



Report of the BiH Stakeholders mapping











Content:

	Introduction
1.	Protocol on Integrated Coastal Zone Management in the Mediterranean5
2.	SPA and Biodiversity Protocol - Protocol on Specially Protected Areas and Biodiversity in the Mediterranean (1982, replaced by a new one in 1995)7
3.	Constitutional regulation of the environmental policy of Bosnia and Herzegovina11
4.	Costal area of Bosnia and Herzegovina
5.	Legal International and National Framework in Bosnia and Herzegovina related to Adriatic Costal Zone
6.	Relevant institutional framework in the field of water and Environmental protection in BiH
7.	Reactios in case of incidental pollutions in the costal area of BiH



Introduction



We are witnessing a growing negative anthropological impact on the world's seas, which results in an increasing amount of waste in marine waters and the sea as such is increasingly reminiscent of floating landfills of enormous capacity. In addition to waste, the seas are polluted by wastewater from the sewage system of coastal areas. Most municipalities in Bosnia and Herzegovina do not have a regulated system of wastewater and sewage disposal. Most of these untreated waters reach directly into marine and river ecosystems.

The Mediterranean Sea represents 0.7% of the world's seas, and 30% of international maritime transport takes place there. As such, it is one of the the biggest traffic sea in the world, with a long history of exploitation. Due to the accelerated population growth, intensive urbanization of coastal areas, the growth of industrial activities, the amount of waste in the Mediterranean is increasing day by day.

The protection and preservation of the Mediterranean ecosystem, which includes the Adriatic Sea basin, is a considerable challenge that exceeds national capacities and frameworks and which can only be successfully addressed through international cooperation of all countries with access to the Mediterranean Sea.

In order to protect the Mediterranean Sea and adequately respond to the aforementioned consequences, 16 Mediterranean countries and the European Community adopted the Mediterranean Action Plan in 1975 (MAP) under the auspices of the United Nations Environment Program.

The legal framework of the Mediterranean or Mediterranean Action Plan consisted of the Convention for the Protection of the Marine Ecosystem and the Coastal Area of the Mediterranean Sea, and the accompanying protocols.

The convention was signed in Barcelona in 1975, hence the name of the Barcelona Convention. The contracting parties to the Barcelona Convention adopted Action Plan II in 1995, and in the same year they revised the Barcelona Convention, which today, together with its 7 protocols, forms the legal framework of the Mediterranean Action Plan II.

A great challenge for the protection of the Mediterranean is the sources of pollution coming from the sea or ships as well as from oil platforms. The greatest danger is the sudden spillage of oil and petroleum products as well as other hazardous substances into the sea.

In order to reduce the consequences of pollution caused by accidents at sea, MAP member states have developed intervention systems in the event of incidental pollution of the sea, and are constantly improving cooperation on these issues because no Mediterranean country has the capacity to deal with major accidents at sea.

Bosnia and Herzegovina, a country with access to the Adriatic Sea, successively took over the Barcelona Convention from the former Yugoslavia, which entered into force in 1978. In this way, BiH has joined joint efforts to prevent and control pollution in the Mediterranean.







Mediterranean
Action Plan
Barcelona
Convention

Namely, the implementation of obligations arising from the Barcelona Convention, which relate to the formation of an intervention system in the event of incidental marine pollution in BiH, is not easy and there is a need for significant improvements in this area. This diminishes Bosnia and Herzegovina's ability to respond effectively in the event of a marine casualty that may result in the spillage of oil or oil and other hazardous substances into the se



The fact that BiH has only 24.5 km of coastline does not diminish the importance of preserving and protecting the ecosystem of the Adriatic Sea. This fact is supported by the example of the discharge of wastewater and dirt from ships that sailed into the Neum Bay in 2010, and the event provoked negative reactions from citizens due to the negligence and ignorant behavior of the then government.

Due to the complexity of the structure of BiH, the institutions have not yet created the conditions for efficient management in cases of incidental marine pollution. Actively workis is necessary to establishing an effective management system in cases of incidental marine pollution. For a part of the Adriatic coastal sea in Bosnia and Herzegovina, a special problem is diffuse sources of pollution, which can include leachate from the landfill Klekovica, then waste from over 1,500 households, about 10 hotels, 12 public institutions and 50 business facilities that are disposed of (approx. 27,293 m2) space.

The leachate of the Klekovica landfill creates pressure on the waters of the Neum - Klek bay, but also on the Blace spring. Also, from the urban area of the municipality of Neum, there is a part of entities that use septic tanks for drainage of wastewater, and that is about 1100 facilities. In the rural areas of the municipality of Neum, which include 49 settlements with over 400 households, there is no sewage system and wastewater is disposed of in septic tanks, drains and canals, after which it goes to the nearest water source. Special research is needed to determine the real environmental impact of diffuse sources of pollution on part of the Adriatic Sea in Bosnia and Herzegovina, or on the bay of Neum - Klek, and on tourism and marine aquaculture.

The Council of Ministers of Bosnia and Herzegovina, at the proposal of the Ministry of Foreign Trade and Economic Relations, adopted a Feasibility Study for the implementation of the Coastal Zone Management Program in Bosnia and Herzegovina - CAMP project. The feasibility study for the implementation of the CAMP project in BiH provides an overview of existing laws, policies, plans and strategies; analysis of institutional arrangements for coastal zone management; a list of ongoing initiatives and projects aimed at contributing to the sustainable development of the coast of Bosnia and Herzegovina. The needs and shortcomings for integrated coastal zone management in Bosnia and Herzegovina are identified and a proposal for CAMP areas and activities is made, with the aim of long-term sustainability of the project.







1. Protocol on Integrated Coastal Zone Management in the Mediterranean

The Protocol on Integrated Coastal Zone Management of the Mediterranean is the seventh protocol under the Barcelona Convention and is the first international legal instrument dealing with an integrated approach to marine and coastal protection that considers spatial planning, environmental and nature protection, cultural heritage and tourism and other economic activities in the coastal area. The aim of the Protocol is to establish a common framework for integrated coastal zone management in the Mediterranean, which in terms of the provisions of the Protocol means a dynamic process of sustainable coastal management and use that considers the fragility of coastal ecosystems and landscape, diversity of activities and uses. organism. The scope of this Protocol is determined by the boundary of the coastal area towards the sea formed by the external boundary of the territorial waters of the Contracting Parties and the boundary of the coastal area towards the mainland formed by the boundary of the competent coastal units as defined by the Contracting Parties.



Integrated coastal zone management has its own implementation instruments, set goals and functions. Maritime property in Bosnia and Herzegovina is still not specified by law. It is necessary to determine by law the conditions under which it is possible to perform an economic activity on a maritime domain. Maritime property is an area of sensitive characteristics, where natural changes and economic activities take place. The approach to the problems of the coastal area requires a systematic consideration in an effort to prevent their occurrence, ie to mitigate the possible negative consequences. The process of initiating and implementing integrated management begins with the adoption of a final decision. It is a complex process that has its own short-term and long-term goals.

According to the Barcelona Convention and the ICZM Protocol, the Contracting Parties undertake to ensure the sustainable use and management of the coastal area in order to preserve coastal natural habitats, landscape, natural resources, ecosystems in accordance with international and regional legal instruments. In view of the above, the contracting parties shall determine the land belt in which construction is not permitted by the prescribed methods. There is a need to define the property rights over all plots in the Urban Plan (Spatial Plan of the Municipality of Neum 2010-2020) of the Municipality of Neum, in order to work on them in terms of bringing infrastructure potentials (access roads, water supply, sewerage, electrification and in the future gasification) as a necessary minimum to put these public areas into operation with the capital of foreign or domestic investors, through the lease of land for a longer period or through the establishment of public-private partnerships, which would mean that until almost unused potentials in the form of land that serves no purpose to be brought to an effective purpose.

