



PROJECT IDENTIFICATION FORM (PIF)¹

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

| | | | |
|---|---|------------------------------|------------|
| Project Title: | Adriatic Sea Environmental Pollution Control Project (I). Croatia and Bosnia and Herzegovina | | |
| Country(ies): | Croatia, Bosnia and Herzegovina | GEF Project ID: ² | 5269 |
| GEF Agency(ies): | WB (select) (select) | GEF Agency Project ID: | P143921 |
| Other Executing Partner(s): | Hrvatske Vode, Croatia; Ministry of Environment and Natural Resources, Croatia; Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina; and Municipality of Mostar. | Submission Date: | 2013-02-14 |
| GEF Focal Area (s): | International Waters | Project Duration (Months) | 36 |
| Name of parent program (if applicable): • For SFM/REDD+ <input type="checkbox"/> | | Agency Fee (\$): | 643,744 |

A. FOCAL AREA STRATEGY FRAMEWORK³:

| Focal Area Objectives | Expected FA Outcomes | Expected FA Outputs | Trust Fund | Indicative Grant Amount (\$) | Indicative Co-financing (\$) |
|-----------------------|--|--|------------|------------------------------|------------------------------|
| IW-2 (select) | Outcome 2.1: Implementation of agreed Strategic Action Programmes (SAPs) incorporates ecosystem-based approaches to management of LMEs, ICM principles, and policy/legal/institutional reforms into national/local plans | Output 2.1: National and local policy/legal/institutional reforms adopted/ implemented | GEFTF | 1,226,256 | 22,660,000 |
| IW-2 (select) | Outcome 2.3: Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measureable results | Output 2.3: Types of technologies and measures implemented in local demonstrations and investments | GEFTF | 5,550,000 | 52,940,000 |
| (select) (select) | | | (select) | | |
| (select) (select) | | | (select) | | |
| (select) (select) | | | (select) | | |
| (select) (select) | | | (select) | | |
| (select) (select) | | | (select) | | |

¹ It is very important to consult the PIF preparation guidelines when completing this template.

² Project ID number will be assigned by GEFSEC.

³ Refer to the reference attached on the [Focal Area Results Framework](#) when filling up the table in item A.

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|--------------------------------------|--------|--|----------|-----------|------------|
| (select) (select) | | | (select) | | |
| (select) (select) | | | (select) | | |
| (select) (select) | Others | | (select) | | |
| Sub-Total | | | | 6,776,256 | 75,600,000 |
| Project Management Cost ⁴ | | | GEFTF | | 650,000 |
| Total Project Cost | | | | 6,776,256 | 76,250,000 |

B. PROJECT FRAMEWORK

Project Objective: To reduce nutrient pollution in selected hot-spots of the Eastern Adriatic Sea and improve regional capacity for project preparation

| Project Component | Grant Type | Expected Outcomes | Expected Outputs | Trust Fund | Indicative Grant Amount (\$) | Indicative Cofinancing (\$) |
|--|------------|--|--|------------|------------------------------|-----------------------------|
| 1. Investments for improved treatment to reduce nutrient discharges into the Adriatic Sea and for the management of sensitive areas, in adherence with relevant Mediterranean, EU and global priorities and policies. This component includes demonstration pollution reduction investments in Croatia and in Bosnia and Herzegovina, and the provision of equipment for monitoring pollution. | Inv | 1.1. Reversal of degradation trends in selected, demonstration, priority "hot spots" in coastal areas achieved | 1.1.1. Reduction of nutrient pollution in demonstration priority "hot spots" in Croatia | GEFTF | 2,100,000 | 25,300,000 |
| | Inv | | 1.1.2. Reduction of pollution load to the Adriatic Sea through karstic groundwater systems from solid waste disposal sites in Bosnia and Herzegovina | GEFTF | 2,200,000 | 17,970,000 |
| | Inv | 1.2. Improved capacity to monitor and manage sensitive coastal areas | 1.2.1 Improved pollution monitoring capacity | GEFTF | 926,256 | 13,830,000 |
| 2. Technical assistance for project preparation for priority investments identified under the Assessment of Hot-Spots in the Adriatic Sea and to assess the relative | TA | 2.1.Policy recommendations to support decision makers for implementation, and capacity building for EcAp including implementation of | 2.1.1. Study to identify and assess sources and quantities of nutrients completed and policy/legal/institutional reforms to address them drafted | GEFTF | 300,000 | 8,830,000 |

