Blue Flag Feasibility Study Questionnaire: Country Profile - Serbia

Country: Serbia

Your name: …"Environmental Ambassadors" team for expertise and education……..
Date: …May 2011……..
Place: Beograd……..
Signature: ……..

Blue Flag Feasibility Study Questionnaire: Country Profile

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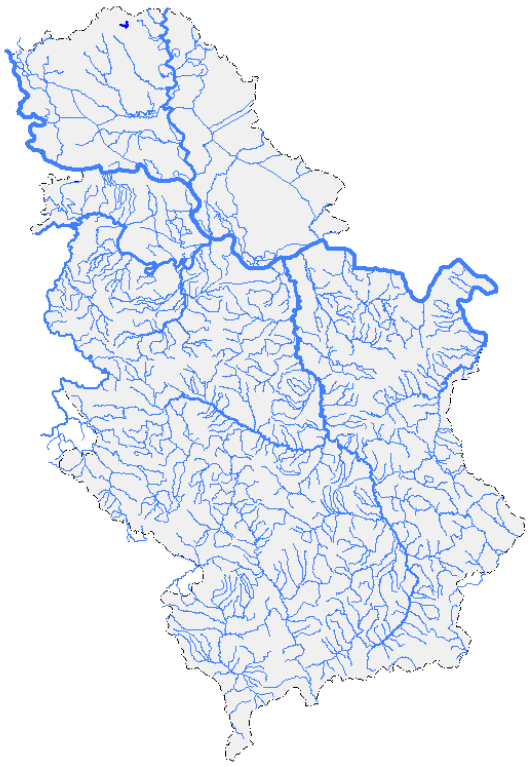
BLUE FLAG FEASIBILITY STUDY QUESTIONNAIRE

1. THE COASTAL AREAS:

1.1. Which activities take place in the coastal areas?



The Republic of Serbia is located at the crossroads between East and West, between the Balkan Peninsula and the Pannonian Plain. Serbia offers an outstanding potential for river transportation. Although landlocked, there is around 2,000 km of navigable inland waterways, among which the largest are Danube, Sava, Tisza Rivers, as well as system of canals Danube-Tisza-Danube. As a Pan-European "Corridor VII", the Danube River is an important transport route. Navigation on the Serbian sector of the Danube River is divided into two sections: from Hungarian-Serbian-Croatian border to Belgrade and from Belgrade to Serbian-Romanian-Bulgarian border. In the first sector navigation for the convoys according to the AGN class VIc is possible, and at the downstream section navigation for the convoys according to the AGN class VII is possible, which allows for the sea going vessels to arrive to Belgrade from the Black Sea.

The stretch of the Danube River in Serbia (from Bezdan to Timok River) is 588 km long, of which 137.5 km is a borderline with Croatia, and 229km is a borderline with Romania. By performing large river training works, on what once used to be a natural flow of the river, navigation was secured in line with the recommendations of the Danube Commission.

From the territory of Serbia waters flow in three directions: predominantly to the Black Sea (Danube River Basin), Adriatic Sea (Drim and Plavska River), and Aegean Sea (Pčinj, Dragovištica, and Lepenac Rivers).

As mentioned above the largest and most important river in Serbia is the Danube River. With its length of 588km it connects Serbia both with West and East. Coming from Hungary largest tributaries to Danube River are: Drava, Tisza, Sava, and Velika (Great) Morava Rivers .Activities taking place in the costal areas includes bathing, pleasure boating, reef walking,

scuba diving, jet skiing, hotels, restaurants, housing/residential activities, fishing, industries. agriculture, ports.

The Government of the Republic of Serbia adopted the first *Action Plan for Harmonization of National Legislation* with EU *acquis* in July, 2003, since when the Government was adopting this plan for each year until introduction of The National Programme for Integration of the Republic of Serbia into the European Union (NPI) in 2008.

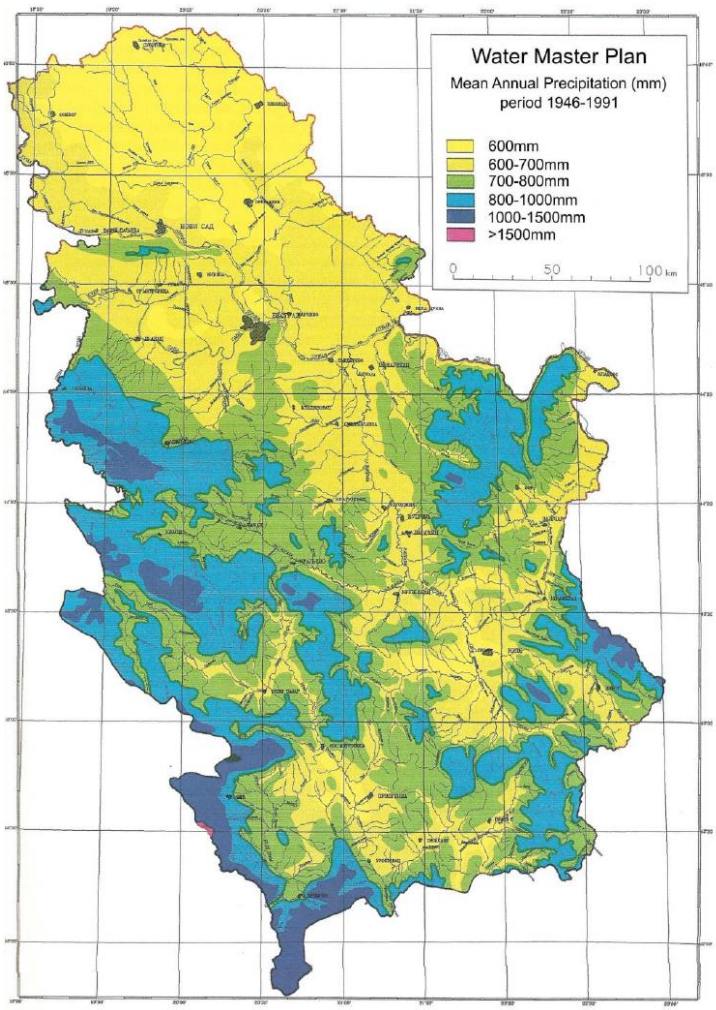


Figure 7: Mean annual precipitation (1946-1991), (Water master plan, 2001)

1.2. Conflicts between these activities exist: yes no

1.2.1 If yes, please provide examples:

Although the environmental legislation in place, horizontal inclusion of environmental issues in the other sectors, like agriculture and tourism is at the beginning and under development.

1.3. Coastal tourism is developed in your country:

Strategically planned; under development.