This Protocol is of great importance to all the countries of the Mediterranean. In order to protect and preserve the Mediterranean Sea, in addition to modern international law (general and regional), national legislation has been woven, and national cooperation between the governments of the Mediterranean countries and the European Union has been enhanced. The Barcelona Convention and its Protocols are important for Bosnia and Herzegovina, which, as a Central European and Mediterranean country, implements the protection of the marine and



coastal environment, which is realized as part of the overall regional strategy for the protection of the Mediterranean.

The State of Bosnia and Herzegovina is aware that the protection of the environment as well as the reduction of emissions of hazardous and harmful substances into the environment is a PAP/RAG priority goal and task of preserving the environment and fulfilling the postulates of sustainable development. The protocol is based on the provisions of the Barcelona Convention, in the obligations of the parties to adopt and implement an integrated approach to coastal zone management in order to protect the environment and support sustainable development, taking into account ecological protection, importance of landscape appearance and rational use of natural resources.



The protocol defines the procedure for action in case one of the contracting parties decides to determine the boundaries differently than prescribed. The process of implementation of this protocol requires the cooperation and coordination of administrative services, state, local and regional authorities responsible for the coastal area. It is also required to develop a strategy, plans and programs related to land use related to urban development and other social and economic activities that are very numerous and diverse in this area, and their specifics require proximity to the sea. The coastal area needs to be evenly distributed according to purpose and risk assessments related to different human activities and infrastructure must be assessed to prevent and reduce their negative impact on coastal areas. If damage to the coastal environment occurs, it is necessary to re-establish the previous state of the environment as much as possible.

The objectives of integrated coastal zone management are:

- Enabling rational planning of sustainable coastal development activities by ensuring that the protection of the environment and the appearance of the landscape are taken into account together with economic, social and cultural development,
- Preservation of the coastal area for the benefit of present and future generations,
- Fully ensure the preservation of coastal ecosystems, landscape appearance and geomorphology
- Prevent or mitigate the impact of natural risks and climate change that may be caused by human and nature factors,
- Achieving coherence between public and private initiatives and all decisions of the state government at the national regional and local level, which affect the use of the coastal area.

This Protocol commits Bosnia and Herzegovina to ensure the sustainable use and management of the coastal area to preserve coastal natural habitats, landscape, natural resources, ecosystems in accordance with international and regional legal instruments. Considering the mentioned contracting parties, and thus Bosnia and Herzegovina, in accordance with the prescribed methodology, will determine the land zone in which construction is not allowed. The Protocol defines the criteria for the sustainable use of the coastal zone and the need to include the national and legal instruments of the Contracting Parties.

The Parties to the Protocol undertake to pay particular attention to economic activities requiring proximity to the sea, to ensure that various economic activities reduce the use of natural





Mediterranean Action Plan Barcelona Convention

resources considering the needs of future generations and to ensure adequate water and waste management in an environmentally sound manner. In order to ensure the sustainable development of coastal areas, it is necessary to adapt coastal and maritime activities to the sensitive coastal area and protect marine resources from pollution, ensure sustainable use of coastal areas and reduce pressures that exceed the receiving capacity. The signatory states to the agreement have committed themselves to ensuring a high level of protection of the coastal and marine environment in agricultural and industrial activities. In fisheries, it is necessary to improve the protection of fishing areas, taking care that fishing is approached in accordance with the prescribed sustainable use of marine resources. In aquaculture, this means protecting aquaculture areas and shellfish farming areas by controlling the input of substances and treated waste into the sea.



It is important to encourage the development of tourism, sports and recreational activities while preserving the coastal and marine environment, coastal and marine ecosystems, respecting the traditions of the local population by carrying out those activities that do not disturb or harm the environment, while supporting sustainable coastal development. When building infrastructure, power plants, ports and when performing maritime and construction works, contractors must have special approvals to combat the negative consequences or compensate for some other measures that are not of a financial nature. When navigating, it is also important to ensure the protection of coastal ecosystems in accordance with the standards and procedures prescribed by the relevant international conventions. The Contracting Parties to this Protocol, in addition to a number of the above activities, are obliged to protect specific coastal ecosystems.

In accordance with the prescribed standards, it is necessary to protect wetlands and estuaries, marine habitats, coastal forests, dunes, existing landscapes, islands and cultural heritage. Participants in the process of implementation of this protocol are relevant territorial communities, public and economic entities, non-governmental organizations, the public, etc. It is necessary for all of them to take part in drafting and implementing strategies, making plans and programs for coast and sea protection and issuing various permits. The Contracting Parties to this Protocol have committed themselves to raising awareness at the national, regional, and local levels, as well as to organizing relevant training and scientific research. This protocol is in the process of ratification in Bosnia and Herzegovina.

2. SPA and Biodiversity Protocol - Protocol on Specially Protected Areas and Biodiversity in the Mediterranean (1982, replaced by a new one in 1995)



The Mediterranean Sea is known for the diversity and uniqueness of flora, fauna and ecosystems, and the fact is, on the other hand, that there is a danger of a significant reduction or loss of biological diversity. The Mediterranean States, aware of the fact that measures to avoid or reduce such a danger cannot and must not be postponed, adopted at a conference in Barcelona (held on 9 and 10 June 1995) on 10 June 1995 a new protocol, the Protocol on Special protected areas and biodiversity in the Mediterranean. It has been in force since 12 December 1999. According to Art. 1.b) biological diversity means the diversity of living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part, including diversity within species, between species and ecosystems. According to Art. 2. v.1. The Protocol applies except to the Mediterranean Sea area as defined in Art. 1. The Barcelona Conventions shall apply to the seabed and the subsoil, waters, seabeds and subsoil thereof which lie within the baseline from which the breadth of the territorial sea is measured and which, in the case of watercourses, extend to freshwater boundaries, but also to inland coastal areas to be determined by the parties themselves, including wetlands. Apart from Slovenia, other coastal EU member states have signed the Protocol, and all but Greece have ratified it.

The sea ecosystem is of special importance in the Mediterranean landscape. According to the findings of relevant workers from the Faculty of Natural Sciences and Mathematics in Sarajevo, University of Sarajevo, it was determined that "the relief of the seabed in the part of the Bosnian sea is very dynamic. Water quality, shelter from strong storms and a specific combination of dissolved salts, have conditioned the development of an extremely rich living world. Microphyte and macrophyte algae and numerous species of invertebrates make planktonic, nektonic, and benthic living communities very interesting. These ecosystems are home to about 100 species of different vertebrates, most of which are fish (97 species), and many different forms of invertebrates - sponges, crustaceans, shellfish, cephalopods, corals, echinoderms, and various sea worms. Global and local anthropogenic influences are expressed in the coastal zone, which is why some sensitive species (fingerling, sea urchin) are seriously endangered.

Therefore, it is of special importance to permanently monitor the state of flora and fauna within the Gulf of Neum-Klek, and to submit periodic appropriate reports, with proposals for measures to be taken to flora and fauna of the Adriatic coastal sea. in Bosnia and Herzegovina. The National Action Plan in the event of a sudden oil spill in this very sensitive and very vulnerable marine area is also being drafted. Support is provided by REMPEC from Malta, which has hired an expert who together with representatives of all levels of government and the Adriatic Sea Basin Agency, along with representatives of the Indirect Taxation Authority, Border Police and others are preparing this strategic plan. This means that other recommendations will be also implemented, but more slowly, taking into account all the above mentined, and the very sensitive situation of the Bay of Neum-Klek.