⁴ GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

| | | | | | | |
|--|----------|---|---|----------|-----------|------------|
| sources of nutrients. The component will include two such studies in Croatia and feasibility studies and preparation of tender documentation for municipal infrastructure investments, including proposals for EU funding (6 in Bosnia and Herzegovina and 4 in Croatia are considered). | | related priority sectoral policies (pollution reduction, integration into national development plans, ICZM plans, IRBM plans) | | | | |
| | TA | 2.2.Sustained stream of pollution reduction investments facilitated through project preparation and priority setting. | 2.2.1. Funding proposals for maintaining a pipeline of investments to address pollution in hotspots in the Adriatic | GEFTF | 1,250,000 | 9,670,000 |
| | (select) | | | (select) | | |
| | (select) | | | (select) | | |
| | (select) | | | (select) | | |
| | (select) | | | (select) | | |
| | (select) | | | (select) | | |
| Sub-Total | | | | | 6,776,256 | 75,600,000 |
| Project Management Cost ⁵ | | | | (select) | | 650,000 |
| Total Project Costs | | | | | 6,776,256 | 76,250,000 |

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

| Sources of Cofinancing | Name of Cofinancier | Type of Cofinancing | Amount (\$) |
|----------------------------|-----------------------------------|---------------------|-------------|
| Bilateral Aid Agency (ies) | EC IPA, SIDA | In-kind | 14,100,000 |
| GEF Agency | World Bank | Hard Loan | 29,940,000 |
| National Government | Croatia and B&H | In-kind | 30,360,000 |
| Local Government | Municipalities in Croatia and B&H | In-kind | 1,850,000 |
| (select) | | (select) | |
| (select) | | (select) | |
| Bilateral Aid Agency (ies) | | Grant | |
| (select) | | (select) | |
| (select) | | (select) | |
| (select) | | (select) | |
| Total Cofinancing | | | 76,250,000 |

D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

| GEF Agency | Type of Trust Fund | Focal Area | Country Name/Global | Grant Amount (a) | Agency Fee (b) ² | Total c=a+b |
|------------|--------------------|----------------------|------------------------|------------------|-----------------------------|-------------|
| WB | GEFTF | International Waters | Croatia | 4,376,256 | 415,744 | 4,792,000 |
| WB | GEFTF | International Waters | Bosnia and Herzegovina | 2,400,000 | 228,000 | 2,628,000 |
| (select) | (select) | (select) | | | | 0 |

⁵ Same as footnote #3.

| | | | | | | |
|------------------------------|------------------|----------|--|-----------|---------|-----------|
| (select) | (select) | (select) | | | | 0 |
| (select) | (select)(select) | (select) | | | | 0 |
| (select) | (select)(select) | (select) | | | | 0 |
| (select) | (select)(select) | (select) | | | | 0 |
| (select) | (select)(select) | (select) | | | | 0 |
| (select) | (select)(select) | (select) | | | | 0 |
| (select) | (select)(select) | (select) | | | | 0 |
| Total Grant Resources | | | | 6,776,256 | 643,744 | 7,420,000 |

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

² Please indicate fees related to this project.

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1. The GEF focal area/LDCF/SCCF strategies /NPIF Initiative:

The project is fully in line with Objective 2 of the GEF5 IW Strategy: *Catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change.* It will support in particular the achievement of Outcome 2.1: *Implementation of agreed Strategic Action Programmes (SAPs) incorporates ecosystem-based approaches to management of LMEs, ICM principles, and policy/legal/ institutional reforms into national/local plans.*, and Outcome 2.3: *Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measureable results.*

Focus on Transboundary Pollution. The project will finance technical assistance and demonstration investments in hot spots identified by the regional TDA (MAP, 2005) and further assessed as part of the preparatory work for the Adriatic Sea Environment Program (ASEP), whose main elements are summarized in Annex 1. Demonstration investments under the Project will target two major transboundary issues in Croatia and Bosnia and Herzegovina: (i) discharges of nutrients, particularly Nitrogen, and (ii) leachate pollution of karstic groundwater into transboundary rivers (Neretva) going to the Adriatic or directly to it.

As indicated in the summary table and below, the project will finance (a) two demonstration investments to reduce Nitrogen discharges (investments considered are the retrofitting of recently constructed wastewater treatment plant and the upgrading of current solid waste leachate treatment lagoon into a high load activated sludge); (b) Technical Assistance for project preparation of priority investments identified as part of ASEP and to assess the relative sources of nutrients; and (c) equipment to enhance regional capacity to monitor coastal water quality.

Alignment with GEF 5 IW Strategic Objectives. The project will support collective management of the Adriatic transboundary water system through the mechanisms for coordination and water quality monitoring that it will finance, through policy recommendations for nutrient's control, incorporating ICZM principles, and also through the project preparation and implementation processes. As indicated below, the project is the result of a consensus-building effort that has involved all countries in the region and MAP, starting with the preparation of the Assessment of Pollution Hot-spots in the Adriatic, which was endorsed by country representatives in two workshops, and through their endorsement letters (although the project is presented as a stand-alone project, it also serves as pilot for a proposed program to follow at the next GEF Council meeting, for which endorsement letters from all four Adriatic countries were also received). The project has already significantly contributed to the implementation of policies and cooperation in the process of agreeing to the ASEP recommendations, and will further contribute to leveraging investments essential for the sustainable use and maintenance of ecosystem services, particularly through pollution reduction, which is one of the pillars of GEF 5 IW strategy.