1.4. Please give a profile of the beach types and numbers in your country:

It is no comprehensive study focused on beaches. Official documents mentioned usually beaches within big cities: Ada Ciganlija and Lido (Belgrade), Strand (Novi Sad), as well as on the lakes.

1.5. Please give a profile of the marina types and numbers in your country: (what percentage are private or commercial, small or large etc.)

It is no comprehensive study focused on marinas. Official documents mentioned development of Marina near Apatin, and marinas within the infrastructure of big cities and towns.

1.6. What are the issues of concern in the coastal areas, from the point of

view of:

1.6.1. Threats to the environment:

Pesticides and fertilizers from agriculture; Inadequate use of sand and other material for exploitation in coastal area; dumps in the coastal areas; untreated wastewater containing hazardous substances that are retained on the coast; use of inadequate water for watering plants in coastal areas.

Pursuant to the *Law on Environmental Protection* (O. Gazette of RS No. 135/04, 36/09), protection and use of water is implemented in the framework of integral water management by taking and implementing measures for preservation of surface and ground waters and their reserves, quality and quantity, and through protection in line with special laws. The Law on Environmental Protection provides the base for passing of National Strategy on Sustainable Use of Natural Resources and Goods (waiting for approval) that includes water resources and National Environmental Protection Programme (Official Gazette of RS, No. 12/10).

1.6.2. Water quality (in relation both to bathing and drinking water):

The regulations in force in the field of water, regulate protection of water against pollution, protection from adverse effects of water, use and management of water as goods of common interest, conditions and manner of performance of water management, adoption and implementation of water protection measures, organising, financing and surveillance of water management, and meteorological and hydrological activity. The regulations also prescribe obligation of defining of water regime, manner of issuing of water acts, limitation of right of owners and users of water, conditions for waste water discharge, obligation of international cooperation, as well as planning and use of water. Provisions of regulations in force are related to all surface and ground water, including drinking water, thermal and mineral water and to watercourses which define or cross the state border. *The Law on Waters* (Official Gazette of RS, No. 30/10) has entered into force on May 2010. The Law regulates legal status of waters, integrated water management, management of water structures and water land, sources and means of funding water sector activities, supervision of implementation of this law and other relevant issues regarding water management. The integrated water management, in the meaning of this Law is a set of measures and activities aimed at preservation and improvement of the water regime, providing necessary quantities of water of required quality for different purposes, protection of water against pollution and protection from adverse effects of water. The water management is in the competence of the Republic of Serbia and is performed through competent ministries, autonomous province bodies, local government unit bodies and public water management enterprises. The Article 29 of the Law define strategic documents for water management, particularly: **1)** Water Management Strategy for the territory of the Republic of Serbia; **2)** Water Management Plan; **3)** Annual Water Management Programme; **4)** plans regulating protection from adverse effects of water, particularly: flood risk management plan, general and operative plans for protection against floods and plans regulating water protection (plan for protection of water against pollution and monitoring programme). The Law also prescribes programme of measures for achievement of objectives of previously mentioned documents and active participation of public in passing of planning documents.
The Law also regulates water sector activities, that includes: **1)** watercourse regulation and protection from adverse effects of water including risk management, prescribes measures and works for protection against flood caused by runoff water and by overflow of river water, against ice, and protection against erosion and torrents and removal of effects of such impact of water;

2) regulation and use of water including use of surface and ground water for supply of drinking water, bathing water and water for industry and other purposes, for irrigation, fish farms, navigation, for sport, recreation and tourism, and use of water power for production of electricity and for device drivers; **3)** protection of water against pollution.

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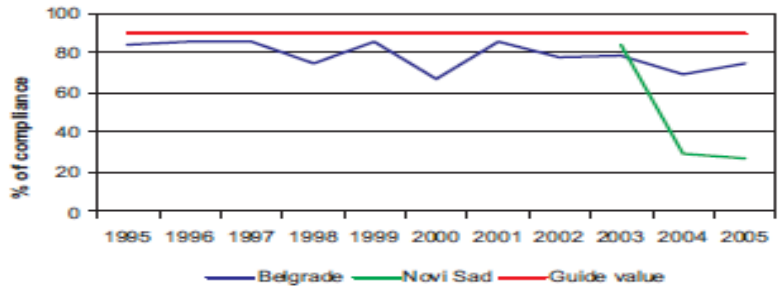
WATER
[CSI 022] Bathing Water Quality

Key message: The observed water quality on two major bathing areas in Belgrade and one in Novi Sad (covering more than 60% of total users of bathing facilities in Serbia) do not comply with the mandatory standards and guide levels for microbiological and physicochemical parameters. Moreover the quality of water in Belgrade slowly decreased while the decrease of quality in Novi Sad resulted with the level that is not suitable for bathing in general.



Percentage of samples complying with guide values for bathing waters

Results and assessment
The overall water quality of bathing water does not comply with mandatory and guide standards suggested by the Bathing Water Directive. Moreover, the situation on the bathing areas on the Danube River deteriorates during the time, giving a large number of samples which do not comply with the standards in more then 50% of cases. It is clear that the upstream waste water discharge from populated areas and industry is the main cause for such a low water quality level. On the other hand, the quality of bathing water on the Ada Cinganlija lake (near Belgrade), as a designated area for bathing shows better water quality all over the time except at the end of bathing season when a lower quality level in sense of microbiological parameters occurs.

Data source(s): Public Health Institute of Belgrade; Public Health Institute of Novi Sad.

1.6.3. Environmental management:

Lack of adequate measures for the protection of coastal areas; lack of adequate legislation for the protection of coastal areas.

1.6.4. Human health and safety:

According to World Health Organisation study based on the exposure to environmental factors and in accordance with the national statistic data published in 2007, it is estimated that 27 percent of population is affected by illnesses caused by environmental factors for the area of Serbia (and Montenegro). Taking this into account, as well as the fact that children are the population group most sensitive to the negative environmental influence on health, and in accordance with the obligations of the Ministerial Declaration adopted at the Fourth Ministerial Conference on Environment and Health held in 2004 in Budapest, theGovernment of the

Republic of Serbia adopted the Children's Environment and Health Action Plan-CEHAP) on 1 October 2009. This plan determines main medium term and short term priority goals, as well as the activities which lead to the achievement of these goals within the field of children's health protection from the negative environmental influence. The main priorities refer to the access to safe drinking water in rural areas, access to an adequate sanitation, activities aimed at reducing the traffic injuries, reducing air pollution, reducing the exposure of children to tobacco smoke and termination and prohibition of the use of leaded petrol. Special priority activities are those necessary for the protection of health against the climate changes. At the 5th Ministerial Conference on Environment and Health, the new global challenges facing governments were presented, as well as the need for promotion of the health system and strengthening the cooperation between the health and environmental sectors, in order to provide better quality environment which is a precondition for a healthier life. A set of environmental laws adopted in 2009 transferring the EU provisions, regulates the influence of environmental factors to the human health.
The National Assembly of the Republic of Serbia adopted Public Health Act in 2009 which recognizes impact of environment on health as one of the priority areas within the public health. In addition, the Public Health Strategy which was also adopted in 2009 by the Government of the Republic of Serbia lays out a set of strategic activities with a purpose of protection of population's health from the negative environmental impact.