Field research on the biodiversity of this area has confirmed the high degree of diversity of flora and fauna of the Klek peninsula, and the presence of a number of endangered and protected species justifies the inclusion of this area in the network of protected areas of BiH. The presence of species from the EU Habitats Directive confirms that this area has national, regional and global importance for the protection of species and habitats. Ecosystems of the Mediterranean area of BiH are very rare, poorly explored and still completely unprotected habitats in BiH. Given that BiH does not have a significant marine or coastal area, the small eumediterranean area around Neum and especially the Klek peninsula is of great importance for the overall biodiversity of BiH. Based on the by now

research, it is concluded that it is necessary to consider the protection of the entire area of the Klek peninsula, where different zones and levels of protection can be defined which will, in addition to preserving species and habitats, enable sustainable use of this area.

Oil can enter part of the Adriatic Sea in Bosnia and Herzegovina due to maritime transport, from the AP/RAC existing terminal, accidents of tankers or other ships, atmosphere, urban wastewater, industrial wastewater, and due to accidents and possible failures of certain infrastructure and material resources from ships. The first effects of oil and oil derivatives on sea water were visible oil and greasy stains, and an unpleasant odor, which was a direct consequence of contamination with oil residues of various port devices, fishing tools, vessels, and shores.

These visible consequences of spilling oil and its derivatives into the sea are especially unpleasant in areas where there are beaches that are used for tourist and recreational purposes, which is the case of Neum - Klek Bay. Given that appropriate maritime activity takes place in this part of the Adriatic Sea, the possibilities of pollution are great. The actual assessment of possible oil pollution can be given through the analysis of vessels entering the territory of the bay Neum - Klek and continuous monitoring of the state of sea quality.

In general, solving the problem of water supply of the entire municipality of Neum, construction of sewers, rehabilitation of solid waste landfills, improvement of transport connections in the hinterland, are prerequisites for successful and sustainable development, both in tourism and environmental protection and in other economic areas. Spatial planning has a strategic role in the development of tourism, in addition to preserving natural and cultural-historical values in its original form, which will be harmonized with the CAMP project and later planning of protected areas, ie areas of exceptional value. In the following are the listed what is need to be done in this area, related primarily to sustainable development and protection of the coast and the environment.

- 1. Mandatory implementation of the recommendations from the Environmental Review relating to the part of the Adriatic Sea in Bosnia and Herzegovina,
- 2. Develop a Strategy for the implementation of sustainable development goals with an action plan for the coastal area of Bosnia and Herzegovina,
- 3. Adopt appropriate legislation and develop management plans for protected and special areas,
- 4. Establish continuous monitoring of the quality of the Adriatic Sea in Bosnia and Herzegovina (physical properties of water, water chemistry, and monitoring of biological and ecological characteristics, which includes monitoring of qualitative and quantitative system of phytobenthos, zoobenthos and fish populations),
- 5. Establish the development of mariculture, but under the condition that it is professionally and ecologically acceptable,
- 6. Establish a measuring station in the bay of Neum Klek, and establish a continuous one sea quality monitoring,
- Monitor and limit further pollution,





- 8. Get involved in all activities to combat climate change, both adaptation and mitigation,
- 9. Observe the Neum area separately and in all strategies (biodiversity, climate change and others),
- 10. Complete the ratification of the ICZM protocol and incorporate the provisions of the protocol into domestic legislation.



Bosnia and Inter-Entity Ministry of Foreign Herzegovina **Coordination Body** Trade and Economic Relations for the Environment **Brčko District** Federation of Bosnia and Republika Srpska Herzegovina Department of Ministry of Ministry of Ministry of Ministry of Spatial Planning and **Environment** Agriculture, Spatial Agriculture, **Property Issues** and Tourism Water Planning, Civil Forestry and Management Engineering Water Department of and Forestry and Ecology Management Agriculture, Forestry and Water Management Cantonal level Municipal level Department for Municipal level Municipal Utility

3. Constitutional regulation of the environmental policy of Bosnia and Herzegovina

Figure 1. Environmental competencies in BiH

Affairs

The Constitution of Bosnia and Herzegovina (BiH), annexed to the General Framework Agreement for Peace in Bosnia and Herzegovina (Dayton Agreement) and adopted in 1995, defines BiH as a sovereign state with a decentralized policy and administrative structure, as well as several levels of political management, as follows:

Government at the level of the state of Bosnia and Herzegovina (legislative: Parliamentary Assembly of BiH, executive: Presidency of BiH and Council / Council of Ministers of BiH, judicial: Constitutional Court of BiH and Court of BiH) two entities:

- Federation of Bosnia and Herzegovina (legislative power: FBiH Parliament, executive: FBiH President and FBiH Government, judicial: Constitutional Court, Supreme Court). The Federation of BiH is further decentralized in 10 cantons that have their own governments, parliaments and courts)
- The Republic of Srpska (legislature: RS National Assembly, executive: RS President and RS Government, judicial: Constitutional Court, Supreme Court). The Republic of Srpska is centralized and has two levels of government: republican and local-municipal.
- The Brcko District is a self-governing administrative unit under the sovereignty of Bosnia and Herzegovina, which is officially part of both entities. Legislative power is exercised by the District Assembly, executive by the District Government, while judicial power is exercised by the District Courts.

Environmental issues are not included in the ten points defined by the Constitution of Bosnia and Herzegovina as the competencies of state institutions, and therefore fall under the following provision: "All government functions and powers not expressly entrusted by this Constitution to the institutions of Bosnia and Herzegovina belong to the entities." Article III, paragraph 3)

The Constitution of the Federation of Bosnia and Herzegovina determines the competencies of this Entity and its cantons in the field of environmental protection as follows:

- The exclusive competence of the Federation is "economic policy, including planning and reconstruction and land use policy at the federal level" (Article III.1c Amendment VIII) as well as "energy policy, including distribution between cantons and provision and maintenance of necessary infrastructure." (Article III.1g Amendment VIII)
- The joint competencies of the Federation and the cantons are e.g. health, environmental policy, tourism and the use of natural resources (Article III.2) These responsibilities "may be exercised jointly or separately, or by the cantons coordinated by the federal government." (Article III
- "Cantons have all competencies that are not explicitly entrusted to the federal government", such as policy making on regulation and provision of public services, regulation of local land use and local facilities for electricity production, establishment and implementation of cantonal tourism policy and development of tourism resources (Article III.4)

The Constitution of the Republic of Srpska explicitly mentions the environment in Chapter II. under Human Rights and Freedoms: "Man has the right to a healthy environment. Everyone is obliged, in accordance with the law, to protect and improve the environment to the best of his ability." (Article 35). This Entity "protects and encourages the rational use of natural resources in order to protect and improve the quality of life and the protection and restoration of the environment in the general interest" (Article 64).

According to Article 68 of the Constitution, the Republic of Srpska is responsible for regulating and providing environmental protection, as well as for the main goals and directions of economic, scientific, technological, demographic and social development, and agricultural and rural development, land use, policies and measures to guide development and goods. Some of the competencies of the municipalities in this entity are to "adopt a development program and urban plan" and "take care of meeting the needs of citizens in culture, education, health and social protection, physical culture, information, crafts, tourism and catering, environmental protection and other areas. "(Article 102)

The highest law of the Brcko District in Bosnia and Herzegovina is the Statute of the Brcko District, which is based on the General Framework Agreement for Peace, the Final Award of the Arbitration Court for Disputes over the Inter-Entity Border Line in Brcko and the Constitution of Bosnia and Herzegovina. Article 9 of the Statute states that the environment is one of the competencies of the public authorities in the District, but this area is not elaborated in detail.