Fully consistent with the ASEP recommendations, the project design focuses on catalyzing and consolidating multi-state cooperation to reduce pollution in the coastal areas of the Adriatic, with special attention to transboundary issues, both for surface and ground waters.

Linkage to Broader Programmatic Objectives on Regional Management Capacity. Although the proposed project is presented for consideration by the GEF as a stand-alone operation, its design, approach and objectives are fully in line with those agreed and supported by the World Bank, GEF and the countries in the region upon the completion of the assessment of hot-spots, and as part of the ASEP review and endorsement process (the World Bank intends to submit the Program documentation for the next GEF Council meeting in June 2013 following GEF policies). As part of the follow-up project that completes the Program, currently under preparation, a regional activity will be included for Knowledge Management, dissemination and replication, as well as for the drafting of an ambitious Regional Framework Agreement for pollution reduction in the Adriatic sea to be submitted to relevant countries. Through the proposed policy recommendations that will be developed under this project and the said Regional Framework Agreement, the Program aims to improve regional management capacity for transboundary pollution control as a part of a larger programmatic effort to restore ecologic balance in the

Adriatic Sea. The proposed monitoring equipment the project would partially support also adds to this objective as this will provide improved capacity to monitor and manage sensitive coastal areas, not for one country, but for the region (an agreement in this respect has been confirmed from the country that will manage such equipment), responding to the threats identified in the NBSAP for these countries. Through these mechanisms, the project also aims to support national plans for implementation of ICZM protocol to Barcelona Convention and EU Marine Framework Directive.

In the particular case of Croatia, the Republic gives special importance to the protection and sustainable management of marine and coastal area. Transposition and implementation of EU *acquis* related to marine environment (specifically Marine Strategy Framework Directive 2008/56/EC) and recent ratification of the ICZM Protocol of the Barcelona Convention sets challenging tasks in front Croatia as a CP to Barcelona Convention and a future EU Member State. (*Croatia ratified the ICZM Protocol in September 2012. While it is too early to have a plan for the implementation of the ICZM Protocol prepared, <http://www.themedpartnership.org/med/pfpublish/p/doc/dd0fc38f79dc27ed70305e9069e6f25c> is indicative of the Ministry's intention to prepare the joint ICZM –Protocol- and Marine -EU Marine Strategy Framework Directive- national strategy).*

Having in mind the variety of adopted policies related to management of marine and coastal environment, Croatia is also on the trail to link the obligations arising from the MSFD and the ICZM Protocol in a way to prepare national strategy that would reflect both the Marine and the ICZM strategy including adaptation to climate change issues in coastal areas, in one document. So far, in 2012 Croatia prepared the first document of the strategy titled “Initial assessment of the State and Pressures on Marine Environment in Croatian Part of the Adriatic”, while the document on the Economic and social analysis of the use and cost of degradation of marine environment and coastal area, should be prepared by the 30 of June this year. Following that, Programme of measures should be adopted by 2015 at the latest.

In addition, there is the national as well as the Adriatic plan to combat the accidental pollution of the sea. Further still, linking the pollution reduction efforts designed in this project and in the follow up one and coupling these efforts with improved management of the coastal areas, particularly sensitive areas, as provided by the policy recommendation, Framework Agreement and the capacity to monitor quality and respond to accidental pollution incidents, the Program will seek to strengthen joint regional work on coastal issues.

This project is being processed now given the urgency of the support it will be providing, as well as to pilot the proposed TA component.

A.2. National strategies and plans or reports and assessments under relevant conventions that frame the Project:

Alignment with NAPs under the SAP MED for these two countries. The proposed Project seeks to accelerate the implementation of the Mediterranean SAPs (SAP BIO and SAP MED) adopted under the Barcelona Convention in the Adriatic, as well as the implementation of Croatia's and Bosnia and Herzegovina's National Action Plans (NAPs), in accordance with EU accession policies and Directives. The project also aims to strengthen synergies with EU investment facilities and UNEP MAP policy work.

The Project will promote accelerating and scaling up partnership investments of the World Bank and other IFIs that aim to support these two countries to invest for sustainable development and protection of the Adriatic Sea. The proposed project is consistent with national priorities and plans. The Project will also facilitate the progress of the two countries, in particular Croatia, towards the compliance with relevant EU Directives and policies. The Project fully adheres to the principles, requirements and targets of the Mediterranean Strategy for Sustainable Development, adopted in 2005, in particular objectives of the priority area “Promoting sustainable management of the sea and coastal zones and taking urgent action to put an end to the degradation of coastal zones,” and to the initiatives to introduce the Ecosystem Approach (EcAp) adopted by the parties to the Barcelona Convention.

