES
<ul style="list-style-type: none"> <li>▪ The level of administrative obstacles associated with the implementation of more demanding rainwater management systems (spatial limitations, longevity of the approval processes).</li> <li>▪ The promotion of sustainable solution applications for the drainage infrastructure by the local government.</li> <li>▪ Lack of coherent strategy for implementing rainwater management on city level.</li> <li>▪ Lack of coherent strategy for the implementation of sustainable development principles.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Low level of recognition of benefits associated with the application of drainage infrastructure facilities.</li> <li>▪ High investment costs renovating and establishing new parts of the rainwater management and discharge systems.</li> <li>▪ Low level of investment expenditure for the construction of drainage systems.</li> <li>▪ Low level of subsidies for the construction of drainage systems.</li> </ul>
SOCIAL ISSUES	TECHNOLOGICAL ISSUES
<ul style="list-style-type: none"> <li>▪ The readiness for cooperation between groups of different participants in the decision-making process associated with investing in a drainage system model.</li> <li>▪ The level of awareness concerning the use of sustainable drainage systems.</li> <li>▪ The residents' safety level, which can be ensured thanks to the use of drainage infrastructure.</li> <li>▪ The level of social losses.</li> <li>▪ The susceptibility of the society to use innovative water management solutions.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ensuring enough capacity in the sustainable rainwater management systems.</li> <li>▪ The reliability of used drainage systems and the required maintenance frequency.</li> <li>▪ The level of experience in the operation of sustainable rainwater management systems.</li> <li>▪ The level of hydraulic overload of existing drainage systems.</li> </ul>
LEGAL ISSUES	ENVIRONMENTAL ISSUES
<ul style="list-style-type: none"> <li>▪ The preferences concerning the use of sustainable technologies in the field of public procurement.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The level of legal protection of the environment and natural resources.</li> </ul>

<sup>2</sup> PESTLE analysis are summarized from deliverable of Maribor FUA D.T3.2.1 Concepts on carrying out FUA-level potential analysis of Rainwater and wastewater utilization. Deliverable is prepared by MBVOD.



<ul style="list-style-type: none"> <li>■ The scope of regulations in the field of cooperation between local governments, industrial and scientific centres.</li> <li>■ The cohesion and stability of legal provisions concerning rainwater management.</li> <li>■ The range of requirements in applicable land development plans.</li> <li>■ The scope of requirements in the field of drainage infrastructure impact on the environment.</li> </ul>	<ul style="list-style-type: none"> <li>■ The level of capacity of drainage systems to supply underground water resources and an increase of biodiversity in urban areas.</li> <li>■ The scale of how the drainage infrastructure impacts the environment.</li> <li>■ The quality of rainwater, the water of the receiving reservoir and the drained area.</li> </ul>
--	--

### 2.2.2. Wastewater use

POLITICAL ISSUES	ECONOMIC ISSUES
<ul style="list-style-type: none"> <li>■ Lack of unified standards.</li> <li>■ Lack of political will to adopt appropriate enabling legislation.</li> <li>■ Lack of political vision and supporting policies.</li> <li>■ No strategical water priority plans.</li> <li>■ Governance as bottleneck for implementation due to lack of knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>■ High investment costs to ensure ample treatment process.</li> <li>■ Higher price of reclaimed wastewater in comparison with natural water sources.</li> <li>■ Lack of market demand.</li> <li>■ High investment costs to construct a reclaimed wastewater supply system.</li> </ul>
SOCIAL ISSUES	TECHNOLOGICAL ISSUES
<ul style="list-style-type: none"> <li>■ Lack of trust in reclaimed wastewater.</li> <li>■ Lack of public concern that would drive the demand and subsequent implementation.</li> <li>■ Lack of education that would ensure trust in reclaimed wastewater.</li> <li>■ Non-preparedness to pay additional/higher costs.</li> <li>■ The use of reclaimed water might present a risk towards public health.</li> </ul>	<ul style="list-style-type: none"> <li>■ Variable quality of reclaimed wastewater.</li> <li>■ Lack of “alternative” water resource distribution system.</li> <li>■ Question of the treatment intensity and technology assurance for technologies that needs to be implemented in order to achieve quality standards.</li> <li>■ Large energy consumption for most of the available technologies.</li> </ul>
LEGAL ISSUES	ENVIRONMENTAL ISSUES
<ul style="list-style-type: none"> <li>■ Lack of national standards for wastewater reuse.</li> </ul>	<ul style="list-style-type: none"> <li>■ The use of reclaimed water might present a risk towards soil contamination.</li> </ul>



- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>■ Lack of legal distinction between different use purposes related to different quality demands.</li><li>■ Lack of supportive pricing policies that would render using drinking water more expensive than reclaimed wastewater.</li></ul> | <ul style="list-style-type: none"><li>■ Lack of knowledge on the content of emerging contaminants in reclaimed water.</li><li>■ High energy consumption to treat and deliver water resource.</li><li>■ The use of reclaimed water will reduce the levels of recharging the aquifers.</li></ul> |
|---|--|



### 3. Policy Recommendations

Policy recommendations are prepared upon SWOT and PESTLE analysis in chapter 2.

<p><b>Issue 1: Strengthening environmental governance (availability of information and public participation)</b></p>
<p><b>Recommendation:</b></p> <ul style="list-style-type: none"> <li>■ Improve access to spatial data and services by making stronger linkages between the country INSPIRE portals, identify, and document all spatial datasets required to implement environmental law, and make the data and documentation at least accessible 'as is' to other public authorities and the public through the digital services envisaged in the INSPIRE Directive<sup>3</sup>.</li> <li>■ Improve the legal framework and/or the practical application access to information to facilitate public participation across the implementation of EU legislation with impact on the environment in line with the Aarhus Convention.</li> </ul>
<p><b>Rationale:</b> In Slovenia, environmental data is centralised at government level. The Ministry of the Environment and Spatial Planning, its Executive Environmental Agency and its Water Agency each host a web portal with such information. The content is mostly about the state of the environment in the country and about environmental legislation, including some references to the specific EU legislation. These sites hold most of the legal information and reports. Slovenia's implementation of the INSPIRE Directive leaves room for improvement. The accessibility of spatial data through 'view and download' services is poor. Slovenia has made good progress, however, it needs to make a greater effort to make the data accessible through services, to improve the conditions for data reuse and to prioritise environmental datasets in the implementation of environmental legislation.</p>

<p><b>Issue 2: To ensure full compliance with Urban Wastewater Treatment directive</b></p>
<p><b>Recommendation:</b> Complete necessary projects to ensure full compliance with Urban Wastewater Treatment Directive as soon as possible.</p>
<p><b>Rationale:</b> Slovenia has not met the deadline of 31 December 2015 for the implementation of the Urban Wastewater Treatment Directive. An investment of around EUR 420 million is needed to ensure that wastewater in the remaining agglomerations is properly collected and treated. The planned projects are only expected to be completed by the end 2021, which far exceeds the 2015 deadline set in Slovenia's Accession Treaty.</p>

<p><b>Issue 3: Absence of national legislation and standards that specifically regulate the rainwater harvesting.</b></p>
<p><b>Recommendation:</b> The adaptation of new EU Regulation (REGULATION (EU) 2020/741 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 May 2020 on minimum requirements for water reuse).</p>

<sup>3</sup> DIRECTIVE 2007/2/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 March 2007 Establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)





**Rationale:** The new rules will apply from 26 June 2023 and are expected to stimulate and facilitate water reuse in the EU. The purpose of this Regulation is to facilitate the uptake of water reuse whenever it is appropriate and cost-efficient, thereby creating an enabling framework for those Member States who wish or need to practise water reuse. This Regulation should be flexible enough to allow the continuation of the practice of water reuse and at the same time to ensure that it is possible for other Member States to apply those rules when they decide to introduce this practice at a later stage. Any decision not to practise water reuse should be duly justified based on the criteria laid down in this Regulation and reviewed regularly.