Bosnia and Herzegovina is unique in the world in terms of its state system. Its organization is of a republican character, although BiH does not function or is defined as a republic due to the complexity of the units into which it is divided (entities and cantons).

According to the current Constitution, the government began to form on December 14, 1995. The signing of the Dayton Peace Agreement in 1995 stopped the civil war in Bosnia and Herzegovina.

Department for construction and spatial planning in the Neum Municipality deal with administrative matters, and performs administrative professional and other tasks in the field of urbanism, construction and physical planning, roads and communal activities, performs inspection and supervision in the field of urbanism, construction, roads and communal activities, also performs other tasks and duties assigned to them in accordance with the regulations.

According to Article 41 of the Law on Spatial Planning and Land Use at the Level of the Federation of Bosnia and Herzegovina ("Official Gazette of the Federation of BiH", no. 2 / 06,72 / 07, 32/08, 4/10, 13/10 and 45/10), as part of the procedure for issuing urban consent, the investor whose project is considered to have or may have a negative impact on the environment is obliged obtain an environmental permit in advance.

The environmental permit aims at a high level of environmental protection. Issuance of environmental permit is regulated by Art. 68.-72.

According to the Law on Environmental Protection (Official Gazette of FBiH 33/03), ie, Art. 26.-27. Law on Amendments to the Law on Environmental Protection (Official Gazette of FBiH 38/09). The Rulebook on industrial plants for which environmental impact assessment is mandatory and plants that can be built and put into operation only if they have an environmental permit ("Official Gazette of the Federation of BiH", No. 19/04) defines plants which can be built and put into operation only if they have an environmental permit.

All existing plants were obliged to obtain an environmental permit by 2008 according to Art. 72 of the Law on Environmental Protection (Official Gazette of FBiH 33/03), ie until December 31 2011. according to Article 27 of the Law on Amendments to the Law on Environmental Protection (Official Gazette of FBiH 38/09). The application for an environmental permit can be prepared by the applicant himself or he can hire a consulting company specializing in the field of environment.

For facilities that do not require an environmental permit the competent authority issues an opinion that it is not necessary obtaining an environmental permit. If so opinion issued by the Federal Ministry of the Environment and tourism, according to Article 2 of the mentioned rulebook, the investor should contact the competent cantonal ministry, and if not the cantonal ministry is not competent and issues an opinion on it, the conditions of protection The environment will be prescribed as part of the urban plan consent

The content of the application for the issuance of an environmental permit has been regulated according to Art. 18 (54a) of the Law on Environmental Protection and the Law on amendments to the Law on Environmental Protection (Official Gazette FBiH No. 33/03 and 38/09). In the case of plants and facilities referred to in Art. 3rd and 4th In the case of plants and facilities referred to in Art. 5th and 6th Ordinance, the Federal Ministry decides whether it is required environmental impact assessment by the Conclusion on development Environmental Impact Studies and if so, the

Investor submits the Environmental Impact Study to the Federal Ministry of Environment and Tourism within 6 months from the date adoption of the Conclusion on the preparation of the Stu

Therefore, BiH do not have relevant laws at the level of Bosnia and Herzegovina, but the domestic legislation, which deals with environmental issues in BiH, mainly refers to the entity legislation of the Federation of Bosnia and Herzegovina. Given that in the FBiH environmental competencies are divided between the canton and the entity level, it is important to mention the legislation of the Herzegovina-Neretva Canton, to which the municipality of Neum belongs.

Existing legal acts that can treat this area are:

- 1. Law on environmental protection Official Gazette of the Federation of BiH no. 33/03 and 14 relevant adopted decisions related to the regulation of this area
- 2. Law on Nature Protection Official Gazette of the Federation of BiH no. 66/13 and 8 adopted relevant decesions for the regulation of this area,
- 3. Law on waste management ("Official Gazette of the Federation of BiH ", no. 33/03, 72/09 and 16 adopted relevant regulations.

For a functional waste management system, one of the important segments is planning, which in accordance with the Law on Waste Management of the FBIH is placed under the competence of the entity, cantonal and municipal authorities. Therefore, at the cantonal level there are Laws and bylaws in the field of environmental protection used in the territory of Hercegbosna Canton:

- 1. Law on Environmental Protection ("Official Gazette of the F BiH" No. 33/03),
 - Rulebook on Plants, and Plants for Which Environmental Impact Assessment is Mandatory ("Official Gazette of the F BiH" No. 19/04),
 - Rulebook on the content of the report on the security situation, the content of information on security measures and the content of internal and external intervention plans ("Official Gazette of the F BiH" No. 68/05),
- 2. Law on Nature Protection ("Official Gazette of the F BiH" No. 33/03),
- 3. Law on Waste Management (Official Gazette of the F BIH No. 33/03),
- 4. Law on Water Protection (Official Gazette of the F BiH No. 33/03, 54/04),
- 4a. Decree on Concessions on Waters and Public Water Resources ("Official Gazette of the F BiH" No. 8/00)

The Municipal Waste Management Plan is a document that organizes the waste management process at the municipal level It was adopted for the period from 2021 to 2025

- 1. Waste management plan of the municipality of Neum (2021-2025)
- 2. Spatial plan of Bosnia and Herzegovina for the period 1981-2000. year,
 - Draft Spatial Plan of FBiH for the period 2008-2028. year,
 - Draft Spatial Plan of the Herzegovina-Neretva County (HNŽ) 2012-2022 year,
- 3. Spatial plan of the Municipality of Neum 2010-2020. year.
 Lower-order spatial planning documents, urban and regulatory plans, have not been adopted for this area.
- 4. Spatial plan of Bosnia and Herzegovina for the period 1981-2000. Year

The Spatial Plan of Bosnia and Herzegovina is not provided for in the Constitution of BiH, but in the context of the preparation of this Expert Explanation, reference is made to the Spatial Plan of BiH for the period 1981-2000. Year. Consolidated text as a plan of the highest order, since the Spatial Plan of FBiH is still in the adoption phase. According to the Spatial Plan of BiH, the proposed protected area Mediteranetum is intended for protection as a Special Natural Area (reserves, landscapes and natural monuments).

These laws and bylaws represent the existing domestic legal framework in which this area (protection of part of the Adriatic coast in Bosnia and Herzegovina) is partially regulated. Insight into the list of international and national legal acts of the Republic of Croatia shows us how legally unregulated and unprotected the bay of Neum-Klek is in ecological terms. The legal legislation of the Republic of Croatia related to the Adriatic Sea can be a guide to Bosnia and Herzegovina, which is necessary to introduce into our legislation in order to avoid all possible negative environmental consequences for part of the Adriatic coast in Bosnia and Herzegovina, due to pollution, which primarily affects marine culture, marine resources, tourism and other branches of social development of the municipality, but also the health of residents and visitors of the municipality of Neum.

4. Coastal area of Bosnia and Herzegovina

The coastal area of Bosnia and Herzegovina is located in the Federation of Bosnia and Herzegovina, in the Herzegovina-Neretva Canton. Herzegovina consists of mountainous (high) and Adriatic (low) Herzegovina, which in a narrow belt between Neum and the Klek peninsula erupts into the Adriatic Sea. The town of Neum is the only exit to the sea in Bosnia and Herzegovina, so the climate in that southern part of BiH is Mediterranean.