The network of 26 public health institutes, with the leading *Institute of PublicHealth of Serbia:* performs monitoring of the health risk factors in environment as well as the monitoring of the population's health in relation with the environmental risks, control and prevention of the chronic non-infectious and infectious diseases and improvement of emergency responses, control of food and drinking water, sanitary monitoring, microbiological analysis in the public health context, data collection within the health system regarding equipment and use of the health system, as well as regarding diseases. The Institute of Public Health of Serbia is also a national representative in the framework of implementation of activities of the International Health Regulations.

1.6.5. Environmental education and information

Environmental education is the subject of continuing advocacy by different stakeholders, included but not limited to civil society. Country adopted UNESCO Initiative on Education for Environment and Sustainable Development, but two main competent ministries for environment and for education are slow in progressing with comprehensive harmonized outreach programs. However, there are good examples of activities performed, including the activities by "Environmental Ambassadors".

The Serbian Environmental Protection Agency is responsible for the establishment, management and development of the environmental protection information system and it collects and integrates environmental data. The Regulation on the content and methods of management of the environmental protection information system, methodology, structure, common bases, categories and levels of data collection, as well as the content of information of which the public is regularly and compulsory informed represents a legal base for a standardized system of environmental data and information collection (Official Gazette of RS, No. 112/09) which is harmonized with the EU legal regulations and the EEA methodologies. The Information system enables collection and providing information and data which are processed and analysed in accordance with the international and European methodology. The system

enables environmental data exchange with the existing similar systems at the level of the European Union and member states, connected within the European Environment Information and Observation Network (EIONET).

The standardized system for data collection on sources of environmental pollution in the Serbian Environmental Protection Agency is set by the Rulebook on Methodology for Development of the Integral Cadastre of Polluters (Official Gazette of RS, No. 94/07). All legal persons with installed production capacities from the list 1 harmonised with the list from E-PRTR Directive or PRTR Protocol, are obliged to provide data on air and water emissions, as well as data on waste, in standardized forms which represent the part of the mentioned Rulebook.

The Serbian Environmental Protection Agency regularly publishes environmental data and information, primarily in the annual reports on the state of environment, as well as in a series of other reports, strategies and analysis at the national and international level. The information is available at the Agency's internet page.

First contacts between EEA and the Republic of Serbia were established in the middle of 2002. Within the drafting of the European State and Outlook of the Environment Report 2010 - SOER 2010 prepared by the EEA, the Republic of Serbia has become for the first time an active participant through direct communication with the EEA and preparation of 8 contributions for country assessment as follows: Country profile, National story, Climate change mitigation, Land use, Nature protection and biodiversity, Waste, Water quality, Air pollution (http://www.eea.europa.eu/soer).

1.6.6. Social, cultural and economic issues

Covered by numerous documents and strategies; however, none of these documents are focused on social, cultural and economic performances of water ,management.

2. THE REGULATORY FRAMEWORK AS IT RELATES TO THE COASTAL AREA

2. 1. Effluent discharge standards exist for:

To prevent deterioration of water and environment quality, emission limit values are specified for certain groups or categories of pollutants as well as limit values for pollutants in surface water, groundwater and sediment, including priority substances and priority hazardous substances in surface water, and time limits for reaching of the values. Also, for protection and improvement of quality of surface water and improvement of groundwater quality, surface and ground water bodies are classified depending on their ecological and chemical status.
For achievement of approximated and comprehensive overview of surface and ground water status, the Law prescribes establishing of water status monitoring, prescribes contents of Annual Monitoring Programme and regulates its implementation.

In order to protect water quality, the following shall be prohibited:

1) Any input into surface water or groundwater of wastewater containing any hazardous substance or pollutant in excess of the prescribed emission limit value, which may lead to the deterioration of the current status thereof;

2) Any discharge of wastewater into standing water, if such water is in contact with groundwater, which may cause the good ecological or chemical status of the standing water to become threatened;

3) Any discharge from a vessel or bank of any pollutant which reaches water directly or indirectly and originates from any device on the vessel or any transfer device to or from such vessel;

4) Any discharge of excessively thermally-polluted water;

5) The use of any fertilizer or plant protection agent inside the inner 5 m belt of the bank;

6) The discharge of wastewater which contains any hazardous substance into a public sewerage system:

- in excess of the prescribed level,
- which may have an adverse effect on sewage treatment potential,
- which may damage the sewerage system or the water treatment plant,
- which may adversely affect the health of sewerage system maintenance personnel;

7) The use of any abandoned water well as a septic pit;

8) The dumping of any material, which may pollute water, in the major channel of a natural or manmade watercourse or lake, or on other land;

9) The washing of any vehicle, machine, equipment, or device in surface water or on water land.

The issues of water quality and quantity in RS are also regulated by the **Law on Meteorological and Hydrological Activities** (Official Gazette of RS, No. 88/10). The Republic Hydrometeorological Service is in charge for monitoring of state and regime of surface and ground water at the territory Republic of Serbia. Other certified legal persons accredited by the Accreditation Board of Serbia can perform water quality testing as well.
Until adoption of the by-laws on the basis of the law, that will transfer EU water quality and quantity standards to national legislation, the existing by-laws will be applied.

The following by-laws are in force at the moment:

- Regulation on Categorization of Watercourses (O.Gazette of SRS No. 5/68), that categorises watercourses of Serbia into categories and defines required classes of water quality for particular parts of watercourses;
- Regulation on Classification of Water (O.Gazette of SRS No. 5/68), prescribing general classification of water, pursuant to pollution level and water purpose, to four classes on the basis of defined physical-chemical, biological and microbiological parameters;
- Rulebook on Dangerous Matters in Water (O. Gazette of SRS No. 31/82), prescribing dangerous matters that must not be directly or indirectly released to water and their maximal allowed concentrations; and
- Rulebook on Manner and Minimal Number of Analysis of Waste Water Quality (O.Gazette of SRS No. 47/83) prescribing waste water quality indicators to be tested for each discharge point, before mixing of waste water with recipient water.

The Waste Management Strategy, the first strategic document in the field of environment, adopted in 2003, and new waste management strategy adopted in 2010, contain action plans that contain short-term and long-term objectives. Within previous period, majority of funds of the environment protection Fund was used to reach goals defined by these strategies.