The Project's development objectives are to reduce the discharge of pollutants with transboundary importance, particularly Nitrogen, in selected hot-spots of the Eastern Adriatic Sea, and improve regional capacity for project preparation and environmental monitoring of sensitive areas.

The proposed specific investments are consistent with the World Bank's Country Partnership Strategies (CPS) with the project countries. The CPS are developed based on (i) the country's development vision presented in the country's social economic development plans/strategies; (ii) a collaborative diagnosis of

its development challenges; and (iii) an analysis of development results that the World Bank could influence; and (iv) the widest possible involvements of domestic stakeholders and development partners. In the selection and design of investments, primary consideration has been given to how the proposed Project supports Croatia's and Bosnia's EU accession agenda. Project components that enhance these countries' capacity to absorb EU funds, especially following Croatia's accession, thus have high priority.

Alignment with the World Bank Country Partnership Strategies (CPS). The proposed project is fully aligned with these two countries CPSs, particularly in relation to the EU integration process.

In the case of **Croatia**, the CPS for the period 2009-2013, is centered on Croatia's goal of joining the EU and accelerating its income convergence with other member states in a fiscally, socially, and environmentally sustainable way. The CPS's main pillar is to support Croatia's pre-accession reforms through projects and analytical and advisory activities that complement the EU accession agenda. The CPS for the next period, currently under preparation, strengthens these efforts and also aims to allow Croatia to be able to access and implement the expected funding support the country will receive from the EC upon accession in July 2012. The proposed project is therefore strategic and critical; both in terms of supporting innovative technologies and of supporting the country to prepare project proposals and requests for the EC funding that is expected to become available. Without this project's support, the capacity of the country to absorb and properly use these funds would be at risk; the limited support to be provided by the project, thus, becomes crucial to accelerate the achievement of Croatia's regional targets in terms of pollution control in the Adriatic by leveraging substantial financing, that might otherwise be lost or used on other national programs.

Similarly, with **Bosnia and Herzegovina** now set on joining the EU, supporting the country's EU integration process has become the overarching theme of the Bank's CPS, along with competitiveness, environmentally sustainable growth, and social inclusion. Expected outcomes of the new CPS (2012 – 2015) include, inter-alia, continued macroeconomic stability and competitiveness in key sectors, improved infrastructure and basic services, sustainable development of infrastructure, reduced pollution of rivers (Neretva, Bosna and Miljacka), and improved management of wastewaters. As in the case of Croatia, the activities to be financed under the project have been selected to foster cooperation with the EC and to leverage EC financing through national programs of regional importance.

B. PROJECT OVERVIEW:

B.1. The baseline project and the problem that it seeks to address:

The Adriatic Sea is a semi-enclosed sea forming a distinct sub-region within the Mediterranean Sea region. The environmental conditions are predominantly caused by a specific system of exchange of waters with the Ionian Sea, thresholds of Otranto and Palagruza separating the Adriatic Sea from the Ionian Sea and deeper south Adriatic from the shallower north Adriatic. Moreover, freshwater input from the mountain regions of the Adriatic eastern coast and north Italian rivers substantially contribute to the uniqueness of its ecosystems.

Croatia has a population of 4,290,612 people out of which about 1.5 million live in the Adriatic Sea discharge basin. About 9 million tourists visit the Croatian coast each year. GDP per capita is 10,246 € (2010) while the total tourism contribution in GDP is about 28%. The priority pollution hotspot sites, as identified by UNEP-MAP in 2003 and then confirmed by the World Bank study in 2011, are Ploce – Neretva Delta, which also receives pollution originating in Bosnia and Herzegovina, Zadar Channel, Split-Kastela, Rijeka, Krka Estuary, Dubrovnik-Ston and Pula. NAP has prioritized coastal pollution issues, and areas to be addressed could be found in all of seven coastal counties. Based either on the severity of environmental issues or the importance of reducing the coastal degradation to improve socio economic performance, notably of tourism, or because of their importance for the coastal biodiversity protection, four coastal counties are singled out as areas where intervention will take place.

The coastal area of Istarska County has a population of about 206,000. The population and tourist industry are concentrated on its west coast (towns of Umag, Savudrija, Porec, Rovinj, Novigrad, Pula). Wastewater is mostly disposed of through offshore outfalls, equipped only with mechanical treatment. About 55% of Istarska County's population is connected to the public sewerage system. Although, overall, the environmental situation, including the water on the beaches, is considered as relatively good, the fact that wastewater treatment is mainly at the primary level carries the risk of environmental degradation, along with serious economic consequences for tourism.

The coastal zone of the Zadarska County has a population of about 133,000. The most important localities of this Northern Dalmatian county are Zadar, Biograd, Pakostane, Novigrad and Bibinje. About 45% of its coastal area population is connected to the public sewerage system. Also in this county the main environmental problem is the current treatment level, compounded with inadequate treatment of sludge, whose solution is yet on hold, at least until a national sludge management study will be completed, and a decision on the location of regional landfills and leachate treatment made. If continued, these trends might seriously affect tourism, the mainstay of local economy, as well as important groundwater bodies.