Total length of B&H coastline is 24.5 km with approximately 12,5km2 of territorial waters. It's the second smallest coastline in the world. It borders Croatia on north and south and on the sea as well. The only town on the coastline is a touristic town of Neum.

The territory of the Municipality of Neum, covering an area of 226 km2, is a part of BiH with direct access to the Adriatic Sea and as such, is one of the most important tourist destinations in B&H, which includes a greater wealth of natural values and allows for various uses throughout the municipality for economic, especially tourism purposes.

The whole coastline of BiH serves as beach for bathing and tourists occupy most of artificially created or semi-natural beaches. The total number of those beaches is 8 and they are mostly located in front of the Hotels, excluding the beach Tiha Luka and Druga strana semi-natural beach which are bordering residential areas.

Adriatic Sea water area in the Federation of BiH (in the Bay of Neum) belongs to one type of coastal water - Polyhaline shallow coastal sea of fine-grained sediment PM 1 (PSU <35; depth <40; fine-grained sediment). The methodology for the determination of surface water body types and characterization of surface and groundwater bodies is determined and prescribed by Annex 1 of the "Decision on characterization of surface and groundwater, reference conditions and parameters for water status assessment and water monitoring "(Section 1.3.2.1). Decision was adopted on the basis of Article 43. Water Law of FBiH which is in line with WFD. The type of coastal waters is determined based on mandatory characteristics: ecoregion, salinity, depth and composition of the substrate, and latitude and longitude as optional factors.

According to the typology criteria and setting which is presented in document UNEP(DEPI)/MED WG 417/Inf.15, BiH coastal waters belongs to type IIA, that corresponds with the category defined for Croatian south Adriatic waters.

Salinity is a major measure of freshwater impact. The relatively narrow coastal zone has a highly karstic hinterland from which freshwater inflow into the sea is often significant, but it is irregular and diffuse, which makes it difficult to determine the types of waters using salinity classes. Therefore, the salinity limit of the polyhaline sea is set at 35 PSU (Practical Salinity Unit), to separate waters that have already been significantly altered (and in which substantially different processes take place) from those waters that are occasionally affected by freshwater yields.

According to the depth of the coastal waters of the Adriatic Sea they are divided into two classes, shallow waters with depths up to 40 m and depths greater than 40 m. In the coastal waters, along

the rocky bottom, we find two classes of substrates, fine-grained and large-grained sediment types. One type of coastal waters has been identified in the Bay of Neum - Polyhaline shallow coastal sea of fine-grained sediment PM 1 (PSU <35; depth <40; fine-grained sediment).



Figure 2. Neum Bay

5. Legal International and National Framework in Bosnia and Herzegovina related to Adriatic Costal Zone

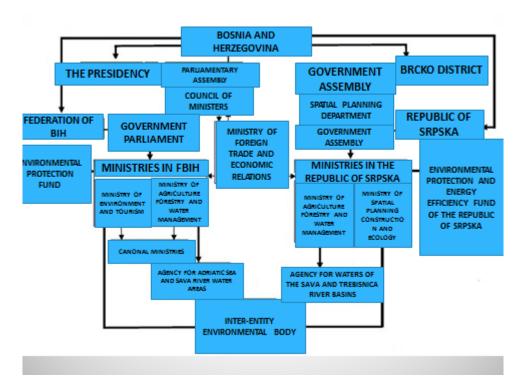


Figure 3. Institutions at the level of BiH are responsible for responding to incidents

Bosnia and Herzegovina lags behind in the ratification process of international environmental agreements, conventions, protocols and other international acts, especially when it comes to the protection of part of the Adriatic coastal sea in Bosnia and Herzegovina, but also in general protection and sustainable environmental management.

In particular, we have shown weaknesses in the adoption of bylaws, through which only the implementation of the provisions of international agreements can be done. Unfortunately, the Dayton Peace Agreement and Annex 4 do not directly address the issue of the environment to the state of Bosnia and Herzegovina, but Article III 2.b states that everything that is not explicitly given to the state level belongs to the entities.

Of all the international agreements dealing with maritime issues, Bosnia and Herzegovina has ratified the Barcelona Convention, and a number of protocols (four out of a total of seven) belonging to this convention. Unfortunately, we still do not have adequate laws at the level of BiH, and in the absence of them, the protocols of the Barcelona Convention, which BiH took over in 1998 from the former SFRY (Official Gazette of the SFRY 12/77 MU), are used.

Otherwise, they are the basis for the implementation of the 2030 Agenda, and in that sense the following protocols exist and are used:

a. Protocol on the Prevention of Pollution of the Mediterranean Sea by Dumping of Wastes and Other Substances from Ships and Airplanes (Dumping Protocol) BiH ratified the Protocol on 22 October 1994 on the basis of a notification of succession, but not the Amendments to the Protocol

adopted in Barcelona, 10 June 1995 The new title of the Protocol is: Protocol on the Prevention and Elimination of Pollution of the Mediterranean Sea by Dropping Waste and Other Substances from Ships and Aircraft or Incineration at Sea BiH has not adopted amendments to the Protocol

- b. Protocol on Cooperation in Combating Pollution of the Mediterranean Sea with Oil and Other Harmful Substances in the Event of an Accident, (Emergency Protocol) BiH ratified the Protocol on October 22, 1994, based on the notification of succession. The new title of the Protocol reads: Protocol on cooperation in combating pollution of the Mediterranean Sea from ships in emergencies and prevention of its pollution. BiH has not signed the new Protocol
- c. Protocol for the Protection of the Mediterranean Sea against Land-Based Pollution (LBS Protocol) BiH ratified the Protocol on 22 October 1994 on the basis of a notification of succession. Amendments to the Protocol: Syracuse, 7 March 1996. Amendments to the Protocol entered into force on 11 May 2008. The new title of the Protocol is: Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities. BiH has not adopted amendments to the Protocol.
- d. Protocol on Specially Protected Areas of the Mediterranean Sea (SPA Protocol) Amendment to the Protocol: Barcelona 10 June 1995 New Protocol entered into force: 12 December 1999. The new title of the Protocol is: Protocol on Specially Protected Areas and Biodiversity in the Mediterranean. BiH has not signed the new Protocol.
- e. Protocol for the Protection of the Mediterranean Sea against Pollution Caused by the Exploitation of the Sea Coast and Soil (Offshore Protocol) Protocol adopted: Madrid, 14 October 1994. BiH has not signed the new Protocol. f. Protocol for the Protection of the Mediterranean Sea against Pollution Caused by Transboundary Movements of Hazardous Wastes and Their Disposal (Hazardous Wastes Protocol) g. Protocol on Integrated Coastal Zone Management in the Mediterranean (ICZM Protocol) Protocol adopted: Madrid 21 January 2008 BiH has not signed a new Protocol.

The European Maritime Safety Agency EMSA offers technical and expertise as well as operational assistance to strengthen maritime safety, pollution preparedness, remediation measures and protection at sea. Unfortunately, BiH is not yet a member of EMSE, although the benefits of membership in this organization would be very significant for BiH. As BiH has pre-accession status in the EU, membership in EMSA is certain, which would mean support for BiH as well, considering that EMSA supports all Mediterranean countries. At the same time, EMSA works closely with the IMO (International Maritime Organization).

