

## **MONTENEGRO**

# Ministry of Sustainable Development and Tourism LAKE SHKODRA INTEGRATED ECOSYSTEM MANAGEMENT PROJECT (LSIEMP)

**Borrower's Implementation Completion Report** 

December 31, 2012

# Contents

#### I. Introduction

Lake Skadar-Shkoder, the largest lake on the Balkan Peninsula in terms of water surface, is on the border between Montenegro and Albania in the Southern part of the Dinaric Alps. Its drainage area is about 5,500 km² (4,470 km² in Montenegro and 1,030 km² in Albania), and it drains to the southeast through the Buna-Bojana River to the Adriatic. The proposed project area consists of the lake and adjacent areas directly served by the lake. In Albania about 170,000 people live in the project area in seven municipalities and rural communes, within three Regions of the Shkodra District. In Montenegro about 12,500 people live in the project area, distributed among 40 small settlements within three municipalities (the larger Montenegro lake watershed has a population of about 250,000).

Lake Skadar-Shkoder has features unique among the world's major lakes—a unique ecology and natural beauty with enormous tourist potential. The lake's complex freshwater ecosystem, associated wetlands, floodplains, and karstic features provide valuable environmental benefits to surrounding communities (e.g. fisheries, drinking water, recreation), and contribute to national and regional economic and cultural assets. However, these same characteristics also contribute to lake ecosystem fragility. Due to those fact Montenegrin part of the Lake Skadar has been proclamed as National Park in 1983 (IUCN management category II) by Government of Montenegro and Albanian part as a Managed Natural Reserve (IUCN Management category IV) by Albanian Government in 2005. Since 1995 National Park Skadar Lake was recorded in the Ramsar list (wetland area of international significance).

Economy of the Skadar Lake region in Montenegro is modest. Main activities are agriculture, including fishery, and tourism. For many people living on the lake side, both in Montenegro and Albania, fishery is the only source of livelihood. Both countries have a high tourism potential. Hydropower has also in both countries development perspectives, making them Less depend from foreign energy suppliers, in particular in Montenegro.

During the 1990s, Albania and Montenegro experienced severe economic decline accompanied by the collapse of many industries and large agricultural enterprises within the watershed. Now, both governments want to revive the local economic base and attract private investment. National and local governments and local residents in both countries see tourism as the main engine for economic development of the Lake Skadar-Shkoder area, and national spatial and sectoral strategies identify it as a priority special interest area to develop nature, culture, and recreation-based tourism, which depends heavily on environmental quality. Therefore tourism that is planned and regulated is preferable to many alternative economic activities. However, tourism is now growing rapidly—unplanned and unregulated—in the Lake Skadar-Shkoder, threatening the lake's potential as an economic asset through inappropriate construction, untreated wastewater, poor solid waste management, over fishing and so forth.

These current trends provide a window of opportunity for strategic, coordinated action to set Lake Skadar-Shkoder on a path of ecological and economic sustainability. Both governments seek to harmonize their policies, legislation, and practices with European Union (EU) Directives, including the EU Water Framework Directive, which sets standards for water quality and calls for integrated watershed management and transboundary cooperation. In 2003, the two Ministries of Environment signed a Memorandum of Understanding (MoU) and in February 2008, a detailed Bilateral Agreement was signed as the legal instrument for joint cooperation for protection and management of the lake, including establishing a Skadar-Shkodra Lake Commission (SLC).

The Government of Montenegro and Government of Albania have received a GEF Grant, administered by the World Bank, focusing on Strengthening Joint Cooperation for Management of the Lake SkadarShkoder Ecosystem. The project: "Lake Skadar/Shkoder Integrated Ecosystem Management") complies with the strategy for bilateral cooperation on Skadar-Shkoder Lake defined in the Agreement for the protection and sustainable development of the Skadar-Shkoder Lake, signed by the former Ministry of Tourism and Environment (MTE) of Montenegro (present Ministry of Sustainable Development and Tourism - MSDT), and by the Ministry of Environment, Forestry, and Water Administration (MEFWA) of the Republic of Albania.