The population of the Sibensko-Kninska County coastal area is about 88,000. The most important settlements are Sibenik, Vodice, Skradin and Primosten. About 44% of the Sibensko-Kninska County population is connected to the public sewerage system. Based on eutrophication level and pollutant concentration analysis in the seawaters, the critical area is the Sibenik Bay sea basin, where significant changes of its environmental status occur due to the combination of adverse effects of the Krka River and anthropogenic impact (wastewater input), with the town of Skradin in its midst. Seawater sanitary quality in the coastal zone of the County was not assessed as satisfactory within the NDA, due to the high percentage of beaches not meeting sanitary standards. This is due to the improper wastewater treatment and discharge of wastewater into the sea (particularly true for Sibenik area), whereby the adverse impact of smaller local sewerage outfalls has also been recorded.

The coastal area of the Dubrovacko-Neretvanska County has a population of about 120,000. The most important settlements are Dubrovnik, Metkovic, Ploce and Korcula. On the territory of Dubrovacko-Neretvanska County pollution characteristics of five major urban wastewater outfalls are monitored within the land-based sources of a marine pollution (LBS) program. The cities of Metkovic, Ploce and Korcula do not have a treatment facility and wastewaters are discharged into the sea without pretreatment. About 38% of the Dubrovacko-Neretvanska County coastal zone population is connected to the public sewerage system. Nutrient salts and suspended solids input is substantial. Initial estimates indicate that the Neretva River accounts for almost all input of Nitrogen (94%), Phosphorus (86%) and suspended solids, while the rest is accounted for by wastewater. The most major problem is the lack of wastewater treatment in the Port of Ploce, which is the larger Croatian coastal city without one. Ploce is close to the Neretva Delta Ramsar site, Neum (only exit to the sea by Bosnia and Herzegovina), as well as close to the Mali Ston oyster farms, which are the mainstay of the local economy. Any deterioration of the environmental situation may seriously hamper the economic potential of the wider area, with transboundary impacts.

Bosnia and Herzegovina has a population of 3,843,126 out of which about 500,000 live in the Adriatic Sea catchment basin. GDP per capita is 3,254 €(2010 data) while the total tourism contribution in GDP is about 8.4%. Bosnia and Herzegovina has an Adriatic Sea coastline of 25 km of that belongs to the Municipality of Neum, with a population of about 4,000 people. Although Neum is in the same inlet as Ploce and Mali Ston, it is not considered a coastal hot spot, however, the importance of Bosnia and Herzegovina is reflected by the fact that the largest parts of the river flow and catchment basins of the Adriatic rivers are located there. Pollution sources located in that area significantly contribute to the pollution loads carried by the rivers of Neretva, Krka and Cetina. The Neretva river discharges nutrients originating from agricultural run-off, solid waste leachates and untreated municipal wastewater from the upriver sources in Bosnia and Herzegovina.

Wastewater treatment is a significant problem in the whole territory of Bosnia and Herzegovina. The current sewerage system in the Mediterranean part of Bosnia and Herzegovina is obsolete and was damaged in the war, and only a few municipalities (Trebinje, Grude and Ljubuski) have wastewater treatment plants that need to be upgraded. Solid waste represents another critical problem. Usually the only existing option for waste (municipal, medical, industrial and other) disposal is local (municipal) landfills, which are mostly just simple waste dumps set on inadequate locations and without basic technical protection measures, and cannot be considered as sanitary landfills. Mostar's landfill at Uborak is an exception; this landfill has been recently closed and a new landfill is being constructed (however, leachate treatment at this facility is only limited and does not address nutrient removal).

The baseline situation is therefore characterized by two major causes of trans-boundary pollution in the project area: (a) nutrient discharges from municipal sewage point-sources and agriculture non-point sources along the coast and the main rivers in the Adriatic basin; and (b) solid waste and the associated discharge of leachates from unsanitary waste dumping in cities and towns at the coast and/or transported via rivers and karsts in the wider catchment areas discharging into the sea. These issues are aggravated by the fact that tourism which increases the coastal population significantly during a relatively short period of the year, mainly during the summer months, places unique technical and financial challenges to liquid and

solid waste disposal management.

There have been several interventions financed by various IFIs, notably the World Bank with its two Coastal Cities Pollution Control projects in Croatia and the Neretva-Trebinjica Management Project in Croatia and Bosnia and Herzegovina, as well as bilateral and international programs including some supported by the European commission (EC), for investments in wastewater treatment and solid waste management in several coastal cities to address some of the issues. However, much remains to be done to address the growing needs of urban areas and to restore the ecosystems of the project areas, particularly on water treatment facilities in coastal towns, and in solid waste management. Failure to do so will certainly lead to the worsening of the present situation and will represent lost economic opportunities both in tourism and in other economic coast and sea dependent sectors.