The Article III of the BiH Constitution defines the responsibilities and relations between the institutions of B&H and its two constituent entities: The Federation of BiH and the Republic Srpska. The responsibilities for water sector are not clearly defined by the Constitution, nor by the competencies of the state of BiH, nor by the entities. However, according to Article III.3c of the BiH Constitution, "All state functions not expressly designated under this Constitution as the jurisdiction of the State of BiH shall be the exclusive competence of the Entities." Pursuant to this constitutional provision, the water sector is the responsibility of the entities, which specifically means that the entities regulate issues of water management and protection through their regulations.

By adopting the Law on Ministries and other administrative Bodies of Bosnia and Herzegovina in March 2003, the Ministry of Foreign Trade and Economic Relations (MOFTER) was given the authority to deal with environmental issues and natural resources issues in international relations at the state level.

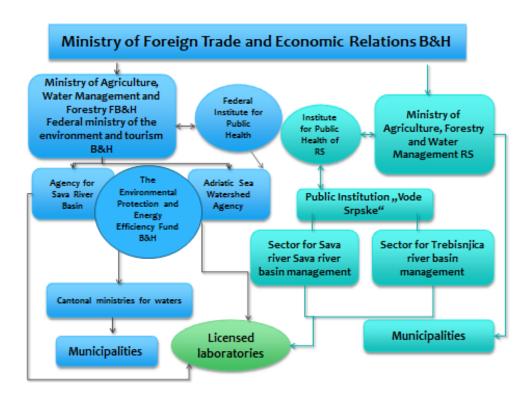


Figure 4. Responsible institutions in case of incident situations

-

¹ Official gazette of B&H", No. 5/03, 42/03, 26/04, 42/04, 45/06, 88/07, 35/09, 59/09 and 109/09

6. Relevant institutional framework in the field of water and Environmental protection in BiH

a. Institution in the Federation of BiH

<u>a) Ministry of Foreign Trade and Economic Relations (MoFTER)</u> deals with environmental and natural resources issues in international relations at the national level, and includes Sector for Water Resources, Tourism and Environmental Protection.

Some of the main responsibilities of this Sector are listed below.

Water resources Department within this Sector deals more in detail with water resources issues:

- Drafting laws and by-laws;
- Elaboration of expert analyzes, information and proposals regarding the state of the environment, water management and tourism;
- Determination of the strategies and development policies in the fields of environment, water management and tourism and propose measures to improve the situation;
- Collection, monitoring and analysis of data in the field of environmental protection and water resource management;
- Monitoring and implementation of international and domestic initiatives, conventions, projects and programs in the areas of Sector competence;
- Preparation and management of the process for accession of BiH to new international agreements (conventions and protocols);
- Reporting to institutions in the country and abroad on the state of the environment, water management and tourism;
- Cooperation with relevant institutions at the state and entity levels;
- Cooperation with the structures of the European Union (European Commission and the Environmental Agency, etc.) in the field of development of BiH 's environmental policy and harmonization of BH legislation and regulations, and environmental standards with the standards and regulations of the European Union, and their implementation in practice;

b) The Federal Ministry of Agriculture, Water Management and Forestry was established based on the Law on Federal Ministries and other Bodies of Federal Administration²,, and Article 15 of this Law prescribes general competences of this Ministry i.e. Administrative, professional and other tasks established by law related to jurisdiction Federation of Agriculture, Water Management and Forestry. The activities of the Ministry relate to: water resources, development plans, water balances, water use, water protection, protection against water, and other activities specified by the said Law.

In the Federation of BiH, within the watershed area of the Adriatic Sea, the Cantonal/County Ministries (Canton 10, West Herzegovina Canton and Herzegovina-Neretva Canton) are involved in water management in addition to the federal one.

The general responsibilities of the Cantonal / County Ministries for Water are:

_

 $^{^2 \ \}hbox{\it "Official Gazette of FB\&H", No. } 58/2002, 19/2003, 38/2005, 2/2006, 8/2006, 61/2006, 80/2010$

- Water protection, protection from water and regulation of water regime;
- Protection against floods, erosion and torrents;
- Water supply to the population and use of water for the needs of the economy;
- Water abstraction from agricultural areas
- Water sector development planning.

The role of the Cantonal/County Ministry responsible for the environment of Herzegovina-Neretva Canton / County is emphasized here below, because of its competence for the Adriatic Sea in B&H. This Ministry is also responsible for its tasks:

- Environmental and nature protection;
- Professional and other activities related to the acquisition, management and use of funds from the Federal Environmental Protection Fund;
- Financing and co-financing of facilities within the competence of the Ministry, and
- Participation in the preparation of nature protection projects.

With the purpose of performing the water management organization and tasks, the FBiH Law on Waters³ prescribes the establishment of water agencies: the Sava River Basin Agency (Sava AVP) and the Adriatic Sea Watershed Agency (AVP Adriatic Sea), with headquarters in Sarajevo and Mostar respectively.

The watershed area of the Adriatic Sea (including main rivers: Neretva, Cetina and Krka Rivers) is under the jurisdiction of the Adriatic Sea Watershed Agency.

Responsibilities of the Adriatic Sea Watershed Agency are stipulated by Art. 29, 155 and 156 of the F B&H Law on Waters, among which are the following:

- Organizing, collecting, managing and distributing data on water resources in accordance with the provisions of the Law, including the establishment and maintenance of the water information system;
- Organizing hydrological and water quality monitoring, monitoring the ecological status of surface waters, and monitoring groundwater, preparing reports on water status and proposing necessary measures;
- Preparation of a water management plan for the respective river basin district, organizing the preparation of technical documentation for individual water management issues, and other activities related to water management, in accordance with the Law;
- Take urgent measures to prevent or reduce the harmful effects caused by incidental pollution and prepare plans for such measures, etc.
- c) The Adriatic Sea Watershed Agency in Mostar collects data on the quantity and quality of surface water in the basins of the Neretva and Cetina Rivers in the territory of the Federation of Bosnia and

 $^{^3}$ " Official Gazette of FB&H", No 70/06

Herzegovina, as well as data on quality of the Adriatic Sea in BiH in the city of Neum (at one monitoring station and three bathing water quality assessment stations) in accordance with Article 156. of the FB&H Water Law.

In accordance with Article 72 of the F B&H Law on Waters⁴, the bathing area is an area for public water recreation (swimming, etc.) and area where bathing is not prohibited and which is traditionally used for this purpose. The bathing area is declared by Municipal water authority in accordance with the regulation referred to in paragraph 6 of this article. The Adriatic Sea Water Agency regularly conducts a bathing water quality test at "traditional bathing sites".

Since the enactment of the Law in Health Care in 1997, the FBiH Institute for Public Health has been acting as an institution that implements public health functions of interest to the Federation of BiH and actively cooperates with relevant sectors and institutions in the country, as well as numerous international organizations. On the day the new F B&H Law on Health Care came into force in 2010⁵, , the old FB&H Law on Health Care⁶ ceased to apply.

d) FBiH Public Health Institute has two Offices, one in Sarajevo and another Mostar. The basic documents for planning of the activities of the FBiH Public Health Institute of the Federation of Bosnia and Herzegovina represents the Law on Health Care of the Federation B&H from 2010, the Law on Radiation and Nuclear Safety in Bosnia and Herzegovina from 2007, and the Strategic Plan of the Institute of Public Health of the Federation of Bosnia and Herzegovina for period 2003.-2013. and 2014.-2019.