#### II. **Project participants**

At the National level the main stakeholders and their responsibilities for the project were:

- The Montenegro Ministry of Sustainable Development and Tourism MSTD<sup>1</sup>, through the 1. MSTD PMU<sup>2</sup>, have overall responsibility for project implementation, in coordination with partners in sectoral Ministries, local governments, and universities. MSTD, through subordinated units, has been directly responsible for on-the-ground management of the lake and immediately surrounding areas because the area on both sides of the border falls within formally established Protected Areas (PAs).
- 2. The Montenegro Ministry of Finance (MoF), through the Technical Services Unit (TSU), have responsibility for procurement and financial management of the Project
- 3. The Skadar Lake Commission (SLC), with the technical advice of the SLC Working Groups and the assistance of the SLC Secretariat, have been responsible for coordinating work between the Recipient and Albania under the Project and for providing technical advice in a manner consistent with the Bilateral Agreement.
- KAP Steering Committee had obligation to monitor and steer all project activities related to 4. the reduction of pollution from Aluminum Plant Podgorica (KAP)
- Montenegrin Ministry of Culture has been stakeholder in implementing project activities 5. related to the reconstruction of touristic facilities in the Lake area
- 6. Environmental Protection Agency of Montenegro has been major stakeholder in implementing project activities related to the monitoring of the Lake, SLC working groups, capacity building (especially regarding IPPC), reduction of pollution from KAP and related environmental impact assessment
- 7. Hydro-meteorological Institute of Montenegro has been stakeholder in project activities mainly related to the development of Hydrological model, monitoring, SLC working groups and capacity building.

<sup>&</sup>lt;sup>1</sup> Due to the institutional adjustments made by the Government during project implementation, previous Ministry of Tourism and Environmental Protection (MTEP in PAD) has been organized as Ministry of Spatial Planning and Environment and later as Ministry of Sustainable Development and Tourism. None of those institutional changes affect project implementation since new ministry has been always ancestor of the obligations and responsibilities of previous ministry – to the full extent regarding project implementation.

PMU has been comprised of: Project Director (Assistant Minister in MSTD), Project coordinator (project-

financed) and support from TSU for all procurement and financial management (partly project-financed).

#### At the local level:

- 8. Municipality of Podgorica (including city municipality of Golubovci) has been mainly involved in project activities related to the: SLC working groups, reduction of pollution from KAP and related Environmental impact assessment, WWTP construction and capacity building.
- 9. National park Skadar Lake (as a part of Public Enterprise National parks of Montenegro-PENPM) has been involved in all project activities since all of them have been implemented (or have strong implication) to the territory that is managed by National park Skadar Lake authorities.

## III. Costs and Financing of the Project

The project has been financed through Global Environment Facility Specific Investment Grant, government budgets, contributions from local government, and the private sector. The GEF grants totaling \$4.55 million (\$2.56 million Montenegro) has been denominated in US dollars. (see Annex 1). Total disbursement level from Montenegrin allocation is 81, 5 % until December 2012 or for each component has resulted as follows: a) Component A 87,2 %, b) Component B 80,3 % and c) 79 %

## **IV.** Project Evaluation

## 4.1 Achievement of project objectives

The global project development objective(GO) was to maintain and enhance the long-term value and environmental services of Lake Skadar/Shkodra and its natural resources and the Project Development Objective (PDO) is to help establish and strengthen institutional mechanisms for transboundary cooperation through joint efforts to improve sustainable management of Lake Skadar/Shkodra.

Both objectives, the GO and PDO, has been achieved.

Namely, the realizations of the key project development indicators (which measure the level of achievements of the project development objective) inform that all three indicators are expected to be fulfilled by December 2012.