What systems for treatment are generally used?
Stabilization ponds □
Constructed wetlands □
Sewage treatment plants □
Activated sludge □
Septic systems □
Other □
Please describe:

Sewage system covers 55,6% of the country's population. Only 9% of the rural population is connected to the sewerage, the rest of the population have to use septic tanks and draining fields for wastewater discharge. Only 13% of municipal wastewaters have been treated before discharging into recipient. Wastewater treatment facilities exist in 20 municipalities (16% of the population is connected to wastewater treatment facilities); 15 facilities perform biological treatment and 5 mechanical treatments only. Some facilities are 35 years old, and their efficiency is low. Typically industrial installations located in urban areas discharge their wastewater into the existing municipal sewerage system. Larger industries are generally located outside settlements, usually near riverbanks. Wastewater from these facilities is discharged directly into watercourses, with or without previous treatment. Serbia's industrial sector possesses 120 larger facilities for treating industrial and mining wastewater. Most of them, mainly small industrial installations, have only the pre-treatment or minimal treatment capacity that is required to fulfill the conditions to discharge into municipal sewerage systems. Only 20 larger industrial installations have full independent wastewater treatment facilities, and today many of those are functioning only partially.
Insufficiently treated industrial and urban waste waters are among key sources of water pollution in the Republic of Serbia. In relation to the number of households connected to public water supply system, only 43.02% is also connected to public sewage. In the Republic of Serbia, about 75% of city population is connected to public sewage system, while this indicator related to rural population amounts only to 9%. According to data of the Republic Statistical Office, percentage of households connected to public sewage system in 2002 was 33%, and 35.03% in 2008. The National Environment Protection Programme (Official Gazette of RS, number 12/10) states that the percentage of households connected to sewage network that have appropriate system for urban waste water treatment in 2002 was 5.30%, and 6.0% in 2008. However, the Report on the Environmental Situation in the Republic of Serbia for year 2009 states that 11.5% of population is connected to the sewage system that have system for purification of waste water. The available data related to the percentage of population connected to sewage system are unreliable and differ depending on the source of data. This discrepancy originates from lack of unique reporting methodology.

The quantities of industrial waste water discharged directly into watercourses of the Republic of Serbia, pursuant to the data of the Republic Statistical Office, in 2007 was around 3072 million m^3 annually, and from public sewage systems of urban areas around 366 million m^3 annually. Approximately, 204 million m^3 of industrial waste water and around 54 million m^3 of waste water

form households and other noncommercial sector was treated before discharged into watercourses.
Pursuant to data of Water Management Framework of the Republic of Serbia (2002) it is estimated that the total emission of suspended matters in recipients amounted to 1,549,531 kg/day, i.e. 12,301,223 population equivalent (PE). The total emission of nitrogen was 111,374 kg/day, and total emission of phosphorus was 36,764 kg/day.

There are 434 city systems in the Republic of Serbia with more than 2000 PE, only 21 municipalities have system for purification of waste waters. The biggest cities in country, Belgrade, Novi Sad and Nis, discharge untreated waste waters into recipients. Some of the existing plants in the cities of the Republic of Serbia stopped working, and some perform only mechanical treatment, but most of them are facing frequent work breaks due to the maintenance problems and lack of financial resources. The result of the above mentioned is incomplete exploiting of existing capacities

It has been found that during 2009, out of total number of controlled water supply systems:
1) 82 water supply systems (53%) had less than 5% of microbiologically contaminated and less then 20% of physically-chemically contaminated water samples, 77 in Central Serbia (49%) and 5 in Vojvodina (3%).
2) 60019 drinking water samples were tested, of which 8296 (14%) were contaminated in regard to physical-chemical composition, where 100% of samples in Mid-Banat district, 98% in North-Banat district and 53% of samples in Srem district, while in Kolubara district there was 0,3% of contaminated samples;
3) 63803 drinking water samples were tested, of which 3128 (5%) were contaminated due to presence of microorganisms, where 25% of samples in North-Backa district, while in Podunavlje district there was no contaminated samples.

Data on rural water supply systems, not managed by public communal enterprise, and on water supply systems of the food manufacturers, are not entered into mentioned annual report. Exact number of water supply systems used for public water supply in the Republic of Serbia is not known. If the criterion is that a public water supply system produces at least 10m3 of drinking water per day, it is supposed that there is between 5000 and 6000 of water supply systems.

What percentage of sewage plants function adequately?
0-10% □
10-25% □
25-50% □
50-75% □
>75% □
What are the receiving systems for sewage effluent?

Soil □
Stream □
Ocean □

2.3. Bathing water quality standards have been set:

Bathing water quality - The Regulation on Water Classification (Official Gazette of SRS, No. 5/68) (hereinafter referred to as the Regulation), that regulates general classification of water into four classes according to pollution level and purpose, prescribes water of the class II as suitable for bathing, recreation and water sports.

The Regulation contains indicators and their limit values for each of the classes. The Regulation is not complied with the Council Directive 2006/7 of 15 February 2006 on water quality intended for recreation purposes.

The Minister competent for health affairs will during 2011, pursuant to the Article 75(3) of the Law on Waters, more precisely prescribe conditions related to health safety of water intended for recreationpurposes, complied with the mentioned Directive.

Monitoring is conducted by:

Health institute of city of Belgrade already delivered requested data for two major **bathing** locations – Ada Ciganlija lake and Lido (Danube) for the period 1995 - 2005. Data were delivered in a form of paper reports and they have to be transferred in electronic form. Health institute of city of Novi Sad promised to deliver the data about another major bathing location on the Danube river. Despite the fact that Institute Batut still didn't give any feedback on the data request, already existing data for three major bathing locations in the country will be enough for calculating the indicator since these bathing locations probably cover more then 70 percents of all the bathing locations in Serbia, based on the number of users.

Systematic **monitoring of surface and ground water quality** at the territory of the Republic of Serbia is carried out in accordance with the Programme contained in the Regulation on Systematic Analysis of Water Quality. Systematic monitoring includes testing of physical and chemical indicators of water quality. Ammonium ion (as N), nitrates (as N), nitrites (as N) and organophosphates (as P), total nitrogen and phosphorus and organic nitrogen, among others of the 61 parameters, are monitored by the Republic Hydrometeorological Service of Serbia. However, the monitoring as envisaged by the Directive 91/676/EEC (Nitrates Directive) has not been established yet, especially for the nitrate vulnerable zones.

Nitrates vulnerable zones in the Republic of Serbia have been not designated yet, but they will be defined within the framework of the Action Programme that will concern entire Republic of Serbia as vulnerable zone or special action programmes will be adopted for certain areas of the country that will be designed as vulnerable zones.