Pursuant to Article 115 of the FBiH Law on Health Care⁷, the Federal Institute for Public Health is a health institution for performing public-health activity in the territory of the Federation. Article 16 of this Law specifies the tasks performed by the Federal Institute of Public Health, which includes, among the others, following activities:

- Microbiological activity of interest to the Federation, monitor, analyse, study and
 evaluate the health regularity of drinking water, dialysis water, recreational water,
 surface and waste water, the state of water supply in the field, the health safety of food
 and general use items, and those intended for international traffic,
- Conducts professional and scientific research in the field of public health,
- Performs other tasks at the request of the Federal Ministry and the Cantonal Ministries
 of Health, the Federation and Cantonal Health Insurance Institutes, and other legal and
 natural persons;
- Cooperates with all other participants in the public health system, in particular with health care institutions and other forms of health service as well as with nongovernmental organizations.

In accordance with Article 117 of the Law on Health Care of the F BiH⁸, the Federal Institute for Public Health, performs the tasks of testing substances hazardous to the health and life of people in

⁴ " Official Gazette of FB&H", No 70/06

⁵ " Official Gazette of FB&H", No 46/2010 i 75/2013

^{6 &}quot; Official Gazette of FB&H", No 29/97

⁷ " Official Gazette of FB&H", No 46/2010 i 75/2013

⁸ " Official Gazette of FB&H", No 46/2010 i 75/2013

water, rivers, seas, flora and fauna, food for humans and animals, in regular conditions, in an emergency events, or when an emergency is suspected and suggests the protection measures. Article 119 of the Law prescribes the establishment of a Public Health Institute of cantons / counties which, among other activities, carry out sanitary chemical and sanitary microbiological diagnostic activities, examine the health regularity of drinking water, dialysis water, recreational water, surface and wastewater, water supply, and the health of food and general use items.

<u>Health Ecology Service of the Federal Institute for Public Health</u> performs the following activities:

- monitor, analyze and evaluate the environmental impact (water, air, soil, noise) on the health status of the population in the Federation of B&H;
- monitor, study and evaluate the health regularity and quality of drinking water, surface water, and condition of the water supply;
- monitor, analyze and evaluate the impact of bathing, recreation and sports waters on the health of the population;
- monitor, study and evaluate the health regularity and quality of foods and items of general use;
- performs tasks in the field of ecotoxicology;
- conducts a public-health microbiological activity of interest to the Federation of B&H;
- Conducts and organizes inter-laboratory comparative tests at national and international levels and performs confirmatory analyzes;
- continuously improve the quality system in accordance with BAS EN ISO / IEC 17025;
- Participates in the implementation of professional and scientific researches, cooperates with the Federal and cantonal ministries of health and institutes of public health, sanitary and market inspections and the Food Safety Agency of Bosnia and Herzegovina.

Within Health Ecology Service there are the following Departments:

- 1. Department of Hygiene and Health Ecology
- 2. Department of Chemical Analysis of Water
- 3. Department of Chemical Analysis of Foods and Items of general use
- 4. Department of Microbiological Analysis of Food, Water and Items of general use
- 5. Department of Human Microbiology
- 6. Department of Administrative Affairs.
- b. Institutional Framework in Republic of Srpska
- <u>a) Ministry of Agriculture, Forestry and Water Management of RS</u> is an independent administrative body that performs administrative and other tasks in several administrative areas and is directly subordinated to the Government.

The Ministry performs tasks within its competence on the basis of the Law on Ministries of RS-Pursuant to Article 12. of the Law, the Ministry performs administrative and other professional tasks related to: control of hygienic safety and quality of raw materials and products of animal origin up to the moment of placing on the market, integral management of ambient waters; preparation and adoption of plans and bases; water balance; enforcement of protection against harmful effects of

water; setting conditions and issuing permits for abstraction and use of water; implementation and organization of water quality control; undertaking of the measures to provide water for the water supply of the population and industry.

The implementation of water management tasks in the Sava River Basin and Trebisnjica River Basin is entrusted to the Public Institution "Vode Srpske" in accordance with Article 24. of RS WaterLaw. The Government of Republic Srpska adopted the Decision on establishment of the Public Institution "Vode Srpske" at its session held on January 11, 2013. According to this decision, two former RS Water Agencies - one for the Sava River Basin in Bijeljina and the other for the Adriatic Sea basin in Trebinje were merged into the Public Institution "Vode Srpske"

Activities carried out by the Public Institution "Vode Srpske" according to the Law on Waters of the RS include, but are not limited to:

- Implementation of measures to prevent the derogation of surface and groundwater status;
- Implementation of measures regarding the protection of surface and groundwater from water users in accordance with the law;
- Implementing of water monitoring objectives in accordance with regulations.

Pursuant to Article 44 of the Water Law of RS⁹, the implementation of water monitoring programs is the responsibility of the Public Institution "Vode Srpske", and only specialized institutions for the water and environment sector which meet the prescribed professional criteria can carry out all water monitoring activities or some of them.

b) The Public Health Institute of RS is a public health institution responsible for the field of public health. The Institute carries out social - medical, hygienic - ecological, epidemiological and microbiological health care activities. The Institute has 5 regional centers.

Institute, among the other activities, is responsible for:

- Monitor and study health problems and risks for the health of population,
- Perform bacteriological, parasitological, virological, serological, chemical and toxicological examinations and tests in relation to the production and trade of food, water, air, items of general use, as well as partial diagnostics of infectious and non-infectious diseases that is related to public health field;
- Performs control of ionizing and non-ionizing radiation sources, dosimetric control
- Provides an opinion on the environmental impact assessment in accordance with the regulations governing the area of the environment.

The Regional Center Trebinje which is located in the Adriatic Sea basin of BiH, as an organizational part of the Institute of Public Health of RS, within its main activity, performs and implements tasks in the fields of: clinical and sanitary microbiology, sanitary chemistry, epidemiology, environmental

-

⁹ "Official Gazette of FBiH", No. 58/2002, 19/2003, 38/2005, 2/2006, 8/2006, 61/2006 and 80/2010

hygiene and social medicine. Within the scope of its activities, this Regional Center also performs systematic control of drinking water, surface and waste water, foodstuffs and items of general use.

Considering current Institutional set-up as presented in Figure 3., and based on current national circumstances regarding implementation of the monitoring of marine environment, the most relevant institutions in BiH are Adriatic Sea Watershed Agency located in Mostar and Laboratory of Federal Institute for Public Health located in Mostar. This finding is in line with present responsibilities for water management at basin level, including Adriatic sea as one of a water bodies; the geographical (territorial) scope of marine environment monitoring; as well as the available technical capacities for water monitoring.

Above specified institutions need to be formally recognized by the Ministry of Foreign Tarde and Economic Relations (MOFTER) and the Council of Ministers of BiH as the relevant institutions that will be responsible for performing the marine environment monitoring program respectively in line with the Barcelona Convention and its Protocols.

7. Reactions in case of Incidental pollution in the coastal area of BiH

In the case of incident BiH has to respond immidiatly including all relevant institutions in accordance to Figure 3. and also all of these institutions have their own responsibility in reaction respond.

In the case of incidental pollution, Bosnia and Herzegovina is obliged to react promptly, including all necessary stakeholders prepared to respond to incidental pollution or conduct operations which must be defined in the Action plan. Accordingly, it is necessary to inform the relevant authorities and institutions, make a forecast of the situation, properly assess the incident, ie the degree of pollution and provide information about the incident. All that is needed to properly prepare the operation, resources, material and other support to effectivly reacte to the pollution incident.

Also, in the case of an incident that pollutes or could pollute the sea and coastal area of BiH, which exceeds the country's response capacity, BiH may request assistance from other parties. The Emergency Protocol of 1976 or the Protocol on Prevention and Emergency of 2002 to the Barcelona Convention27, in accordance with Article 10 and Article 12 of these protocols.