In more details, status of fulfilment of these indicators is as follows: (1) Immediate and longer term threats to lake water quality and ecological system are reduced by finalization of site investigation, Feasibility Study and independent Environmental Impact Assessment for the remediation of improperly stored hazardous waste in KAP dumpsite as a major treat affecting groundwater (including forming of operational joint decision body, improved capacity of institutions and Government's commitment to finance the remediation works) and developing of the different tools for future integrated management of the lake watershed area (2) Status of key transboundary indicators of Lake water quality and ecology are maintained or improved since majority of the basic water quality indicators has been recorder within Class 1A (or better class A) during project implementation. Monitoring for years 2008-2011 indicate constant trend of improvement of water quality. Total 26 records exceeding the required class limit (on 15 basic water quality indicator categories) has been recorded in 2009, 19 in 2010 and only 10 records in 2011 (see Annex 2) and (3) Bilateral Skadar-Shkodra Lake Commission and 4 Working Groups has been operational, and during period of project implementation those joint structures adopted development

and water use decisions/actions that lead (among others) to the singing of four bilateral Agreements between Institutions on December 20, 2012<sup>3</sup> and preparation of draft text of new bilateral Agreement<sup>4</sup> between Governments in order to contribute to integrated management of joint resource.

## 4.2 Implementation of activities by component

**Component A:** Capacity Building for Improved Understanding and Joint Management of the Lake

**Objectives of this component** is to establish operating a permanent institutional structure for lake management trough (I) establishment of Skadar-Shkodra Lake Commission (SLC) and bilateral Working Groups to coordinate implementation of key actions called for in the Strategic Action Plan and to (II) support specific tasks which correspond to the tasks of the four working groups, namely: (a) create a predictive hydrological model of the lake basin; (b) research and monitor to better understand impacts of changes in inflowing water quantity and quality; and (c) harmonize monitoring on both sides of the lake through a publicly accessible joint database

Implementation of activities under this component fully achieved set PAD objectives. Outcomes of the implementation of this component are as follows:

#### **OUTCOME I**

- Skadar/Shkodra Lake Commission (SLC) comprised of 3+3 high-level members has been established and operational (regular meetings has been held with decisions/conclusions on various aspects of project outcomes and different matters outside the project framework as well)
- Establishment and operational of the Secretariat for SLC (located in City of Shkodra) and Bilateral WGs. These WGs include: Planning and Legal; Monitoring and Research; Communications/Outreach and Sustainable Tourism; and Water Management and each member group is comprised of 5+5 members officially delegated from relevant Institutions.
- WG had monitored/improved and proposed more than 11 joint activities in the framework of LSIEMP, including:
  - o *A joint social economic study* conducted as a baseline survey of the status of lake area to compare it with the final impacts and achievements of the project.
  - o *A joint fish stock* assessment was conducted for the second time after 25 years in Montenegro and for the first time in Albania. Its findings are helpful for the future of the lake protection and management from the fishery communities in both countries.
  - A legal framework review was conducted to find the differences of both countries in legal aspects regarding lake protection monitoring and management and based on its findings a legal harmonization between both countries is underway.

<sup>&</sup>lt;sup>3</sup> See below

<sup>&</sup>lt;sup>4</sup> It is foreseen (by the singed Agreement on financing of Skadra/Shkodra Lake Comission, Secretariat and Working group established by LSIEMP; article 4) that two Governments will sing a new bilateral agreement on the management of Skadar/Shkodra Lake until end of 2013 which will, among others, secure future financing for years after 2013. The draft of new bilateral agreement is prepared thought activity: "Legal Harmonization and Bilateral Binding Agreement" for which Partial Extension of the Closing date for the LSIEMP project has been granted until December 31, 2012, and draft is currently is in phase of final approval by two Ministries/Governments.

- An inventory of the natural and cultural attractions around the lake in Albania and Montenegro was conducted to promote the lake as a tourist attraction nationally and internationally.
- An inventory of the polluted sites and sources around the lake was conducted to raise the
  awareness of the authorities and communities on both sides to eliminate these sources
  and reduce pollution in general.
- o *A Skadar/Shkodra geodatabase* was prepared as a functional GIS database that will serve as a baseline dataset for the protected area managers in the Skadar-Shkoder Lake area.
- o *Harmonization and preparation of a bilateral binding agreement* which upgrades the existing agreements and MOUs and specifies also the functioning of the joint structures and implementation of all joint management documents.
- Predictive Hydrological Model, Lake Management Strategy and Fisheries Plans and Joint Monitoring Program, as main outputs of this component, was improved by work of respective WG's
- Training and strengthening of the SLC thought exchange of experience, organization of
  yearly donor meetings and participation on the international meetings as well as public
  awareness champagnes organized in the framework of the project
- Financing for the future functioning of the joint bilateral bodies (SLC, SLC Secretariat and WG's) agreed among Governments<sup>5</sup>.
- Four bilateral Institutional Agreements prepared and singed on the final workshop (held on December 20,2012 in Shkodra, Albania) in order to secure sustainability of LSIEMP results as well improve bilateral cooperation.

