

## IPA National Programme 2011 – Bosnia and Herzegovina

### 1. Identification

<b>Project Title</b>	Support to infrastructure development and the approximation of environmental standards
<b>CRIS Decision number</b>	
<b>Project no.</b>	8
<b>MIPD Sector Code</b>	6. Environment and Climate Change
<b>ELARG Statistical code</b>	03.27 European Standards / Environment
<b>DAC Sector code</b>	14050 Waste management / disposal (highest amount)
<b>Total cost (VAT excluded)<sup>1</sup></b>	EUR 38 300 000
<b>EU contribution</b>	EUR 16 100 000
<b>Management mode</b>	Components Ia, Id and IId: centralised Component Ib: European Investment Bank (EIB) through joint management with the European Commission Component Ic: World Bank (WB) through joint management with the European Commission. Component IIa, IIb, IIc: The World Bank through joint management with the European Commission
<b>EU Delegation in charge</b>	Delegation of the European Union to Bosnia and Herzegovina
<b>Implementation management</b>	Delegation of the European Union to Bosnia and Herzegovina
<b>Implementing modality</b>	Stand alone project
<b>Project implementation type</b>	C01
<b>Zone benefiting from the action(s)</b>	Bosnia and Herzegovina

### 2. Overall Objective and Project Purpose

#### **2.1 Overall Objective**

The overall objective is to improve environmental infrastructure and develop administrative capacity in the field of waste management and water management in line with the environmental *acquis* and international obligations.

---

<sup>1</sup> The total project cost should be net of VAT and/or of other taxes. Should this not be the case, clearly indicate the amount of VAT and the reasons why it is considered eligible.

## **2.2 Project purpose**

To support the implementation of integrated water and waste management systems in Bosnia and Herzegovina.

## **2.3 Link with AP/NPAA / EP/ SAA**

### ***Commitments under the Interim Agreement and SAA (Stabilisation and Association Agreement)***

The Parties shall develop and strengthen their cooperation in the environmental field with the vital task of halting further degradation and start improving the environmental situation with the aim of sustainable development.

### ***European Commission Progress Report for Bosnia and Herzegovina 2010***

There has been little progress in the area of waste management. Bosnia and Herzegovina has started to address infrastructure needs by constructing sanitary landfills. However, no concrete steps were taken to establish system for recycling and recovering priority waste streams, such as packaging, electrical and electronic equipment hazardous substances, motor oil and tyres. Management of waste streams of animal origin requires improvement.

There has been little progress in the area of the water quality. The Federation established water councils to oversee public consultation procedures for river basin management planning. It also adopted implementing legislation on identifying and monitoring areas sensitive to eutrophication and nitrates. Republika Srpska established water agencies. However, a large amount of legislation transposing the *acquis* is not in place. There is a lack of harmonised implementation of water laws, monitoring and river basin planning between the Entities. Untreated discharges of wastewater, access to drinking water and flood management remain key challenges.

## **2.4 Link with MIPD 2011 - 2013**

The project addresses the following priorities of the MIPD:

1. To support the transposition and implementation of the environmental *acquis* and other international obligations.

#### *Indicators:*

- Legal framework harmonized;
  - Capacities of the environmental institutions at all levels, including the local level improved.
2. To improve the environmental infrastructure, in particular for waste management and water and waste water treatment and enhance environmental protection.

#### *Indicators:*

- A project pipeline for infrastructure investment prepared;
- Increased level of awareness on environmental protection and increased level of public participation in decision making processes;
- Fostered cooperation between the administration and civil society, in particular in local level.

## **2.5 Link with National Development Plan**

Bosnia and Herzegovina (BiH) has prepared a country development strategy (CDS) and a social inclusion strategy which will serve as basis for the national development plan. Both strategies and the related action plans remain to be adopted by the Council of Ministers. The proposed goals and priorities for the CDS are strengthened macroeconomic stability, sustainable development, competitiveness, employment, EU integration and social inclusion.

The present project is particularly linked to sustainable development.

## **2.6 Link with national/ sectorial investment plans**

### **Water and waste water**

The National Environmental Action Plan was the first document specifically oriented to environmental problems and was adopted by the Entity governments of BiH in 2003.

The planned interventions in the water sector are in line with this Action Plan, since the priorities related to the water resource and wastewater management are (by 2020): 1) provision of sufficient quantities of high-quality water for water supply & other needs; 2) protection of water resources; 3) protection from flooding.

The water sector interventions are also in line with the BiH Water Protection Plan which is the strategic document for the implementation of the EU Urban Waste Water Treatment Directive (91/271/EC). It identifies the urban waste water as the main source of pollution of the surface water in BiH.

### **Solid waste**

The EU funded *Solid Waste Management Strategy* in BiH was completed in August 2000. The strategy is the essential document for solid waste collection, disposal, and management, and envisions the construction of 16 regional sanitary requirement-compliant waste disposal landfills in BiH. This strategy recommends a series of measures for technical, institutional and financial development of the waste management system in the following 15 to 20 years. One of the key measures is the construction of regional landfills and the development of new technologies for solid waste management. The strategy foresees environmental standards that are required for EU accession.

The Environmental Protection Strategy 2008-2018 for the Federation of Bosnia and Herzegovina (FBiH), adopted in 2008, reaffirms the regional approach to solid waste management and building of regional landfills for waste disposal based on sanitary requirements and EU directives.

The management plan for waste management for FBiH was completed in 2010.

## **3. Description of project**

### **3.1 Background and justification:**

The intervention focuses on the improvement of water, waste water, flood protection and solid waste infrastructure and supports the transposition of the water related EU Directives and the preparation of the Sava River Management Plan.

## **Component I – Water management**

### **Component Ia: Regulation of Bosna River in Sarajevsko polje (EUR 3 400 000)**

The Bosna River basin is the most populated sub-basin of Sava river with 1.820.080 inhabitants and with the most developed industry in BiH. Due to its size and importance, it is listed as a river of category I in the Water Law of the FBiH. The current status of flood protection structures is not satisfactory. The protection is provided only partially in central parts of some towns along the Bosna River.

Sarajevo field is one of the areas jeopardised by floods of the Bosna and its tributaries: Dobrinja, Zeljeznica, Miljacka, Zujevina and Tilava. Floods in this area cause significant problems as the area is densely populated and there are a number of industrial plants. Further development of the area is limited due to flood occurrences. It is important to note that the area of Sarajevo field also includes a protected area of Sarajevo's water supply intake.

The Water Agencies for the Management of the area of the Sava River Basin in Sarajevo financed the preliminary design for flood protection on the Bosna River from the Reljevo area to the tributary of the Zeljeznica River in 2006. In 2009, the main design and tender document were completed.

The proposed project covers the protection of 611 ha in case of a flood of the magnitude Q1/100 (*one – hundred – year flood*).