Assistance may be requested from other Parties according to these Protocols either directly or through REMPEC. Such assistance may include expert advice, products, equipment, vessels and aircraft needed to respond to major incidents of marine pollution. BiH has a mutual duty to fulfill its obligations regarding mutual assistance, within its own possibility, in case of extraordinary marine pollution arising from the relevant international agreements to which BiH is a party.

The Audit Office of the Institutions in the Federation of BiH conducted an performance audit on the topic "Management of interventions in case of incidental pollution of the Adriatic Sea", in order to examine whether the competent institutions in FBiH have created preconditions for effective intervention management in case of incidental marine pollution. The audit was conducted as part of a parallel performance audit project in which the Audit Office of BiH institutions, as well as supreme audit institutions from Croatia, Montenegro, Slovenia, Italy, and Albania, also participated. The issue of environmental protection, as well as the protection of water resources, is one of the most important global issues today. This is an area where regional and global cooperation is necessary, which has motivated the supreme audit institutions of the countries accessing the Adriatic Sea to launch this parallel performance audit. It is estimated that the establishment of cooperation of all countries accessing the Adriatic Sea will enable more efficient joint action in the event of incidental marine pollution.

In addition to nature protection, there is economic interest - this area, although the length of the Adriatic coast that belongs to BiH is relatively small and is only 24.5 kilometers, is an extremely valuable resource and economic potential for BiH. There are many important economic activities related to the sea, such as tourism, transport, fishing, shellfish farming, and the use of sea water for medical and industrial purposes is also significant. At the international level, Bosnia and Herzegovina has undertaken obligations to protect the sea from various types of pollution and has committed itself to cooperation with other countries in this area. The Barcelona Convention, which entered into force in 1978, was taken over from the former Yugoslavia by succession, and in 2020, amendments to this Convention were ratified. In this way, BiH has confirmed its commitment to take part in the implementation of the Action Plan for the Protection of the Marine Environment

and Sustainable Development of Coastal Areas (MAR) and contribute to the prevention of pollution of the Mediterranean Sea. The signing of international conventions and agreements implies their implementation. Thus, despite the accepted international obligations and the fact that, in accordance with the Law on Waters, the reduction of water pollution and prevention of water degradation has been identified as the goal of water management in FBiH, available data indicate that BiH is delayed in establishing an appropriate system.

There are many risks that can lead to incidental marine pollution. Although Neum does not have a built port or dock for ships, the entry of ships into the bay is not uncommon. There are several examples of incidents in road traffic that occurred in previous years and that caused incidental pollution of the Neretva River. In these cases, it is recorded that the oil that spilled into the Neretva reached the sea, there is a possibility of pollution of the sea through incidents that occur in rivers. According to the subject of the examination and the competencies of the institutions, the audit covered the activities of the Federal Ministry of Agriculture, Water Management and Forestry, the Federal Ministry of Environment and Tourism, the Adriatic Sea Agency, the Federal Administration for Inspection Affairs, the Federal Civil Protection Administration, the Federal Ministry of Transport and Communications, the Ministry of Agriculture, Forestry and Water Management of the Herzegovina-Neretva Canton, the Ministry of Trade, Tourism and Environmental Protection of the Herzegovina-Neretva Canton and the Municipality of Neum. All these institutions are also mapped as stakeholders in the case of Incidental pollution in the coastal area of BiH.

Despite the importance of the Adriatic Sea and its extreme sensitivity, the audit showed that in the FBiH the basic preconditions for efficient management of interventions in the case of incidental pollution of the sea and other waters have not yet been established. The shortcomings of the existing regulatory framework, inadequate institutional preconditions for water protection, noncompliance with the adopted regulations, and delays in the adoption of clear procedures for action, indicate the inefficiency of the competent institutions in this area. It was found that the adopted regulations in the field of environmental protection and water require additional improvements to define the obligations of institutions more clearly in this area. A special problem is the inadequately regulated protection of the sea because none of the adopted regulations precisely defined the management of the sea and its protection. Even though the competent institutions for water and environment are aware of this problem, the audit found that they did not take more concrete actions and initiated a more adequate regulation of marine protection.

Only in 2020, the Federal Operational Plan for Incidental Pollution of the 3rd degree of endangerment was adopted. On the other hand, the cantonal ministry in charge of water (HNK) has never even started drafting a cantonal operational plan for incidental water pollution, which was to be drafted in cooperation with the Adriatic Sea Water Agency. The audit established that the Plan for Defense against Sudden Pollution from the Ship and the Coastal Belt of Inland Waters, which was supposed to be adopted in accordance with the Law on Inland and Maritime Navigation, was not adopted. In addition to the fact that some necessary acts were not adopted, the auditors also found serious shortcomings in the adopted ones - for example, the Federal Operational Plan.

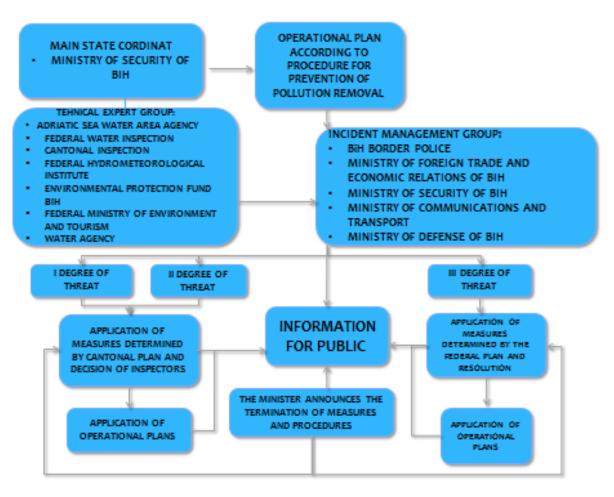


Figure 5. Action plan in case of incidental pollution

The audit findings also indicate that there was a lack of adequate risk assessment for the occurrence of incidental marine pollution. There has also been a delay in establishing functional groups to ensure coordination of all relevant institutions. Within the functional groups, the participation of the Municipality of Neum, the Port Authority of Neum, and the cantonal ministries of water and environment, which should play a significant role in the event of incidents at sea, is not envisaged. Experimental exercises, as a key element of the verification of intervention actions, which would test the planned procedures and measures, have not been organized so far, which is why the readiness of all competent institutions for effective action in the implementation of the Federal Operational Plan is questionable. In accordance with the established findings and conclusions, the Audit Office of the Institutions in FBiH gave specific recommendations to eliminate the identified shortcomings and create conditions for better protection of the sea from incidental pollution. It was emphasized that, although the focus of this audit was the preconditions for intervention in case of incidental marine pollution, the given audit recommendations can contribute to the improvement of the water protection system in FBiH in a broader sense.

It is very important to note that the National Contingency Plan of the NCP for BiH is in the process of being drafted, from which an operational action plan in case of an accident will be made. The analysis presents the responsibilities of authorities mainly for water management, public health and incidental marine pollution. The latter is presented into very detail including the recent activities for the preparation of the Contingency plan. All these are important elements of the coastal zone management.

List of acronymus:

BiH - Bosnia and Herzegovina

RS - Republica Srpska

FBIH - Federation of Bosnia and Herzegovina

SFRY - Federal Republic of Yugoslavia

MOFTER - Ministry of the Foreign Trade and Economic Relations

UNEP - United Nation Environmental Program

MAP - Mediterranean Action Plan in 1975

EMSA -The European Maritime Safety Agency

IMO - International Maritime Organization

ICZM Protocol - Protocol of Integrated Coastal Zone Management in the Mediterranean