B.2. Incremental /Additional cost reasoning:

GEF financed investments and TA. The GEF proposed project has two areas of activity (2 components):

Component 1 – Demonstrative investments to reduce nutrient discharges and improve water quality monitoring capacity: This Component will finance works and equipment (US\$5.23 million estimated in GEF financing) for:

- (i) Retrofitting a current wastewater treatment plant (the one in Novigrad, in Istarska County, Croatia has been proposed), to reduce effluent Nitrogen concentrations in order to comply with EU criteria for discharges into the Adriatic;
- (ii) Upgrading a current solid waste leachate treatment lagoon (the one in Mostar's landfill, in Bosnia and Herzegovina, has been proposed) to high load activated sludge to reduce the transfer of pollution to the sea through karstic groundwater systems and the Neretva River basin; and
- (iii) Provision of equipment to enhance the capacity to monitor coastal water quality.

Component 2 – Technical Assistance: This Component will finance consultant services (US\$1.55 million estimated in GEF financing) for:

- (i) An assessment of nutrient discharges in selected areas of Croatia's coast (to assess relative sources of nutrients, including point and non-point sources, and draft proposals for their reduction in the Northern Dalmatia, which covers the entire Zадарска County and northern part of the Sibensko-Kninska County, and in the Neretva Delta area, in Dubrovacko-Neretvanska County and Bosnia and Herzegovina Neretva's basin), as well as to provide an analysis of the policy, legal and/or institutional reforms that are needed to address related water quality problems, incorporating ICZM principles, and contributing to national plans for implementation of ICZM protocol to Barcelona Convention and EU Marine Framework Directive;
- (ii) Preliminary designs and project documentation, including preparation of tender documentation to access EU funds, for investments in wastewater and leachate treatment to comply with EU requirements in Croatia (cities considered are Zadar and Novigrad in Zадарска County, Skradin in Sibensko-Kninska County and Ploce in Dubrovacko-Neretvanska County); and
- (iii) Preliminary designs and project documentation, including preparation of tender documentation to access EU funds, for investments in wastewater and solid waste leachate treatment to comply with EU requirements in Bosnia and Herzegovina (cities considered are Trebinje and Gacko in Eastern Herzegovina, Livno, Glamoc and Posusje in Western Herzegovina, and Neum on the Adriatic coast).

The project includes, as part of the proposed financing of physical investments and technical assistance, support for institutional strengthening to improve the capacity of the institutions involved in managing and/or overseeing the relevant coastal areas and obligations for the Adriatic Sea (involved utilities, Ministry of Environment of Croatia and Neretva Basin Commission).

GEF funding will support the countries in reaching the following *two major global environmental benefits*:

- (i) accelerating MED SAP and NAPs implementation by facilitating environmental infrastructure investments in the Adriatic basin by the EU, WB and others; and
- (ii) expanding their scope to support compliance with EU Directives, Barcelona Convention Protocols, the GPA, in synergy with MAP strategies and approaches.

Without GEF funding, the above benefits may not materialize or may not materialize as quickly, resulting

in continued discharge of large volumes of untreated or inadequately treated wastewater in the Adriatic Sea. The GEF support will provide incremental financing for the construction and upgrading of pollution reduction municipal infrastructure, innovative in their approach and with replicability potential, in adherence with relevant EU, Mediterranean, and global priorities and policies (Component 1), and will also create conditions for sustained flow of investments in the future (Component 2).

The activities of the project are coordinated with the activities of the World Bank-MAP GEF Strategic Partnership for the Mediterranean Large Marine Ecosystem (the MedPartnership), especially with regard to the implementation of SAP and NAPs in the Adriatic Region. The benefits this project is expected to bring to the local communities in the Adriatic will make it an attractive catalyzing factor for similar investments in the future.

The cost effectiveness of the project will be determined in detail as part of the studies to be carried out during the project preparation phase and for CEO endorsement. However, it is already clear that the project approach is cost effective, taking into consideration the following: (i) coherence and complementarity with previous and ongoing GEF funded projects in the Mediterranean Basin and the Adriatic sub-region, (ii) reduction of the negative transboundary impacts project activities will bring, and (iii) continuation of the “business-as-usual” approach, which brings an accelerated increase in the costs of environmental degradation in the countries concerned. Additional work carried out has shown the significant positive outcome and fiscal impact.

Capacity of Investments to foster Innovation and Replication. As indicated, the project will finance two demonstration investments: (i) retrofitting of a secondary treatment to reduce nutrient (Nitrogen) discharges from this city into the Adriatic sea; and (ii) leachate treatment in a solid waste landfill, to reduce discharges of nutrients and pollution through karstic formations and to the Neretva basin draining into the Adriatic sea. The investment in the WWTP will be based on the retrofitting and enhancement of existing treatment, not traditional tertiary treatment approaches or extensive treatment (lagoons or wetlands) as these have been tested as part of other projects. These are simpler methods that lend themselves better for the upgrading of existing treatment plants and which could have a wider impact and easier implementation. With respect to the leachate treatment, the main pollutants of interest are nutrients, particularly Nitrogen, given its solubility and transportability into ground waters and ultimately into the Adriatic. The technology under consideration is high load activated sludge with anaerobic phases, of which some examples are already under operation on a pilot base.