**Issue 4: Removing administrative obstacles associated with the implementation of more demanding rainwater management systems**

**Recommendation:** updating the legal regulation for spatial limitations and update the technical regulation

**Rationale:** complicated and long procedures for investors to obtain the necessary spatial permits and out-of-date technical regulation that is not adjusted to innovative tools.

**Issue5: Lowering the losses in the water supply networks**

**Recommendation:** Due to the deterioration of the water supply network, a huge amount of water is lost in Slovenia every year (in 2017, water losses were 46.9 million m3). Therefore, it is extremely important that networks that are obsolete due to the deterioration of water pipes are restored, as this could reduce water losses.

**Rationale:** Water losses pose a major challenge for system improvements, better management and maintenance. The problem of water losses is an indication that Slovenian municipalities do not invest the funds raised in the purpose of renovating the water supply system in order to provide consumers with a quality standard of water supply. Dilapidated pipelines that have not been renovated cause, in addition to water losses, also high costs of current maintenance, which increases price of water or causes higher operating costs.

**Issue 6: Lacking awareness among citizens, businesses, and farmers about water re-use**

**Recommendation:** engaging citizens, businesses and farmers in the “citizens” science. Engaging the general public through citizen science can increase knowledge about the environment and help the authorities in their work.

**Rationale:** In Slovenia, there is no website providing information to businesses and farmers on information how to comply with their environmental obligations. The provision and the quality of such information in Member States is an indicator of how actively authorities promote compliance in areas with serious implementation gaps.



## 4. REFERENCES

- The Environmental Implementation Review 2019, COUNTRY REPORT SLOVENIA. European Commission. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions The EU Environmental Implementation Review 2019: A Europe that protects its citizens and enhances their quality of life. Brussels, 4.4.2019 SWD(2019) 131 final: [https://ec.europa.eu/environment/eir/pdf/report\\_si\\_en.pdf](https://ec.europa.eu/environment/eir/pdf/report_si_en.pdf)
- D.T3.2.1 Concepts on carrying out FUA-level potential analysis of Rainwater and wastewater utilization- MARIBOR FUA. Deliverable prepared by Maribor Water Supply Company.
- Zakon o vodah - Water Act (Uradni list RS, št. 67/02, 2/04 - ZZdl-A, 41/04 - ZVO-1, 57/08, 57/12, 100/13, 40/14, 56/15 in 65/20):  
<http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO1244>
- Zakon o varstvu okolja - Environmental Protection Act (Uradni list RS, št. 39/06 - uradno prečiščeno besedilo, 49/06 - ZMetD, 66/06 - odl. US, 33/07 - ZPNačrt, 57/08 - ZFO-1A, 70/08, 108/09, 108/09 - ZPNačrt-A, 48/12, 57/12, 92/13, 56/15, 102/15, 30/16, 61/17 - GZ, 21/18 - ZNOrg in 84/18 - ZIURKOE):<http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO1545>
- Zakon o gospodarskih javnih službah - Services of General Economic Interest Act (Uradni list RS, št. 32/93, 30/98 - ZZLPP0, 127/06 - ZJZP, 38/10 - ZUKN in 57/11 - ORZGJS40)  
<http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO272>
- Zakon o financiranju občin- Financing of Municipalities Act (Uradni list RS, št. 123/06, 57/08, 36/11, 14/15 - ZUUJFO, 71/17 in 21/18 - popr. in 80/20 - ZIUOOPE)  
<http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4615>
- Uredba o emisiji snovi in toplote pri odvajanju odpadnih voda v vode in javno kanalizacijo - Decree on the emission of substances and heat when discharging waste water into waters and the public sewage system (Uradni list RS, št. 64/12, 64/14 in 98/15)  
<http://pisrs.si/Pis.web/pregledPredpisa?id=URED6070>
- Uredba o odvajanju in čiščenju komunalne odpadne vode - Decree on the discharge and treatment of urban wastewater (Uradni list RS, št. 98/15, 76/17 in 81/19)  
<http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED6951>
- Uredba o metodologiji za oblikovanje cen storitev obveznih občinskih gospodarskih javnih služb varstva okolja - Decree on the methodology for determining prices of obligatory municipal public services for environmental protection (Uradni list RS, št. 87/12, 109/12, 76/17 in 78/19) <http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED6060&d-16544-s=1&d-16544-o=2&d-16544-p=1>
- Uredba o okoljski dajatvi za onesnaževanje okolja zaradi odvajanja odpadnih voda- Decree on the environmental tax on pollution due to the waste water discharge (Uradni list RS, št. 80/12 in 98/15) <http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED6149>
- Uredba o uporabi blata iz komunalnih čistilnih naprav v kmetijstvu- Decree on the management of sewage sludge from the urban waste water treatment plants (Uradni list RS, št. 62/08) <http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED4880>
- Uredba o predelavi biološko razgradljivih odpadkov in uporabi komposta ali digestate- Decree on the treatment of biodegradable waste and the use of compost or digestate (Uradni list RS, št. 99/13, 56/15 in 56/18)  
<http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED6281>