The project will be co-financed by local institutions: FBiH Ministry of Agriculture, Water Management and Forestry, Water Agencies for the Management of the Area of Sava River Basin in Sarajevo, Government of the Canton Sarajevo.

### **Component Ib: Rehabilitation and construction of water and sanitation infrastructure in selected municipalities in RS (EUR 2 000 000)**

There has been a deterioration of Republika Srpska's (RS) environmental infrastructure, with investment levels in water and wastewater falling below capital maintenance and/or replacement requirements. The budget priorities at both entity and local levels tended towards short term current-expenditures rather than investments. Due to financial constraints, investment levels have failed to maintain an adequate level of service, resulting in water related environmental problems. Provision of sewerage systems and wastewater treatment plants is inadequate in most areas of the country. Water pollution is a problem faced in several parts of the RS, where, due to the low flows rates of the rivers, discharged loads have significant impacts on the water quality.

The proposed operations under the component are part of wider intervention in the water and sanitation sector and will include 24 RS municipalities.

The value of the whole investment project is EUR 100 000 000.

The European Investment Bank (EIB) contributes to the overall scheme with EUR 50 000 000 (50% of total budget).

The present national IPA 2011 contribution is EUR 2 000 000. The national IPA 2010 contribution was for Part I EUR 10 000 000 and for Part II 2 500 000 EUR. The Infrastructure Project Facility - Technical Assistance (IPA 2010 IPF TA) contribution was 1 250 000 EUR, while local municipalities will cover the remaining amount.

Based on the information provided by the municipalities on their preliminary investments needs, the following summary can be made:

- Investment related to sewerage systems: Sokolac, Donji Zabar, Teslic, Vlasenica and Vukosavlje.
- Investment related to water supply systems: Pale, Kotor Varos, Ribnik, Trebinje, Zvornik, Lopare, Kozarska Dubica, Samac and Trnovo.
- Investment related to water supply and sewerage: Prijedor, Brod, Rogatica, Gacko, Gradiska, Han Pijesak, Laktasi, Novi Grad, Sekovici, Sipovo and Celinac.

Four feasibility studies and a number of detailed designs for rehabilitation activities were already prepared. Additional feasibility studies and detailed designs will be funded by the approved IPF-TA grant.

### **Component Ic: Waste Water Treatment Plant in Butila, Sarajevo (EUR 2 500 000)**

FBiH suffers from the negative impacts of underdeveloped water services on public health and the environment. Only 2% of collected urban wastewater in FBiH is treated. This leaves public water supplies and bathing waters exposed to the effects of serious pollution and the discharge of untreated water.

The Sarajevo Waste Water Treatment Plant (WWTP) consists of 25 facilities all built at the location of Butila. The operation of the plant was stopped during April 1992. All facilities suffered major damages due to the war and destruction of equipment because the waste water treatment plant was left without maintenance for a long time.

This intervention will contribute to the construction of the WWTP boiler room. The project is a completion of the waste water treatment process and the treatment and usage of its products, i.e. active sludge and biogas. Active sludge emerges during the process of waste water treatment, and needs to be treated separately. During the anaerobic digestion in active sludge treatment process, the sludge needs to be heated up to 35 degrees of Celsius. This heating will be done by the equipment placed in the boiler chamber. The biogas which emerges in anaerobic digestion process will be later used to produce thermal energy and electricity in generators envisaged in the future generator facility.

The total value of the investment is EUR 32 000 000. The present national IPA 2011 contribution is EUR 2 500 000. The IPA 2010 (Part I and Part II) funding has contributed to the investment programme with EUR 10 500 000. The WB loan contributes to the overall scheme with EUR 15 430 000, while the Canton Sarajevo will cover the remaining amount of EUR 3 570 000.

### **Component Id: Capacity Building in the water sector (EUR 2 500 000)**

This component will cover the preparation of the Sava River Basin Management Plan and assistance in transposition and implementation of water-related EU Directives in BiH.

The Water Agencies for the Management of the Area of the Sava River Basin in Sarajevo and Bijeljina require assistance in the preparation of the Sava River basin management (RBM) plan in BiH. The preparation of the RBM Plan and its content is defined by the Water Laws at the Entity level, which are in line with the principles of the Water Framework Directive.

Support will also be provided for the transposition of the water related EU Directives<sup>2</sup>, to the Ministry of Foreign Trade and Economic Relations (MoFTER), Entity Ministries for Water

---

<sup>2</sup> Water related Directives include, but are not limited to: 98/83/EC; 91/272/EEC; 76/464/EEC; 91/676/EEC and 2007/60/EC.

Management and Water Agencies in FBiH and RS, as well as the relevant Brcko District government departments.

The basis for further transposition of EU water *acquis* will be the draft strategic document “Further Steps Necessary to Reach the Transposition of the Legislation in BiH with the EU Water *acquis*”. This document was prepared with assistance of the IPA 2007 project “Support to BiH Water Policy”.

The above mentioned document is a transposition strategy that identifies the changes needed to bring BiH legislation in line with the existing EU requirements in the water sector. It contains both legal acts which must be prepared in accordance with the Water Laws of the Entities and Brcko District and additional legal acts needed for harmonisation with the *acquis*. The proposed Work-plan for further development of BiH water-related legislation indicates deadlines and man-power needed for preparing new or amending the existing legal acts.

The project should ensure that a clear national water tariff policy will be developed to provide long term financial sustainability to all future projects in the sector and thus apply the principle of cost recovery. Additionally, capacity building in the sector should very clearly be done considering both geographical criteria ("river basins") and financial capacity of the administrative units.

## **Component II – Waste management**

### **Component IIa: Rehabilitation of the existing landfill “Klepovica” in Neum municipality (EUR 1 200 000)**

Rehabilitation of the landfill “Klepovica” will allow the disposal of municipal solid waste and non-hazardous waste only at this site. The existing waste (approximately 58.000 tonnes) will be relocated to a new sanitary disposal cell, which will be constructed at the same location. The landfill will be rehabilitated and reconstructed in three phases, i.e. three compartments. The first compartment will be constructed adjacent to the receiving and forwarding area and will have the capacity of 70.000 tonnes.

Compartments no. 2 and 3 will be developed successively to the south and east of compartment no.1. The compartments are further subdivided to minimise the production of leachate through rainfall on the operational tipping area.

With the remediation of the existing wild dump and the construction of a sanitary landfill in Neum Municipality, the following impact is expected:

- Reduction of pollution of Neum (BiH) – Ston (Croatia) surface and groundwater resources, as well as protection of the ecosystem in Neum – Ston bay;
- Improved health conditions in Neum municipality

The total value of the investment is EUR 2 500 000. The present national IPA 2011 contribution is EUR 1 200 000. The WB loan contribution is EUR 1 300 000, including a 10% contribution provided by the FBiH government, i.e. EUR 130 000.