2.4. Fresh water

2.4.1. Information on fresh water consumption by the tourist industry is available: yes no
2.4.2. Information on fresh water supplies is available: yes no
2.4.3. Water saving programmes have been launched: yes no

2.5. Regulations for the management of urban solid waste have been set:

yes no
2.5.1. If yes, do they call for recycling programmes? yes no

The recycling programmes established in the accordance with the Low on waste, by the end of 2010.

2.5.2. If yes, do they foresee fines for littering? yes no

2.6. Regulations for the disposal for hazardous waste and oils has been set: yes no

If yes, please describe what the regulations are and for what wastes:

Law on Waste Management **(**"Official Gazette of RS", number 36/09 and 88/10) (Article 44) prescribes that during collection, separation, storage, transport, re-use and disposal, hazardous waste must be packaged and labelled in a manner consistent with safeguarding human health and environment. The Minister competent for environment affairs prescribes manner of storage, packaging and labelling of dangerous waste.
Pursuant to the Article 67 of the Law on Chemicals, (Official Gazette of RS, number 36/09 and 88/10), the Chemicals Agency issues permit for performance of trading in particularly dangerous substances to importer, manufacturer, i.e. further user. Together with the request for issuing of permit for trading in particularly dangerous substances, it is necessary to submit the evidence that appropriate storage has been prepared and that appropriate measures are set for safe storing of particularly dangerous substances, and to enable risk control and secure replacement of certain substance with appropriate more safe alternative substance, the Agency publishes List of Substances of Very High Concern.
Manufacturer, importer, distributor and further user shall store dangerous substances in a manner not jeopardizing human lives and health and environment and shall collect, store and safely dispose residues of dangerous matters and empty packaging in line with regulations regulating waste management (Article 32 of the Law on Chemicals).

2.7. Special norms have been set to protect wildlife from souvenirs' collectors and/or from other recreational activities: yes no

2.7.1. If yes, these address: (tick all the relevant options)
Sea turtles □
Dugongs □
Sea horses □
Sharks □
Corals □
Shells □
Birds □
Others:

In Serbia, the Regulation on the Protection of Natural Rarities (1993) regulated the protection of natural rarities and the gene pool (215 plant and 426 animal species) throughout the territory or parts of the territory. In addition, there is a set of regulations that restrict sales of wild plant and animal species, and hunting and fishing.

2.8. Noise pollution standards have been set: yes no

2.9. Air pollution standards have been set: yes no

2.9.1. If yes, do they include specific requirements for vehicles emissions?

Not yet, specific requirements for vehicles emissions will be established by the end of 2012.

2.10. Environmental Impact Assessment legislation is in force:
yes no

Law on Environmental Protection (Official Gazette of RS, Nos. 135/04, 36/09, 36/09 – other law and 72/09 – other law), represents the framework law in the field of environmental protection. The law contains basic principles of legal order that comprehensively and completely regulate protection of the environment.

Law on Environmental Impact Assessment (Official Gazette of RS, Nos. 98/2002 and 36/09) – regulates the assessment process regarding the effects of the projects that may have significant environmental consequences, the content of the Environmental Impact Assessment Study, participation of stakeholders, authorities, organizations and public, inter-state information about the projects that may have significant trans-boundary impact on the environment, monitoring and other relevant issues regarding environmental impact assessment.

Law on Strategic Environmental Assessment (Official Gazette of RS, No. 98/2008 and 88/10) – this law regulates the conditions, methods and procedure according to which environmental impact assessment of certain plans and programmes is carried out in order to provide environmental protection and enhancement of sustainable development by integrating basic principles of environmental protection into the procedure of preparation and adoption of relevant plans and programmes.

2.10.1 If yes, does it include tourism related services and facilities?
yes no

2.11. An Integrated Coastal Area Management Plan is in place:
yes no

At this moment, *Water Management Master Plan of the Republic of Serbia (WMMP*) is the basic planning document related to strategy of water use, water protection and protection against adverse effects of water at the territory of the Republic of Serbia adopted by Government, as a Regulation of the Republic of Serbia (Official Gazette of RS No. 11/02). It contains objectives and measures to take for reaching the objectives. WMMP is passed on the basis of analysis based on data of census and data from 1991, and on the fact that the conditions for implementation of the measures have significantly changed during the end of the nineties.

Pursuant to the *Law on Environmental Protection* (O. Gazette of RS No. 135/04, 36/09), planning and management of environmental protection is secured and provided by implementation of the National Programme on Environmental Protection (NPEP) (Official Gazette of RS, number 12/10) adopted by the Government for the period of ten years. NPEP contains description and estimation of environment state and basic objectives and criteria for implementation of environment protection in whole, including water protection. Creation of the

Action Plan that is a short-term instrument for implementation of the National Programme is under preparation.
In accordance with the Law on Environment Protection, creation of the National Strategy of Sustainable Use of Natural Resources and Goods that includes water resources, for the period of at least ten years, is in the progress. The National strategy will be implemented through plans, programmes and frameworks for each natural resource or goods. The National Strategy for Sustainable Use of Natural Resources and Goods is planed to be adopted in 2011.

The Law on Waters (Official Gazette of RS, No. 30/10) (hereinafter the Law) envisages adoption of planning documents for water management (Article 29 of the Law on Waters).

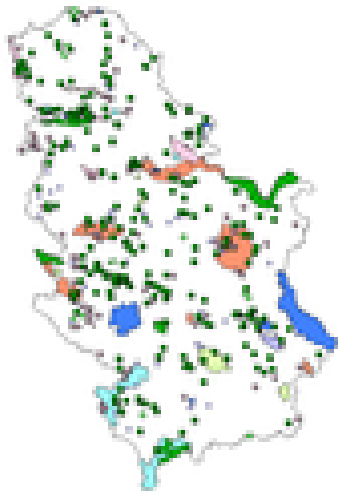
The Law on Protection and Sustainable Use of Fish Resources ("Official Gazette of RS", No. 36/09) regulates management of fish resources in fishing waters, which includes protection and sustainable use of fish resources as a natural resource and resource of general interest. Commercial offences are prescribed in the Article 55 of this Law.

2.12. A Tourism Development Plan(s) has been developed:
yes no

2.13. A Local Agenda 21 strategy has been developed:
yes no

2.14. Protected areas have been established:
yes no

Protected areas (presented on picture)



2.14.1 If yes, in the legislation tourism is indicated as one of the permitted uses:
yes no

2.14.2. If yes, please describe how these areas are managed and by whom:
Management of protected areas is regulated by the Law on the Protection of Nature. Protected areas are managed by public enterprises, economic entities and NGOs
Law on Nature Protection („Official gazette of RS", No. 36/09 regulates protection and conservation of nature, biological, geological and landscape diversity as part of the environment. Article 125 of this law stipulates commercial offenses.