#### **Signed Agreements are following:**

- O Agreement on financing of Skadra/Shkodra Lake Comission, Secretariat and Working group established by LSIEMP (singed between: Ministry of Environment, Forestry and Water Administration of Albania –MoEFWA and Ministry of Sustainable Development and Tourism of Montenegro-MSDT), with the aim to financially support joint bodies for year 2013, and trough article 4 of the same Agreement new long term bilateral Agreement has been foreseen for singing in order to secure future sustainability of joint bodies.
- O Agreement on joint use of the Predictive Hydrological Model for the Skadar/Shkodra Lake Basin Area-PHM LS (singed between Hydro-meteorological and Seismological Institute and Environmental protection Agency of Montenegro and Institute for Geology, Energy of Water and Environment of the Polytechnic University from Tirana, and Department for GIS and Electronic Archives of Waters, of the General Directorate for Water Management of the Ministry of Environment, Forestry and Water Resource Management, Tirana in Republic of Albania) that secured joint use of PHM LS, exchange of information and cooperation.
- o **Agreement on joint use of the joint database of Lake Skadar/Shkodra** (singed between: Ministry of Environment, Forestry and Water Administration of Albania, Ministry of

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<sup>&</sup>lt;sup>5</sup> Agreement on financing of Skadra/Shkodra Lake Comission, Secretariat and Working group established by LSIEMP for year 2013, singed on December 20, 2012.

Sustainable Development and Tourism of Montenegro and Skadar-Shkodra Lake Commission (SLC) in order to secure platform of exchange of data.

- Agreement on use of joint Monitoring program of Lake Skadar-Shkodra and Exchange of Data (singed between: Ministry of Environment, Forestry and Water Administration of Albania and Ministry of Sustainable Development and Tourism of Montenegro in order to facilitate implementation of joint monitoring program.
- It is agreed that two Governments will sing a new bilateral Agreement on the management of Skadar/Shkodra Lake until end of 2013 in order to improve bilateral cooperation. In that respect, the draft of new bilateral agreement is prepared thought activity: "Legal Harmonization and Bilateral Binding Agreement" (for which Partial Extension of the Closing date for the LSIEMP project has been granted until December 31, 2012) and draft is currently is in phase of final approval by two Ministries/Governments.

#### OUTCOME II (a)

- Predictive Hydrological Model (PHM) for the Skadar-Shkoder Lake Basin Area (SS-LBA) has been completed and adopted by 4<sup>th</sup> meeting of the SLC. Hydrological model is joint tool for better understanding of 'natural water resources conditions' and the assessment of the impacts on water resources. PHM is consisted of hardware and specialized software that is powered by the huge amount of hydrological data collected and harmonized for whole Lake Watershed area (including Montenegrin and Albanian part).
- Hydrological model has been used to predict possible impacts on the Lake of the different activities thought four (planned) development scenarios (in accordance with conclusions of respective WG and SLC): a) development of new hydropower infrastructures on Moraca river, b) dredging of the Bojana/Buna River, c) Land sources of pollution in the Lake and d) Extreme event analyses.
  - Special training activities for use of PHM model have been conducted for representatives of institutions from both countries.
  - O According to the agreement and conclusion made by SLC, PHM has been delegated to the Hidrometeorological and metrological Institute of Montenegro as a host institution with obligations to maintain and improve PHM and to provide use of it to the other interested officially designated national institutions (one Montenegrin and two Albanian so far).
  - o MoU for joint use of PHM has been agreed and will be signed until December, 2012 (see footnote 3).