### **Component II b: Expansion of sanitary landfill Smiljevici in Sarajevo (EUR 1 500 000)**

The landfill Smiljevici in Sarajevo is the first sanitary landfill in BiH constructed and operated in accordance with EU directives and standards. It is at the same time the biggest landfill in BiH which receives and disposes 500 tonnes of waste per day. The centre possesses a sorting facility for paper and PET packaging and a plant for electricity generation from landfill gas.

Canton Sarajevo plans to expand the capacity of the landfill to facilitate its transformation to a regional landfill centre covering Canton Sarajevo. The following activities are planned:

- Construction of an impervious disposal cell for waste after the sorting process with a drainage system for an area of 10 000 m<sup>2</sup> ;
- Construction of a facility for treatment of construction waste with relevant equipment and disposal area for inert waste;
- Construction of a recycling yard with the area of 2000 m<sup>2</sup> with containers and equipment for separation of waste toward reduction of disposed waste.

The land for the construction of the additional disposal cell is located inside the landfill area and is fenced.

The total value of this investment's phase is EUR 3 000 000. The present national IPA 2011 contribution is EUR 1 500 000. The WB loan contribution is EUR 1 500 000 including a 10% contribution provided by the FBiH government, i.e. EUR 150 000.

### **Component IIc: Closure and land remediation of wild landfills Krivodol in Bosanska Krupa Municipality and Babunovici in Srebrenik Municipality (EUR 2 000 000)**

The Wild landfill Krivodol in Bosanska Krupa is an open and uncontrolled landfill with an area of 21,700 m<sup>2</sup>. The following shortcomings were identified during the field survey at the site:

- There is free access to the landfill and waste is land-filled in an uncontrolled manner;
- Chemical waste (or packages from chemical substances), medicines and medical material are land-filled;
- A drainage system does not exist and landfill water is not pumped back to the landfill; and
- Landfill water is being accumulated in a ground depression below the landfill foot closure.

The subject of the designed scope of work is to ensure long-lasting stability of the landfill as well as reclamation layers, and sealing off the landfill surface to prevent precipitation water from recharging to the landfill body and thus washing the wastes deposited in it.

Drainage of the landfill surface (which must secure the timely and safe discharge of rainwater, seeped through the reclamation layers of the landfill body) will be provided by the installation of a drainage layer on the sealed landfill surface.

Landfill Degassing: at the site a gas drainage for the whole area will be implemented consisting of the main hole (on the site of the strongest activity of the generated gas) and catch drains. Generated bio-gas will be processed by a bio-filter.

The total value of the investment is EUR 1 200 000. The present national IPA 2011 contribution is EUR 1 000 000. The WB loan contribution is EUR 200 000 including a 10% contribution provided by the FBiH government, i.e. EUR 20 000.

The Wild landfill Babunovici – Srebrenik Municipality is an uncontrolled landfill located 3,5 km from town Srebrenik in a natural depression. There is a considerable impact of leached water that continuously pollutes sources of drinking water. The rehabilitation of the landfill 'Babunovci' started in 2008. Part of the already landfilled waste, approximately 50.000 m<sup>3</sup>, was relocated to the newly constructed landfill's cell that is used for the disposal of new waste, until a regional sanitary landfill will be constructed in Tuzla Canton, to which Srebrenik Municipality belongs.

The subject of this grant assistance will be:

- Final closure of the existing wild landfill Babunovici;
- Construction of covering layer in accordance with EU Directives;
- Collection of leached water and degassing system for area of 4000 m<sup>2</sup>;

The total value of the investment is EUR 1 200 000. The present national IPA 2011 contribution is EUR 1 000 000. The WB loan contribution is EUR 200 000 including a 10% contribution provided by the FBiH government, i.e. EUR 20 000.

**Component II d: Preparation of a number of technical studies to support implementation of regional integrated waste management system in RS (EUR 1 000 000)**

According to the Solid Waste Management Strategy in BiH, there is a plan to build six regional sanitary landfills in the RS for municipal waste disposal (Banja Luka, Bijeljina, Prijedor, Dobo, Vlasenica and Bileca).

So far, two regional sanitary landfills have been built and put in function:

1. Regional sanitary landfill Ramici, Banja Luka.
2. Regional sanitary landfill Brijesnica, Bijeljina

In other RS municipalities waste is disposed at the local municipal landfills, which do not meet the minimum of technical conditions for waste disposal. No survey has been made for these locations (geological, hydrological, geo-technical). There is no protection fence around them, collection and purification of waste waters does not exist. Pipes for gas extraction from the landfill body were not set either, and in most of the cases, waste is not covered with a layer of inert material, which results in frequent fires.

These local landfills pose an environmental and health risk. In addition, the level of involvement of the municipal authorities in RS in the solid waste management is generally low, which is undoubtedly a direct consequence of the limited funds available for the implementation of waste management measures.

Planning and management of household waste is under the competence of utility companies. Most of them have limitations in the implementation of these activities – collection is relatively well organized, however, the treatment and disposal of waste is not appropriate due to the lack of funds and technical expertise.

This project will be a continuation of the IPA 2008 NP project *'Preparation of feasibility studies for selection of regional sanitary landfills in BiH'*. The aim is to help further development of the solid waste management sector in BiH by reducing a number of wild landfills and health hazards caused by inadequate waste collection and disposal systems.

The design of feasibility studies will contribute to meeting the law requirements for the construction of landfill sites in BiH (in this case RS) and will help municipalities to contribute to future investments in the solid waste management sector.

The total value of the investment is EUR 1 000 000. This intervention is complementary assistance to the ongoing World Bank loan in the solid waste management sector.

**3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact**

The aforementioned interventions will have a strong positive environmental and public health impact with an overall benefit to quality of life in BiH. Floods cause huge problems in BiH, especially in the areas important for water supply. The FBiH Strategy for Water Management places problems with the River Bosna therefore as top priority as regards flood management measures.



The improved collection and treatment of wastewaters will have a strong positive cross border impact and reduce pollution of surface and ground waters in BiH and the region as a whole.

Additionally, the projects will result in a significant environmental improvement of water quality which will contribute to public amenity, *incl.* water supply, fishing, swimming and tourism. There is also a potential impact on business in the region by removing one of the key constraints to the future urban development.

The interventions regarding capacity building in the water sector will provide the water sector with assistance in preparation of the Sava River Basin Management Plan which will strengthen capacities and knowledge on implementation of the Water Framework Directive and transboundary management. Furthermore, the support in transposition of the water related EU Directives will enable BiH to have environmental quality standards in field of water policy compliant with the *acquis*.

The interventions as regards waste treatment will also have a strong positive impact on the environment and on public health. Since the landfill affects the quality of groundwater and surface water, soil and air, sanitary disposal of waste is a condition for minimizing these negative effects as much as possible.