2.15. Emergency plans for natural disasters exist:

yes no

2.16. Oil pollution accident emergency plans exist:
Detailed plans under development.

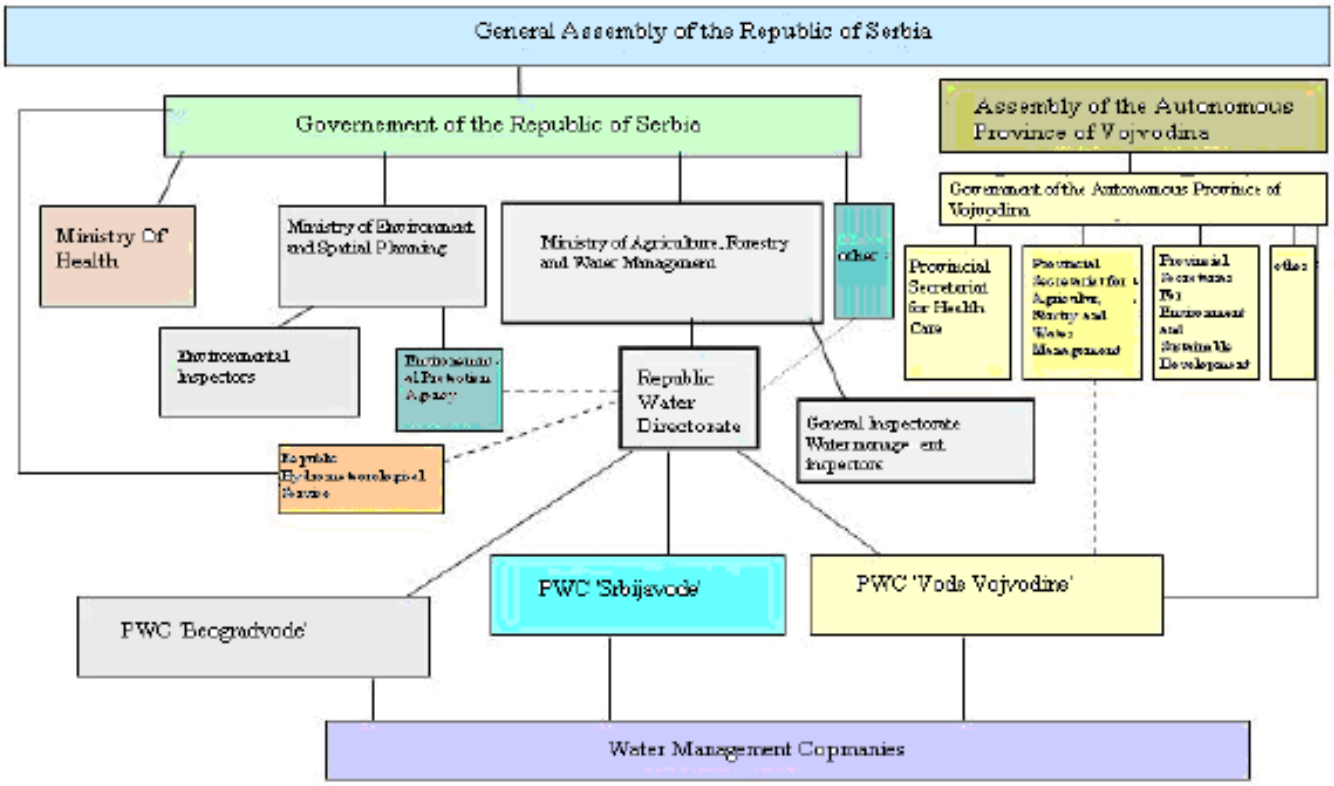
2.17. Regulations to protect bathers exist at the national and/or local level:
Partially.

2.17.1 If yes, they address: (tick all the relevant options)

Domestic animals □
Toxic, dangerous, poisonous animals □
Sea currents □
Life guards on duty □
Danger flags regulations □
Rescue equipment requirements □
Safety risk assessment □

3. THE INSTITUTIONAL FRAMEWORK

3.1. Please indicate the different administrative levels in your country:



Water management competence scheme

Pursuant to the Law on Ministries (Official Gazette of RS, No. 65/2008,36/2009- state law and 73/2010-state law), four Ministers have authority in the field of water protection and management in the Republic of Serbia: The Ministry of Environment, Minning and Spatial Planning, the Ministry of Agriculture, Trade, Forestry and Water Management, the Ministry of Health and the Ministry of Infrastructure and Energy. All competent ministries adopt planning documents within the scope of its authority.

The Public Water Management Enterprises (Srbijavode, Vode Vojvodine and Beogradvode) issue annual programmes of construction, reconstruction and maintenance of water management structures at the water area/territory under their jurisdiction, and the Local Government units within the scope of their competences defined by the provisions of the Law on Waters, especially in the field of erosion (Article 61 of the Law).

Certain activities related to the field of water protection and management are performed by the Republic Hydrometeorological Service, network of Institutes and Bureaus for Public Health, Water Management Enterprises, Local Government Bodies and Water Supply and Sewage Enterprises.

Provincial Secretariat for Agriculture, Water Management and Forestry is, pursuant to the Law on Determining the Jurisdiction of the Autonomous Province of Vojvodina (O. Gazette of RS, No.99/2009) competent for water management at the territory of AP Vojvodina.

At the level of the City of Belgrade, after entering into force of the Law on the Capital (Official Gazette of RS, No. 129/2007) Secretariat for Utilities and Housing Services of the city of Belgrade – Water Administration is competent for water management.

Local government is responsible for municipal water supply and sewerage on its own territory and for performing other tasks in the water sector.

Cooperation between administrative bodies is regulated by *Law on State Administration*, Articles 64 and 66 that define the duty of state administrative bodies to cooperate and exchange information in all issues of mutual interest, as well as establish joint bodies and project groups for the purpose of performing tasks that demand several participating administrative bodies. In that case, the tasks from the scope of two or more administrative bodies are managed by the administrative body responsible for the majority of tasks.

Competence for law enforcement in the *field of environmental protection* is divided between: republic inspections, provincial inspectors, local inspections for (in local government units).

3.3. Are formal procedures for community involvement and consultation, in the decision making process, in place (i.e. public consultation is required on project undergoing E.I.A. etc)?

YES

4. MONITORING AND ASSESSMENT

4.1. Please list the laboratories equipped to run water quality testing.
(Please indicate if private or public and their location. If possible, please add contact details)

Republic Hydrometeorological Service of Serbia, Belgrade
Network of 23 Institutes for Public Health

4.2. Please list universities and research institutes (or just experts) with research facilities and programmes on marine and coastal issues (if possible, please add contact details):

To be developed/updated until March 2012 by National Blue Flag Commision.