The specific impact of the two proposed demonstration investments is to reach the EU legislation in terms of effluent discharges and protection of underground waters, but the real project impact has to be seen from the potential for replication of these two investments and, particularly, if considered in conjunction with the TA also proposed under the project to assess the relative importance of nutrient sources, develop policy recommendations (including incentives) and prepare projects under this approach that could be eligible for EU or other donor financing.

Baseline investments. The demonstration investments and technical assistance to be financed by the proposed GEF project build on and complement the investments financed through the World Bank Croatia Coastal Cities (second under implementation and third currently under preparation) and Bosnia and Herzegovina Second Solid Waste Management projects. These projects provide financing for the construction of the secondary treatment plant and for the rehabilitation of the landfill (Mostar) whose leachate treatment will be upgraded, respectively, as well as technical assistance for both the strengthening of the utilities responsible for their operation and for preparation of additional project proposals for funding. Sequencing of the corresponding co-financing from these sources is needed because of the scope of the investments to be financed under the GEF grant (retrofitting of the wastewater treatment plant and disposal infrastructure and leachate treatment) and does not represent a project risk since such co-financing is fully committed. Project management will be provided under the Bank projects’ co-financing.

B.3. The socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

The proposed project will have significant socioeconomic benefits as it is aligned to the World Bank’s investments and CPS priorities. The project addresses four categories of issues:

- need to expand wastewater and leachate treatment capacity and address removal of nutrients (Croatia);
- protecting groundwater recharge areas in the karstic regions draining to the Adriatic, by introducing

leachate and sludge management facilities in solid waste disposal sites (Croatia and Bosnia and Herzegovina);

- preparing project documentation for EU funding (Croatia and Bosnia and Herzegovina); and
- improving monitoring capacity (regional), and facilitating an exchange of information and experiences, and replication (Croatia and Bosnia and Herzegovina).

All these activities will bring about substantial social and economic benefits to the two countries by reducing health and environmental hazards originating from pollution of freshwater, both surface and groundwater, and marine coastal waters, thus also strengthening their tourism potential. It is expected that the project will generate socioeconomic benefits equally to both genders of project beneficiaries. Specific gender dimensions of the project activities will be examined, monitored and reported under each individual component.

B.4. Risks, including climate change risks that might prevent the project objectives from being achieved, and measures that address these risks to be further developed during the project design:

1. The location of some of the facilities where infrastructure will be built may face resistance of local stakeholders (Moderate). This risk will be mitigated by awareness raising activities and explaining the benefits that the intervention will bring to the community. In all cases it has been confirmed that the proposed demonstration investments to be financed will be carried out within the land and perimeter of existing facilities, not requiring land acquisition or resettlement nor affecting amenities of adjacent activities.

2. Insufficient capacity to develop project proposals for EU financing (Moderate). This risk will be mitigated by the early implementation of adequate training to raise local and national capacities.

3. Leveraged financing will not fully materialize (Moderate). This risk will be mitigated by seeking support from donors such as the EU. Monitoring of financing leverage delivery, based on the appropriate calculation, will also be established.

4. Social and environmental risks may occur in specific investment projects (Low). Environmental management procedures will be conducted to identify and mitigate any potential risks. Analysis of social issues affecting individual projects will also be carried out during project preparation.

5. Project implementation and results will not be adequately monitored (Low). This risk will be mitigated by ensuring that adequate resources are allocated for monitoring.

B.5. Key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

The Project will involve several stakeholders at the global, sub-regional, national, and local levels. In designing the Project, the World Bank aims to leverage key partnerships, especially with the GEF, the EU, and MAP. In addition to these stakeholders, this initiative seeks to build upon and bring together key civil society organizations based in the Adriatic region, such as major NGOs in both countries. In Croatia, major stakeholders are: Ministry of Environment and Nature Protection (GEF political and operational focal point), Ministry of Agriculture, Ministry of Physical Planning and Construction, Ministry of Regional Development, Croatian Waters, Croatian Fund for the Environment and Energy Efficiency (FZOEU), and municipal authorities where activities are planned. In Bosnia and Herzegovina, stakeholders include State and Federal ministries and municipalities. Considering the integrated nature of the intervention, it would be necessary that stakeholders from Italy and Slovenia be involved through sub-regional initiatives such as the Adriatic Commission and Adriatic Ionian Initiative.