As regards Component Ic, usage of biogas for electricity production will reduce consumption of electricity from city electric network and reduce emissions of greenhouse gases to the atmosphere. This also contributes to climate change mitigation.

At last, but not the least, the project interventions will have a positive impact on the economy of BiH and the region as such. Investments in the infrastructure projects will trigger and open new opportunities for employment in the country, thus creating new jobs that are to be considered valuable contribution in the alleviation of the current economic and financial crises.

### **3.3 Results and measurable indicators:**

#### **Component I – Water management**

##### **Component Ia: Regulation of Bosna River in Sarajevsko polje**

Result 1: Flood protection structure constructed on the river banks of River Bosnia (Sarajevsko polje).

*Indicators:*

- 611 ha of industrial, agricultural and residential land protected in the case of floods of magnitude Q1/100 (*one – hundred – year flood*);

##### **Component Ib: Rehabilitation and construction of the water and sanitation infrastructure in selected municipalities in RS**

Result 1: Water supply system, sewage collection system and waste water treatment plants in RS rehabilitated and constructed.

*Indicators:*

- Water infrastructure projects successfully completed in 24 municipalities in RS.

##### **Component Ic: Waste water treatment plant (WWTP) in Butila, Sarajevo**

Result 1: Boiler room of the WWTP Butila in Sarajevo reconstructed and operational.

*Indicators:*

- Boiler room and generator facility of the Butila WWTP constructed and operational.

### **Component Id: Capacity building in the Water sector**

Result 1: Sava River Basin Management Plan drafted.

Result 2: Legal framework in BiH harmonized with EU water-related acquis, including but not limited to 2000/60/EC, 98/83/EC, 91/272/EEC, 76/464/EEC, 91/676/EEC, 76/160/EEC and 2007/60/EC

#### **Indicators:**

- Draft Sava River Basin Management Plan completed;
- Number of legislative acts harmonised with EU acquis and under implementation<sup>3</sup>.

### **Component II – Waste management**

#### **Component IIa: Rehabilitation of the existing landfill “Klepovica” in Neum municipality**

Result 1: Existing landfill rehabilitated.

#### **Indicators:**

- Existing cell rehabilitated and stabilised;
- New sanitary disposal cell constructed;
- Approximately 58.000 tonnes of old waste is reallocated;

#### **Component IIb: Expansion of sanitary landfill 'Smiljevici' in Sarajevo**

Result 1: The regional sanitary landfill Smiljevici expanded;

Result 2: Implemented integrated waste management practice in accordance with EU directives and local legislation for waste management.

#### **Indicators:**

- Increased quantity of treated waste that is safe to landfill;
- Increased percentage of recycled and reused waste

#### **Component IIc: Closure and land remediation of wild landfills Krivodol in Bosanska Krupa Municipality and Babunovici in Srebrenik Municipality**

Result 1: Wild landfills Krivodol and Srebrenik closed

#### **Indicators:**

- Land is remediated and existing waste is stabilized and covered;
- Reduced emissions of greenhouse gas to the atmosphere generated from waste decomposition
- Reduced pollution of groundwater and surface water in surrounding areas

#### **Component IId: Preparation of a number of technical studies to support implementation of regional integrated waste management system in Republika Srpska**

Result 1: A number of readymade investment infrastructure projects advanced enough for financing by IFIs and other donors.

#### **Indicators:**

- Number of technical documentations/studies prepared and appraised and new investments planned.
- Projects supported for further investment by IFIs or donors.

---

<sup>3</sup> To be further specified during the inception phase

### 3.4 Activities

#### **Component I – Water management**

##### **Component Ia: Regulation of Bosna River in Sarajevsko polje (Works and a supervision contract):**

*Activities related to the Result No. 1*

Construction of flood protection structures on river banks (*works and supervision*)

##### **Component Ib: Rehabilitation and construction of the water and sanitation infrastructure in selected municipalities in RS (Contribution agreement EIB)**

*Activities related to the Result No. 1*

Rehabilitation, upgrade and construction of the following:

- Water supply system;
- Extension of drinking water and wastewater treatment facilities;
- Extension of wastewater networks;
- Bulk and consumer metering.

##### **Component Ic: Waste water treatment plant (WWTP) in Butila, Sarajevo (Administrative agreement WB)**

*Activities related to the Result No. 1*

Construction of boiler room and generator facility.

##### **Component Id: Capacity building in the Water sector (Service contract)**

*Activities related to the Result No. 1*

- Prepare Characterisation Report and background studies/reports;
- Prepare Programme of measures;
- Implement public consultation process related to the preparation of RBM plan;
- Draft Sava River Basin Management Plan;

*Activities related to the Result No. 2*

- Draft legislation to transpose relevant EU water sector directives, including but not limited to 98/83/EC, 91/272/EEC, 76/464/EEC, 91/676/EEC, 76/160/EEC, 2007/60/EC;
- Further develop water information system

#### **Component II – Waste management****Component IIa: Rehabilitation of the existing landfill “Klepovica” in Neum municipality (Administrative agreement WB)**

*Activities related to the Result No. 1*

- Construct impervious disposal cell;
- Relocate existing waste, waste stabilization and constructing of the waste cover.

##### **Component IIb: Expansion of sanitary landfill 'Smiljevici' in Sarajevo (Administrative agreement WB)**

*Activities related to the Result No. 1*

- Construct facility for management of construction waste;
- Construct new cell for disposal of inert waste, e.g. construction waste

**Component IIc: Closure and land remediation of wild landfills Krivodol in Bosanska Krupa Municipality and Babunovici in Srebrenik Municipality (Administrative agreement WB)**

*Activities related to the Result No. 1*

- Close surface area of the existing wild landfill;
- Install insulation protection measures;
- Ensure waste stabilization and cover construction.

**Component IId: Preparation of a number of technical studies to support implementation of regional integrated waste management system in Republika Srpska (Service contract)**

*Activities related to the Result No. 1*

- Prepare of technical documentation for closure and/or rehabilitation of a number of existing wild landfills

**3.5 Conditionality and sequencing:**

Cooperation and support from the relevant authorities and beneficiaries is of utmost importance for the successful implementation of the project. The continuous engagement and full cooperation of IFIs is another critical success factor as well as coordination with all relevant stakeholders.

In relation to the conditionality it is important that relevant Ministries (Primary and Secondary Beneficiaries) dedicate competent staff and other resources required for support of the project(s). IFIs require from the authorities to form project management units within the ministries (e.g. PMU for EIB projects, PMT for WB projects, etc). Further conditions are: technical documentation are prepared and revised; land acquisition is completed; necessary permits and conformities are obtained; co-financing mechanism is in place and operational; good co-operation and co-ordination of activities amongst all projects' stakeholders, including complementarity and coherence with regional IPA programmes (IPF MW); contracts for execution of the construction works are concluded in accordance with the procurement schedule.