4.3. Base line studies of the state of environment exist:
yes no

4.4. A "State of the environment" report is produced regularly at the national and/or local level: yes no

4.5. Data bases on environmental related issues exist:
yes no

4.5.1. If yes, please provide details on type of data base, operating agency, and eventually contact details:

Serbian Environmental Protection Agency which is part of the Ministry competent for Environment role is to:

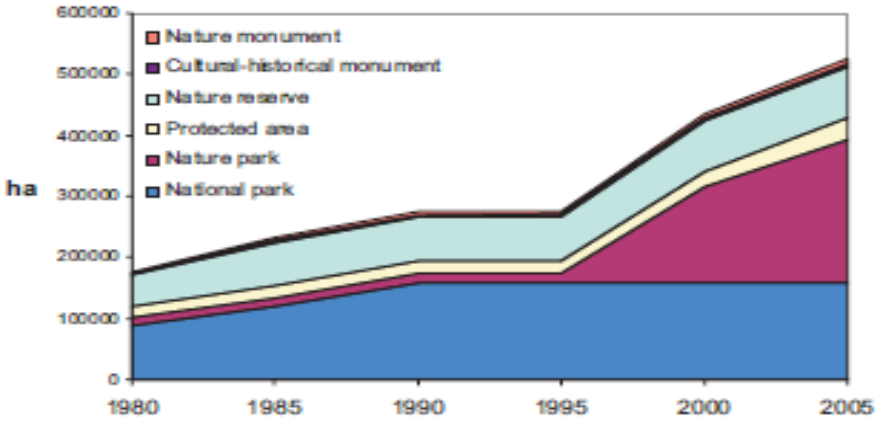
- Development, regulation and maintenance of the National information system for the environmental protection (monitoring the parameters of the state of the environment, pollutants cadastre, etc.);
- Environmental data acquisition, centralization and processing, reporting about the state of the environment and policy implementation in the field of environmental protection;
- Development of the procedures for environmental data processing and evaluation;
- Management of the information about best available techniques and practices and their implementation in the field of environmental protection;
- Cooperation with the European Environmental Agency (EEA) and European Environment Information and Observation Network (EIONET), as well as other objectives defined by law.

4.6. Maps of the coastal areas exist: yes no
4.6.1. Natural resources and features of the coastal areas have been mapped:
yes no

4.6.2. Endangered habitats have been mapped: yes no

BIODIVERSITY
[CSI 008] Designated Areas

Key message: In the past 25 years, there was a significant increase of the number and the size of protected areas in Serbia. At the moment the percentage of protected areas is 6.6% of the territory and it will reach 10% until the year 2010.



Cumulative area of protected areas in Serbia

Results and assessment
The greatest percentage of protected areas belongs to Nature parks. According to IUCN, Nature Parks are V category, so the degree of protection of the dominant category of protected areas in Serbia is at a rather low level. Bearing in mind the rather heterogeneous level of categorisation compared to the significance of individual areas, and taking into account the fact that Serbia, as a part of the Balkans, is a significant centre of diversity at European and the world scales, it is necessary to raise the protection level of some especially valuable areas.

4.6.3 hotspots have been mapped: yes no

4.7. You collect statistics on:
International tourism arrivals: yes no
Domestic tourism arrivals: yes no
Tourists' preferences: yes no
Tourists' satisfaction levels: yes no

5. IMPROVING IN-COUNTRY CAPACITY

5.1. Training programmes for public officials exist for:

Tourism management yes no
Safety yes no
Environmental management yes no

5.2. How is the promotion of tourism organized in your country?

Mainly by tourist organization/s.

6. RAISING AWARENESS AND VOLUNTARY INITIATIVES

6.1. Please describe, if any, information and awareness raising campaigns for the protection of the coastal environment, at the national and local levels (i.e. beach clean ups, "save the …" campaigns etc):

Ministry of Environment, Mining and Spatial Planning performed the action Let's clean Serbia, the goal of which is the environmental protection and raising of the level of citizens' ecological consciousness. This action includes beach clean ups. Many coastal areas are cleaned up every year during celebration of The Danube Day or World Water Day.

7. THE OTHER STAKEHOLDERS

7.1. Which are the main Non Governmental Organizations working on:

(please indicate, if possible, at which level they operate, i.e. local, national, regional)

"Blue Flag" program will be among pioneer (Operating by NGO).

7.2. Other relevant stakeholders operating in the coastal areas are:

One of the goals of Blue Flag Serbia is to attract involvement of different stakeholders.

8. REGIONAL COOPERATION

8.1. Your country is member of a Regional Organization(s) involved in the sustainable development of tourism: yes no

No, according our information.

8.3. Your country is part of a Regional Development Plan which includes guidelines/strategies for sustainable tourism development:

yes no

According our knowledge, country is supporting Carpathian Convention Protocol on Sustainable Tourism.

9. COMMENTS AND FEEDBACK

9.1. Do you feel that the Blue Flag programme could help improve the environmental quality of your country's coastal areas?

Yes:

9.2. Do you feel that the Blue Flag programme could help increase tourists' arrival and the rate of tourists' returns?

Yes

9.3. Do you feel that the Blue Flag programme could represent an instrument to solve other critical issues?

Possible

Short-term Goal 2010 - 2014[1]

- Establish a strategic framework for the conservation and sustainable use of water;
- Eliminated overlapping responsibilities in the areas of water management and water protection and enhanced interinstitutional coordination in the field of water;
- Harmonized national regulations for integrated water management with the Framework Directive 2000/60/EC on the waters;
- Introduced standards for effluent quality according to the Directive on the treatment of municipal wastewater utility 91/271/EEC end of 2011. year;
- Harmonized national regulations with other directives related to water (flood 2007/60/EZ Directive, the Directive on the management of water quality for swimming 2006/7/EZ), Groundwater Directive 80/68/EEC (cease to be valid 2013. Directive 2006/118/EEZ);
- The strategy adopted for monitoring surface water and groundwater in the Republic of Serbia and the Action Plan;
- Transposition and implementation of the Nitrates Directive 91/676/EEC;
- Transposition of the Directive, which defines the quality of water intended for human consumption 98/83/EC into domestic legislation;
- Transposition of the Directive, which defines the quality of water intended for swimming 76/160/EEC;
- Defined zone of protection of sites of groundwater and reservoirs used for water supply;
- Conform to the standards for drinking water requirements of Directive 98/83/EC of drinking

[1] *Excerpt from the National Environmental Protection of Serbia, published in the Official Gazette of the Republic of Serbia No. 12/2010 of 12.03.2010*

water by 2012.year;
- Establish a strategy for geological survey of underground water;
- Made the balance of groundwater reserves for the whole territory of the Republic of Serbia, on the basis of a study of underground water reserves with the goal of sustainable use of groundwater sites;
- Developed and updated geological information system of Serbia - a subsystem of groundwater in which the balance of reserves, monitoring and protection thereof;
- Implemented a water management information system of the Republic of Serbia;
- Create a missing component of the information system of water quality;
- Develop a register of sources of water pollution in the Agency for Environmental Protection.