- Pravilnik o občutljivih območjih- Rules on sensitive areas (Uradni list RS, št. 98/15)  
<http://www.pisrs.si/Pis.web/pregledPredpisa?id=PRAV12494>
- Pravilnik o prvih meritvah in obratovalnem monitoringu odpadnih voda- Rules on initial measurements and operational monitoring of wastewater  
<http://www.pisrs.si/Pis.web/pregledPredpisa?id=PRAV12112#>
- RESOLUCIJA o nacionalnem programu varstva okolja za obdobje 2020-2030 (ReNPVO20-30)- National Environment Protection Programme with programmes measures until 2030, including National Water Management Strategy  
<http://www.pisrs.si/Pis.web/pregledPredpisa?id=ODLO1985>
- Program ukrepov upravljanja voda - National Water management action programme  
[https://www.gov.si/assets/ministrstva/MOP/Dokumenti/Voda/NUV/13ce67fe7a/program\\_ukrepov\\_upravljanja\\_voda.pdf](https://www.gov.si/assets/ministrstva/MOP/Dokumenti/Voda/NUV/13ce67fe7a/program_ukrepov_upravljanja_voda.pdf)
- Načrt upravljanja voda na vodnem območju Donave za obdobje 2016-2021- Water management plan for the Danube river basin district for the period 2016-2021  
[https://www.gov.si/assets/ministrstva/MOP/Dokumenti/Voda/NUV/63dbe4066b/NUV\\_VOD.pdf](https://www.gov.si/assets/ministrstva/MOP/Dokumenti/Voda/NUV/63dbe4066b/NUV_VOD.pdf)
- Načrt upravljanja voda na vodnem območju Jadranskega morja za obdobje 2016-2021- Water management plan in the Adriatic Sea basin for the period 2016-2021  
[https://www.gov.si/assets/ministrstva/MOP/Dokumenti/Voda/NUV/4195091b63/NUV\\_VOJM.pdf](https://www.gov.si/assets/ministrstva/MOP/Dokumenti/Voda/NUV/4195091b63/NUV_VOJM.pdf)
- Operativni program odvajanja in čiščenja komunalne odpadne vode- Operational program for drainage and treatment of municipal wastewater <https://www.gov.si/novice/2020-09-17-odlocitve-32-redne-seje-vlade-republike-slovenije-s-podrocja-ministrstva-za-okolje-in-prostor/>