**3.6 Linked activities**

The intervention planned under IPA 2011 is a continuation of activities being implemented under IPA National Programmes for 2008, 2009 and 2010.

**The Infrastructure Project Facility – Municipal Window (IPF-MW)** was launched at the Steering Committee<sup>4</sup> of the IFI Facilities on 5th March 2008 with the purpose to combine grants for capacity building and co-finance the loans to remedy the very low income of the IPA countries which hinder financing of infrastructure projects. The EC has contributed to the IPF-MW 2008 in the Western-Balkan region by EUR 24 million, BiH receiving in total EUR 9 million. The proposed intervention (components I and III) will be complementary to the IPF-MW and all the recommendations of the IPF secretariat should be followed<sup>5</sup>.

---

<sup>4</sup> The Steering Committee of the IFI Facilities is a structure set up to manage the Facility programmes SMEFF, MFF, MIF and EEFF combining EU grants with credit lines from the EIB, the EBRD and CEB in association with KfW. The members of the Steering Committee are the Commission and representatives of the IFIs participating in the Facilities.

<sup>5</sup> The IPF-MW is linked to Technical Assistance provided through IPF (IPF-TA) since it is developed under the same umbrella. Infrastructure projects for which preparation and feasibility studies would have been financed from the IPF-TA may benefit from the IPF-MW.

Additional activities in the municipal water and waste water sector are as follows:

**KfW** finances municipal infrastructure and providing technical assistance to water utilities in Kakanj, Kostajnica, and Derventa. Apart from Banja Luka, a further project is under preparation in Bihac (wastewater collection and construction of a wastewater treatment plant).

There are also two GEF project implemented through **the World Bank**. The first project is "Water Quality Protection", aiming to provide support for investments in wastewater treatment in the municipalities Odzak, Trnovo, Mostar and Zivinice and the second project is "Neretva and Trebisnjica Management Project", implemented together with the Republic of Croatia providing support for wastewater collection and treatment for the municipalities of Konjic, Ljubuski, Bilece, Nevesinje and Trebinje.

The **EBRD** prepares financing of the Plava Voda Regional Water Supply Project. The Project is financed under the Infrastructure Project Facility (IPF-TA) with the aim to construct new regional water pipeline. Commissioned by the EBRD, the "Water and Wastewater Project (Protection of Lake Modrac) 2005" (environmental impact and feasibility study) prepared via the Danube Regional Investment Support Facility (EC funded), identified the level and sources of lake pollution which discharges into the river Spreca and subsequently into the River Bosna, then to the river Sava and ultimately to the river Danube.

**On a bilateral basis** the Swiss Development Cooperation is supporting 17 municipalities in the Una Sana River Basin with regard to water management and environment issues and financing the rehabilitation of the water supply in Prijedor.

The Norwegian Development Cooperation is financing water supply projects along the Vrbas river.

The **EC CARDS** project "Water Quality Management" prioritized the agglomerations facing pressing issues of waste water collection and treatment in order to ensure water protection. Zivinice municipality was defined as one of the priorities.

Under **IPA 2007** the project *Construction of Sewage Collectors in Zivinice* is completed. The construction of sewage collectors represents the first phase of an integrated project to protect Lake Modrac from pollution and to secure its future as the main source of potable water in the Tuzla Canton. The project *Support to BiH Water Policy* is being implemented also under IPA 2007. The project supports the development and implementation of Entity Water Laws, in accordance with the principles of the European Union's Water Framework Directive and other water sector related EU directives. The project strengthens BiH capacities for coordination and implementation of international conventions to which BiH is party to.

### **3.7 Lessons learned**

Experience obtained from past and ongoing infrastructure investments projects from the CARDS and IPA programmes will be applied as much as possible. Experience gained from such programmes has shown that mutual cooperation with beneficiary partners in BiH and their full commitment during all phases of the project implementation is needed.

It is important that all stakeholders' incl. relevant ministries take an active role during the project implementation. Apart from the need to have good coordination with IFIs and other stakeholders in the sector to implement the infrastructure projects, it is crucial that relevant designs, feasibility studies, permits etc. are available a priori in order to avoid delays in the project implementation. Lessons learned from the existing cooperation projects with the IFIs will be taken into account, especially with regards to the revenue collection by the water utilities (sustainability of the water companies).

The key lessons in the environment sector in BiH based on previous interventions can be summarised as follows:

- The institutional set up in the environment sector remains problematic and the needs in the sector are considerable and growing rapidly as the sector seeks to meet the challenges of meeting EU Directives as well as its growth.
- The coordination between the State and Entity Governments needs to be improved.

#### 4. Indicative Budget (amounts in EUR)

			TOTAL EXP.RE	SOURCES OF FUNDING								
				IPA COMMUNITY CONTRIBUTION		NATIONAL CONTRIBUTION					PRIVATE CONTRIBUTION	
ACTIVITIES	IB (1)	INV (1)	EUR (a)=(b)+(c)+(d)	EUR (b)	%(2)	Total EUR (c)=(x)+(y)+(z)	% (2)	Central EUR (x)	Regional/ Local EUR (y)	IFIs EUR (z)	EUR (d)	% (2)
Component I		X	29 400 000	10 400 000	35.37	19 000 000	64.63		3 570 000	15 430 000		
Component 1a Contract 1.1 Works Contract		X	3 200 000	3 200 000	100							
Component 1a Contract 1.2 Supervision Contract		X	200 000	200 000	100							
Component 1b Contract 1.3 CA EIB		X	2 000 000	2 000 000	100				0	0 <sup>6</sup>		
Component 1c Contract 1.4 AA WB		X	21 500 000	2 500 000	11.63	19 000 000	88.37		3 570 000	15 430 000 <sup>7</sup>		
Component 1 d Contract 1.5 Service Contract	X		2 500 000	2 500 000	100							
Component II		X	8 900 000	5 700 000	64.04	3 200 000	35.96		320 000	2 880 000		
Component IIa AA WB (*)			2 500 000	1 200 000	48.00	1 300 000	52.00		130 000	1 170 000		
Component IIb AA WB (*)			3 000 000	1 500 000	50.00	1 500 000	50.00		150 000	1 350 000		
Component IIc B Krupa, AA WB (*)			1 200 000	1 000 000	83.33	200 000	16.67		20 000	180 000		
Component II c Srebrenik			1 200 000	1 000 000	83.33	200 000	16.67		20 000	180 000		

<sup>6</sup> The figure does not include the following contributions from other sources: EIB loan (already considered for IPA 2010 co-funding): 50 000 000, national IPA 2010: EUR 10 000 000, IPA-2010 part2: 2 500 000, IPA WBIF (IPF TA) 2010: 1 250 000. Because of the economic difficulties, municipalities have less funds available in their budgets as was initially expected. For this reason, a slightly higher IPA allocation is justified in order to mitigate the risk of municipalities not being able to afford the related loan components and jeopardize the effectiveness of the whole project.