Continuous Goal 2010 - 2019.

- Improve water quality by reducing discharges into water courses untreated industrial and municipal wastewater;
- Provide rehabilitation and operation of existing wastewater treatment of wastewater from settlements;
- Ensure evacuation and treatment of urban waste water in rural areas with over 100 000 population equivalent;
- Provide treatment of urban waste water in rural areas where no organized water supply and which significantly affect the immediate recipient and the water quality in sensitive areas;
- Increasing the degree of coverage of public sewerage to 65% of the population;
- Ensure that the quality of drinking water in rural areas meet the quality standards, the Directive on drinking water 98/83/ES and establish a regional water supply systems in selected rural areas with low quality water;
- Establishment of protection zones for all site groundwater and reservoirs used for water supply;
- Rationalization of water consumption by individual consumers;
- Establishing monitoring groundwater cover the entire territory of the Republic of Serbia;
- Establish a reference laboratory for testing water;
- Conduct a balance of groundwater reserves for the whole territory of the Republic of Serbia, on the basis of a study on groundwater reserves.

Mid-term goals 2015 - 2019.

- Adjust the standards for bathing water requirements of the Directive 76/160/EES
- Provide adequate treatment, reuse or disposal of sludge from the device for treatment.

Note (Bathing water standards as in Council Directive of 8 December 1975 concerning the quality of bathing water 76/160/EEC):

ZAHTEVI KVALITETA ZA VODU ZA KUPANJE

	Parametri	G	I	Minimalna učestalost uzorkovanja	Metod analiziranja i pregleda
1	**Mikrobiološki:** Ukupni koliformi /100ml	500	10 000	Dvonedeljno (1)	Fermentacija u više epruveta. Gajenje pozitivnih epruveta na podlozi za potvrđivanje. Brojanje prema najverovatnijem broju ili membranska filtracija i gajenje na odgovarajućoj podlozi kao što su tergitol laktozni agar, endo agar, 0,4% Teepol bujon, gajenje i identifikacija sumnjivih kolonija. U slučajevima 1 i 2, temperatura inkubacije zavisi da li se ispituju ukupni ili fekalni koliformi.
2	Fekalni koliformi /100 ml	100	2 000	Dvonedeljno (1)	
3	Fekalne streptokoke/100 ml	100	-	(2)	Litsky metod. Brojanje kolonija prema najverovatnijem broju ili filtracija na membrani. Gajenje na odgovarajućoj podlozi.
4	Samonela /1 litar	-	0	(2)	Koncentrisanje membranskom filtracijom. Inokulacija na standardnoj podlozi. Obogaćivanje – gajenje na izolacionom agaru – identifikacija
5	Entero virusi PFU/10litara	-	0	(2)	Koncentrisanje membranskom filtracijom, flokulacija ili centrifugiranje i potvrđivanje.
6	**Fizičko-hemijski:** pH	-	6-9 (0)	(2)	Elektrometrija sa kalibracijom na pH 7 i 9
7	Boja	- -	Bez nenormalne promene boje -	Dvonedeljno (1) (2)	Vizuelni pregled ili fotometrija sa standardima na Pt.Co skali
8	Mineralna ulja mg/litar	- -	Bez vidljivog filma na površini vode,bez mirisa -	Dvonedeljno (1) (2)	Vizuelni i mirisni pregled ili ekstrakcija upotrebom adekvatne količine i merenje suvog ostatka
9	Površinski aktivne materije koje reaguju sa metilneskim plavim mg/litar (lauril-sulfat)	- ≤ 0,3	Bez trajne pene -	Dvonedeljno (1) (2)	Vizuelni pregled ili apsorpciona spektrofotometrija sa metilenskim plavim
10	Fenoli (indikatori fenola) mg/litar C_6H_5OH	- ≤ 0,005	Bez specifič. mirisa ≤ 0,05	Dvonedeljno (1) (2)	Verifikacija odsustva specifičnog mirisa na fenol ili apsorpcioni spektrofotometrijski 4-aminoantipirin (4AAP) metod
11	Transparentnost m	2	1 (0)	Dvonedeljno (1)	Seki disk

12	Rastvoreni kiseonik % saturacije O_2	80-120	-	(2)	Winklerov metod ili elektro-metrijski metod
13	Katran i plivajući mateijali kao što su: drvo, plastika, boce, staklene posude, guma i druge materije, otpaci	Bez		Dvonedeljno (1)	Vizuelni pregled
14	Amonijak mg/litar NH_4			(3)	Apsorpciona spektrofotometrija, Neslerov metod ili metod sa indofenol plavim
15	Azot po Kjeldalu mg/litar N			(3)	Kjeldalov metod
16	**Druge supstance koje se smatraju indikatorima zagađenja:** Pesticidi mg/litar (paration, HCH, dieldrin)			(2)	Ekstrakcija sa odgovarajućim rastvaračima i hromatografskim određivanjem
17	Teški metali mg/litar kao: arsen, kadmijum, hrom VI, olovo, živa			(2)	Atomska apsorpcija uz moguću prethodnu ekstrakciju
18	Cijanidi mg/litar CN			(2)	Apsorpciona spektrofotometrija sa specifičnim reagensom
19	Nitriti i fosfati mg/litar NO_3 i PO_4			(2)	Apsorpciona spektrofotometrija sa specifičnim reagensom

G – preporučena vrednost
I – obavezna vrednost
(0) – Odredba postoji za prekoračenje graničnih vrednosti u slučajevima izuzetnih geografskih ili meteoroloških uslova
(1) – Ako je uzorkovanje iz prethodne godine dalo rezultate koji su znatno bolji od vrednosti iz Aneksa i ako se nisu pojavile nove činjenice koje bi mogle da snize kvalitet vode, nadležni organi mogu prepoloviti učestalost uzorkovanja.
(2) – Koncentracija koju nadležni organi treba da provere ako pregled u oblastima za kupanje pokaže da supstanca može biti prisutna ili da je kvalitet vode pogoršan.
(3) – Ovi parametri moraju se proveriti od strane nadležnih organa ukoliko postoji tendencija ka eutrofikaciji vode.