The above mentioned stakeholders will be at the heart of the governance structure of the project and relevant GEF policies in that respect will be followed. Several rounds of consultation have already been held with major stakeholders in both countries. The requirements for information dissemination, consultation and stakeholder participation will be adequately built into the project's implementation design.

B.6. Coordination with other related initiatives:

Some of the project activities build, at a sub-regional level, upon activities initiated within another GEF Program – the MedPartnership, and its associated project “Integration of climatic variability and change into national strategies to implement the ICZM Protocol in the Mediterranean.” In both projects, Adriatic

countries are well represented.

During project preparation, linkages will be established with two other related GEF projects in the region, both executed by UNDP. The COAST (Conservation and Sustainable Use of Biodiversity in the Dalmatian Coast) project has developed measures to protect biodiversity to enhance the potential for tourist development along the Croatian coast, and its objectives are also to protect coastal areas by reducing pollution and to bring socio economic benefits to its population by improving the quality of the coastal environment. The DIKTAS (Protection and Sustainable Use of the Dinaric Karst Transboundary Aquifer System) project is implemented in Croatia, Bosnia and Herzegovina, Montenegro and Albania with the aim to introduce sustainable integrated management principles in a transboundary karstic freshwater aquifer and, as such, may provide valuable inputs to this project, which operates in the same natural conditions.

Implementation of other UNEP activities, such as the Ecosystem Approach initiative, will be actively monitored and results utilized. In addition, the EU Marine Strategy and Water Framework Directives' implementation will provide benchmarks for the implementation of the project.

C. WORLD BANK'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

C.1. Co-financing amount the GEF agency is bringing to the project:

The World Bank will provide co-financing in the amount of approximately US\$29.94 million, estimated combined amounts for relevant sub-activities for both Croatia and Bosnia, through its on-going Coastal Cities Pollution Control 2 Project in Croatia and the Second Solid Waste Management Project and Water Quality Project in Bosnia and Herzegovina. Additional co-financing is committed from other bilateral and multi-lateral agencies financing the above two projects in Bosnia and Croatia, IPA and SIDA, estimated at US\$ 14.1 million. Estimated co-financing from the national governments is provided in Table C. Counterpart funding from the Government of Croatia (Ministry of Environment and Nature Protection and FZOEU) entails a combination of in-kind and cash contributions. Additionally, national governments are estimated to contribute about US\$370,000 for the management and supervision of investments and project reporting, as part of their current costs for the implementation of related investments.

Total co-financing for the project is estimated at US\$76.25 million, resulting in a co-financing ratio of 10.3 over the GEF Grant amount. The project is also expected to leverage substantial additional financing through the TA component to support project preparation and funding requests (it is estimated that the Project would leverage an additional US\$60 to 65 million).

C.2. How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

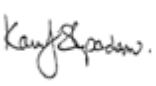
The proposed Project is aligned with individual CPSs for the two countries (Croatia and Bosnia and Herzegovina) and with the World Bank's ECA Regional Strategy of developing closer regional partnerships with the EU institutions. The knowledge management, dissemination, and replication activities envisaged under the project are also aligned with the Bank's Knowledge Strategy. The proposed activities to be financed have been selected to foster such cooperation and leverage EC financing through national programs. The World Bank brings highly relevant experience from the Baltic Sea Environment Program and the Black Sea – Danube Strategic Partnership on Nutrient Reduction, as well as the on-going Sustainable Med Investment Fund that would now be adapted to address the special conditions of the Adriatic Sea. The Bank has experienced staff working in the field offices of both countries and at Headquarters in Washington, that are currently involved in the supervision of the on-going World Bank projects, and who will also support the GEF project's preparation and implementation. Procurement, financial management, environmental specialist, and social specialist staff are available to support the project from the World Bank Zagreb and Sarajevo field offices.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

B. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

| NAME | POSITION | MINISTRY | DATE (MM/dd/yyyy) |
|--------------------|---|--|-------------------|
| Ms. Gordana Ruklic | Head of International Relations Department, GEF Operational Focal Point | MINISTRY OF THE ENVIRONMENT AND NATURE PROTECTION, CROATIA | 02/11/2013 |
| Mr. Senad Oprasic | GEF Operational Focal Point | MINISTRY OF FOREIGN TRADE AND ECONOMIC RELATIONS, BOSNIA AND HERZEGOVINA | 02/11/2013 |
| | | | |

B. GEF AGENCY(IES) CERTIFICATION

| This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation. | | | | | |
|--|---|-------------------|--|--------------------------------------|--|
| Agency Coordinator, Agency name | Signature | DATE (MM/dd/yyyy) | Project Contact Person | Telephone | Email Address |
| Karin Shepardson GEF Executive Coordinator The World Bank |  | January 9, 2013 | Angela Armstrong, GEF Regional Coordinator Manuel Mariño Task Team Leader | (202) 458-0975 (202) 473-6692 | aarmstrong@worldbank.org mmarino@worldbank.org |
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