<sup>7</sup> The figure does not include the contribution of national IPA 2010: EUR 10 500 000 to the total cost of the project of EUR 32 000 000. EUR 3 570 000 will be contributed by the Canton of Sarajevo.

(\*) = These contracts will be combined in one single Administration Agreement with the Worldbank (contract 2.1)

			SOURCES OF FUNDING								
			TOTAL EXP.RE	IPA COMMUNITY CONTRIBUTION		NATIONAL CONTRIBUTION				PRIVATE CONTRIBUTION	
AA WB (*)											
Component IId Contract 2.2 Service Contract	-	-	1 000 000	1 000 000	100.0						
TOTAL IB			2 500 000	2 500 000	100.0						
TOTAL INV			35 800 000	13 600 000	37.99	22 200 000	62.01		3 890 000	18 310 000	
<b>TOTAL PROJECT</b>			38 300 000	16 100 000	42.04	22 200 000	57.96		3 890 000	18 310 000	



## **5. Indicative Implementation Schedule (periods broken down per quarter)**

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1.1 - Works Contract	Q4 2012	Q2 2013	Q2 2015
Contract 1.2 – Service Contract	Q4 2012	Q2 2013	Q2 2015
Contract 1.3 – Contribution Agreement with the EIB	n/a	Q1 2013	Q1 2015
Contract 1.4 – Administrative Agreement with the WB	n/a	Q1 2013	Q1 2015
Contract 1.5 - Service Contract	Q4 2012	Q2 2013	Q4 2015
Contract 2.1 – Administrative Agreement with the WB	n/a	Q1 2013	Q1 2015
Contract 2.2 - Service Contract	Q1 2013	Q4 2013	Q4 2015

## **6. Cross cutting issues**

### **6.1 Equal Opportunity**

Equal opportunity for participation of men and women will be assured in all aspects of project implementation.

### **6.2 Environment**

This works project is specifically targeting the improvement of the environment. These investments will mainly focus on the water and waste management sectors. All investments shall be carried out in compliance with the relevant Community environmental legislation.

The procedures for environmental impact assessment as set down in the EIA directive (Council Directive 85/337/EEC of 27 June 1985) fully apply to all investments financed under IPA. If the EIA directive has not yet been fully transposed, the procedures should be similar to the ones established in the above-mentioned directive.

If an investment is likely to affect sites of nature conservation importance, an appropriate nature conservation assessment shall be made, equivalent to that provided for in Article 6 of the Habitats directive (Council Directive 92/43/EEC of 21 May 1992).

### **6.3 Minorities**

Participation in the project activities will be guaranteed on the basis of equal access regardless of racial or ethnic origin, religion or belief, disability, sex or sexual orientation.

## **ANNEXES**

- I Log frame in Standard Format
- II Amounts contracted and Disbursed per Quarter over the full duration of Programme
- III Description of Institutional Framework
- IV Reference to laws, regulations and strategic documents
- V Details per EU funded contract

**ANNEX I: Logical framework matrix**

<b>LOGFRAME PLANNING MATRIX</b>		<b>Programme Name and Number:</b>  <b>IPA National programme 2011 – Bosnia and Herzegovina</b>  <b>Fiche 8: "Environment"</b>	
		Contracting period expires: Three years following the date of the conclusion of the Financing Agreement	Disbursement period expires: One year following the end date for the execution of contracts
		Total Budget:  EUR 38 300 000	IPA Budget:  EUR 16 100 000
<b>OVERALL OBJECTIVE</b>  The overall objective is to improve environmental infrastructure and develop administrative capacity in the field of waste management and water management in line with the environmental <i>acquis</i> and international obligations.	<b>Objectively Verifiable Indicators</b>  Progress made in harmonization with the <i>acquis</i> and increased number and type of investments for new and/or upgraded infrastructures in water and sanitation and solid waste sector (e.g. number of household connection to water supply and sewage network; volume of treated waste water; number of international and domestic investors; reduced pollution impact; reduced flood risk).	<b>Source of Verification</b>  Annual Progress Report  Statistics on utilities management and services provision  Levels of public and private sector investments	
<b>Project Purpose</b>	<b>Objectively Verifiable Indicators</b>	<b>Source of Verification</b>	<b>Assumptions</b>
To support the implementation of integrated water and waste management systems in Bosnia and Herzegovina.	Increased level of implementation of integrated waste management strategy and of water and waste management EU directives.	Project Reports  Progress Reports	Continued State support for integrated water and waste management systems.

Results	Objectively Verifiable Indicators	Source of Verification	Assumptions
<b>Component I (water management)</b>			
<b>Component Ia</b> Flood protection structure constructed on the river banks of River Bosnia (Sarajevsko polje).	611 ha of industrial, agricultural and residential land protected in the case of floods of magnitude Q1/100 ( <i>one – hundred – year flood</i> );	Project Reports  Provisional and final acceptance of the works	Proactive involvement of all stakeholders involved in projects implementation.
<b>Component Ib</b>  Water supply system, sewage collection system and waste water treatment plants in RS rehabilitated and constructed.	Water infrastructure projects implemented in selected municipalities in RS.	Project Report Municipal statistics  Provisional and final acceptance of the works  Communal records on users connected to system	Preconditions for works execution are in place (e.g. Loan Agreement operational; Technical design documentation completed; land acquisition completed; necessary permits are in place).
<b>Component Ic</b>  Boiler room of the WWTP Butila in Sarajevo reconstructed and operational.	Boiler room and generator facility of the Butila WWTP constructed and operational	Projects Reports  Final acceptance of the works  Provisional and final acceptance of the works	Preconditions for works execution are in place (e.g. land acquisition completed; necessary permits are in place).
<b>Component Id</b>  Sava River Basin Management Plan drafted. Legal framework harmonized with EU Water Framework Directive.  Water related EU Directives (98/83/EC, 91/272/EEC, 76/464/EEC, 91/676/EEC, 76/160/EEC, 2007/60/EC) transposed.	Sava River Basin Management Plan completed.  Number of legislative acts harmonised with EU acquis and under implementation.	Project Reports  Progress Reports	

<p><b>Component II (waste management)</b></p> <p><b>Component IIa</b></p> <p>Existing landfill Klepovica in Neum rehabilitated.</p>	<ul style="list-style-type: none"> <li>- Existing cell rehabilitated and stabilised;</li> <li>- New sanitary disposal cell constructed;</li> <li>- Approximately 58.000 tonnes of old waste is reallocated;</li> <li>- Reduced pollution of groundwater and surface water in surrounding areas and the Adriatic Sea.</li> <li>-</li> </ul>	<p>Project Reports</p> <p>Provisional and final acceptance of the works</p>	<p>Preconditions for works execution are in place (e.g. Technical design documentation completed; land acquisition completed; necessary permits are in place).</p>
<p><b>Component IIb</b></p> <p>The regional sanitary landfill Smiljevici expanded; Implemented integrated waste management practice in accordance with EU directives and local legislation for waste management.</p>	<ul style="list-style-type: none"> <li>- Increased quantity of treated waste that is safe to landfill;</li> <li>- Increased percentage of recycled and reused waste</li> <li>-</li> </ul>	<p>Project Reports</p> <p>Provisional and final acceptance of the works</p>	<p>Preconditions for works execution are in place (e.g. Technical design documentation completed; land acquisition completed; necessary permits are in place).</p>
<p><b>Component IIc</b></p> <p>Wild landfills Krivodol and Srebrenik closed</p>	<ul style="list-style-type: none"> <li>- Land is remediated and existing waste is stabilized and covered;</li> <li>- Reduced emissions of greenhouse gas to the atmosphere generated from waste decomposition</li> <li>- Reduced pollution of groundwater and surface water in surrounding areas</li> </ul>	<p>Project Reports</p> <p>Provisional and final acceptance of the works</p>	<p>Preconditions for works execution are in place (e.g. Technical design documentation completed; land acquisition completed; necessary permits are in place).</p>
<p><b>Component II d</b></p> <p>A number of ready made investment infrastructure projects advanced enough for financing by IFIs and other donors.</p>	<ul style="list-style-type: none"> <li>- Number of technical documentations/studies prepared and appraised and new investments planned.</li> <li>- Projects supported for further investment by IFIs or donors.</li> </ul>	<p>Municipal statistics</p> <p>Project Reports</p> <p>Reports of regional landfills</p>	<p>Proactive involvement of all stakeholders involved in projects implementation.</p>

Activities	Means	Cost	Assumptions
<p><b>Component I (water management)</b></p> <p><b>Component Ia</b></p> <p>Construction of flood protection structures on river banks.</p>	<p>Contract 1.1 – Works Contract – <i>Regulation of Bosnia River in Sarajevsko polje</i></p> <p>Contract 1.2 – Service Contract - <i>Regulation of Bosnia River in Sarajevsko polje</i></p>	<p>The IPA budget: EUR 3 400 000</p> <p>Contract 1.1 (<i>Works</i>): EUR 3 200 000</p> <p>Contract 1.2. (<i>Supervision</i>): EUR 200 000</p>	<p>Proactive involvement of all stakeholders involved in projects implementation.</p>
<p><b>Component Ib</b></p> <p>Rehabilitation, upgrade and construction of the following:</p> <ul style="list-style-type: none"> <li>- Water supply system;</li> <li>- Extension of drinking water and wastewater treatment facilities;</li> <li>- Extension of wastewater networks;</li> <li>- Bulk and consumer metering</li> </ul>	<p>Contract 1.3 - Contribution agreement with EIB - <i>Rehabilitation and construction of the water and sanitation infrastructure in selected municipalities in RS</i></p>	<p>The IPA budget: EUR 2 000 000</p>	<ul style="list-style-type: none"> <li>- Loan Agreements between BiH Government and EIB ratified and operational</li> <li>- PIU established and operational</li> <li>- Municipalities selected</li> <li>- Technical design documentation completed and revised</li> </ul>
<p><b>Component Ic</b></p> <p>Construction of boiler room and generator facility.</p>	<p>Contract 1.4 - Administration Agreement with WB – <i>Construction of boiler room and generator facility of waste water treatment plant (WWTP) Butila in Sarajevo</i></p>	<p>The IPA budget: EUR 2 500 000</p>	<p>Loan Agreements between BiH Government and WB ratified and operational</p>
<p><b>Component Id</b></p> <ul style="list-style-type: none"> <li>- Preparation of Characterisation Report and background studies/reports;</li> <li>- Preparation of Programme of measures;</li> <li>- Implementation of public consultation process related to the preparation of RBM plan;</li> <li>- Drafting of Sava River Basin</li> </ul>	<p>Contract 1.5 - Service Contract – <i>Capacity building in the water sector</i></p>	<p>The IPA budget: EUR 2 500 000</p>	<p>Proactive involvement of all stakeholders involved in projects implementation.</p>

<p>Management Plan;</p> <ul style="list-style-type: none"> <li>- Drafting of legislation to transpose relevant EU water sector directives, including but not limited to 98/83/EC, 91/272/EEC, 76/464/EEC, 91/676/EEC, 76/160/EEC, 2007/60/EC;</li> <li>- Further development of water information system.</li> </ul>					
<p><b>Component II (waste management)</b></p> <p><b>Component IIa</b></p> <ul style="list-style-type: none"> <li>- Construction of impervious disposal cell;</li> <li>- Relocation of existing waste, waste stabilization and construction of the waste cover;</li> </ul>	<p>Contract 2.1 – Administration agreement with WB - <i>Solid waste)</i></p> <ul style="list-style-type: none"> <li>- <i>Component IIa – Rehabilitation of existing landfill 'Klepovica' in Neum</i></li> <li>- <i>Component IIb - Expansion of sanitary landfill 'Smiljevici' in Sarajevo</i></li> <li>- <i>Component IIc - Closure and remediation of wild landfills 'Krivodol' in Bosanska Krupa and 'Babunovci' in Srebrenik</i></li> </ul>	<p>The IPA budget with the WB: EUR 4 700 000</p> <ul style="list-style-type: none"> <li>- <i>Component IIa – EUR 1 200 000</i></li> <li>- <i>Component IIb – EUR 1 500 000</i></li> <li>- <i>Component IIc – EUR 2 000 000</i></li> </ul>	<p>Technical design documentation completed and revised</p>		
<p><b>Component IIb</b></p> <ul style="list-style-type: none"> <li>- Construction of new cell for disposal of inert waste, e.g. construction waste</li> </ul>					
<p><b>Component IIc</b></p> <ul style="list-style-type: none"> <li>- Closure of surface area of the existing wild landfill;</li> <li>- Installation of insulation protection measures</li> <li>- Waste stabilization and cover construction</li> </ul>					

<p><b>Component II d</b></p> <p>- Preparation of technical documentation for closure and/or rehabilitation of a number of existing wild landfills</p>	<p>Contract 2.2. - Service Contract – <i>Preparation of number of technical studies to support implementation of integrated waste management system in RS</i></p>	<p>The IPA budget: EUR 1 000 000</p>	<p>Proactive involvement of all stakeholders involved in projects implementation.</p>
---	---	--------------------------------------	---



**ANNEX II: Amounts (in €) Contracted and disbursed by quarter for the project**

<b>Contracted</b>	<b>Q1 2013</b>	<b>Q2 2013</b>	<b>Q3 2013</b>	<b>Q4 2013</b>	<b>Q1 2014</b>	<b>Q2 2014</b>	<b>Q3 2014</b>	<b>Q4 2014</b>	<b>Q1 2015</b>	<b>Q2 2015</b>	<b>Q3 2015</b>	<b>Q4 2015</b>
Contract 1.1 - Works Contract		3 200 000										
Contract 1.2 - Service Contract		200 000										
Contract 1.3 - Contribution Agreement with EIB	2 000 000											
Contract 1.4 - Administration Agreement with WB	2 500 000											
Contract 1.5 - Service Contract			2 500 000									
Contract 2.1 - Administration Agreement with WB	4 700 000											
Contract 2.2 - Service Contract				1 000 000								
<b>Cumulated</b>	<b>9 200 000</b>	<b>12 600 000</b>	<b>15 100 000</b>	<b>16 100 000</b>								
<b>Disbursed</b>												
Contract 1.1 - Works Contract		320 000	1 280 000	1 280 000	240 000					80 000		
Contract 1.2 - Service Contract		40 000		140 000						20 000		
Contract 1.3 - Contribution Agreement with EIB	2 000 000											
Contract 1.4 - Administration Agreement with WB	2 500 000											
Contract 1.5 - Service Contract		500 000		600 000			600 000			550 000		250 000
Contract 2.1 - Administration Agreement with WB	4 700 000											
Contract 2.2 - Service Contract				200 000			350 000			350 000		100 000
<b>Cumulated</b>	<b>9 200 000</b>	<b>10 060 000</b>	<b>11 340 000</b>	<b>13 560 000</b>	<b>13 800 000</b>		<b>14 750 000</b>			<b>15 750 000</b>		<b>16 100 000</b>

### **ANNEX III: Description of Institutional Framework**

The country of Bosnia and Herzegovina has two major, highly autonomous “Entities”: the FBiH, and RS. Each has its own laws that impact the delivery of water and wastewater services, addressing most aspects of technical, administrative and financial matters.

#### ***The role of Ministry of Foreign Trade and Economic Relations of BiH***

The role of the State in the sector has been increasing in Bosnia and Herzegovina over the past years, in view of increasing international obligations of the country and a need for an improved coordination at state level and ensuring more efficient use of scarce resources available to the Sector. The State level coordination role is assigned to the Ministry of Foreign Trade and Economic Relations and its Sector for Environment, Energy and Natural Resources. Consensus has been reached on the creation of a temporary Water Framework Directive Unit attached to Ministry of Foreign Trade and Economic Relations, which must receive more significant assistance to increase human and technical capacities. The Water Framework Directive Unit will facilitate and coordinate in meeting the international obligations in the water sector (e.g. ICPDR and Sava Commission, Barcelona Convention etc.). Currently, the "embryo" of the Unit has been formed, with the engagement of a water expert who is engaged (with the support of ICPDR) on the implementation of the Water Framework Directive in Bosnia and Herzegovina, and obligations towards the ICPDR and the Sava Commission.

#### ***Water and Environment Ministries in the Entities***

In the Federation the main authorities responsible for environment and water issues are the Federal Ministry of Agriculture, Water Management and Forestry and the Federal Ministry of Environment and Tourism (following a recent restructuring). The Federal Ministry of Agriculture, Water Management and Forestry is responsible for the water policy and strategy development, the issue of approvals and permits, setting of standards and regulations. The Federal Ministry of Environment and Tourism is responsible for the preparation of the environmental policy and strategy-related documents, quality standards for air, water, and soil, environmental monitoring as well as supervision of relevant institutions from the environment sector.

Similar to the FBiH, there are two Ministries in the RS, responsible for environment and water issues, namely: the Ministry of Agriculture, Forestry and Water Management in RS and the Ministry of Spatial Planning and Ecology of RS. Their competencies are similar to the competences of the ministries in FBiH.

In addition to the above-mentioned ministries, several other institutions in Bosnia and Herzegovina deal with water issues directly and indirectly. These include Water Agencies in both Entities, other ministries, independent administrative offices and institutions, and institutions related to the ministries. Other ministries with secondary responsibilities for water are usually the ones dealing with health, industry, energy and mining (or the economy in general), labour and public welfare.

The main authorities on entity level for waste management are the Ministry for Environment and Tourism in FBiH, and the Ministry of Physical Planning, Construction, and Ecology in RS. Those Ministries are also responsible for the preparation of the environmental policy and strategy-related documents, quality standards for air, water, and soil, environmental monitoring as well as supervision of relevant institutions from the environment sector.

### *Agencies for Watershed Sava (Danube) and Adriatic in Bosnia and Herzegovina*

There are two watersheds in BiH: Sava (Danube) and Adriatic. According to the delineation of river basin, two Agencies for Water management companies were established in FBiH (Sarajevo and Mostar), while in RS Agencies for Waters in Bijeljina and Trebinje.

The tasks of the Agencies, according to Water Laws, are obliged to carry out following tasks:

River basin water resources management; preparation of all strategic planning documents concerning water resources management, water quality and quality monitoring, flood control and management, preparation of expert material for drafting of water secondary legislation, establishment and management of water sector information system, organisation of operation and maintenance of the principal water facilities such as flood protection systems, regional water supply system etc, investment management and construction supervision of water related infrastructure, issuing water management guidelines, agreements and permits.

AWs are having also different tasks regarding fulfilment of agreements and conventions which Bosnia and Herzegovina has signed and ratified so far.

#### **ANNEX IV:**

##### **Reference to laws, regulations and strategic documents**

- Water Laws, Official Gazette of RS 50/06
- Water Laws, Official Gazette of FBiH 70/06
- Law on Waste Management of the Federation of Bosnia and Herzegovina (Official Gazette of FBiH 33/2003)
- Law on Waste Management of Republic of Srpska (Official Gazette RS 51/2002)

## **ANNEX V:**

### **Details per EU funded contract**

The actions will be implemented by joint management in accordance with Article 53 (d) of the Financial Regulation through the following:

#### **Component I – Water management**

- |              |  |
|--------------|--|
| Contract 1.1 | Works contract for the implementation of the Component Ia                          |
| Contract 1.2 | Service contract (supervision) for the implementation of the Component Ia          |
| Contract 1.3 | Contribution agreement with EIB for the implementation of the Component Ib         |
| Contract 1.4 | Administration agreement with Worldbank for the implementation of the Component Ic |
| Contract 1.5 | Service contract for the implementation of the Component Id                        |

#### **Component II – Waste management**

- |              |  |
|--------------|--|
| Contract 2.1 | Administration agreement with WB for the implementation of the components IIa, IIb and IIc |
| Contract 2.2 | Service contract for the implementation of the Component IId                               |