## **OUTCOME II (b)**

• Joint Lake Management Strategy including National Fishery Management Plans for each country has been completed and adopted. It is expected that outputs of this plan will be

incorporated in the new (improved) bilateral agreement, to be prepared until end of 2013. in order to secure operationalization of joint vision for Lake Development.

## OUTCOME II (c)

- Joint Lake Skadar/Shkoder monitoring program has been prepared with special attention to the monitoring requirements from international agreements and respective EU acquis. Requirements and existing institutional capacities and national monitoring programs in both countries have been taken into account as well. Based on those, program of joint monitoring for the Skadar/Shkodra Lake have been adopted by SLC, and MoU for joint monitoring implementation between respective institutions have been agreed.
- **Joint database,** with the purpose of collecting and distributing all kind of data related to the Lake, **has been created and it is operational and publicly available online**<sup>6</sup>. Hosting of database has been secured from IW:LEARN until 2015 while Agreement has been reached (between two Governments) on support for hosting (after 2015) and updating of database, thought joint Secretariat.

#### **Component B:** Promoting Sustainable Use of the Lake

**Objective of this component** are to promote adoption of sustainable approaches to economic development of the lake (and its natural resources) by focusing on tourism and fisheries where there is high potential for economically significant sustainable use. It will support environmentally and socially sustainable tourism by improving nature- and culture-based facilities and attractions; raising public awareness; and providing technical assistance to local residents considering tourism-based businesses. It will support sustainable fisheries management as well.

**Key project outcome idicators** for this component are set in the PAD as fallows: a) Targeted tourism infrastructure renovations/construction, b) Reduction in numbers of fishermen using illegal fishing methods and c) increased local understanding of and engagement in sustainable tourism and natural resource management

Implementation of activities under this component have achieved set PAD objectives:

#### **OUTCOME** a)

• General desing for reconstruction of mid-eval Besac fortress on the Lake shore has been completed. Based on Agreement between Montenegro Ministry of culture and EU Delegation in Montenegro, civil works will be financed with the EU funds support. Delegation issued the call for tender for civil works in August, 2012 (ammount of 0,48 mil EUR) based on the desing completed in the framework of LSIEMP.

#### OUTOCME b)

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<sup>&</sup>lt;sup>6</sup> Database available online at: lss.iwlearn.net

- Number of registered illegal fisherman's in Montenegrin side of the lake has decreased from 58%<sup>7</sup> (in 2009) to 21 % (in 2010) and 17 % (in 2011)<sup>8</sup>. This outcome exceeds its PAD objective to have not more than 20 % of total illegal fisherman in year 4 already in year 3 (17 % in 2011). This reduction have been achieved by the completion of following component activities:
  - o Two fisherman organizations established in the Montenegrin part of the Lake (Vranjina and Krajna) in contrary of non-existence of such organizations at the beginning of the project
  - Capacity building for existing fisherman organizations has been done through expertize in fisherman organization resulting initiative for forming of two more fisherman organization. In perspective, existing two and future three fisherman organizations will cover with activity total territory of National Park Skadar Lake
  - Over 150 members of fisherman organization (only licenced fisherman with no felonies) received equipment (fishing nets) donation trough established fisherman organizations. Funds necessary for such donation has been provided in the framework of LSIEMP, in order to straighten society and control role of fishermen organizations in sustainable fisheries on the Lake.
  - National Park Skadar Lake received donation in equipment for patrolling and guarding (five highspeed vessels, two patrol vehicles and different small equipment such as: binoculars, cameras etc.) in order to enhance Lake protection enforcement capacity.

#### OUTCOME c)

- At least 50 % of local population (estimate) was outreached by effects of two joint public champagnes have been realised with more than 15 different public awareness activities based on the coverage and ratings of media that informed about activities.
- Capacity building on the National Park Skadar Lake has been conducted thought one year support of one officer for tourism and one officer for local communities to the National park Skadar Lake administration. After year of financing from the Project, one officer have been permanently employed by the National park authorities.

Described outcome shows that objectives set at the beginning of the project where successfully met. However, one activity from this component: Works on migratory waterfowl monitoring stations that included financing of the civil works for construction of monitoring (ornithological) stationery near the Headquarters of National Park Skadar Lake has not been fully implemented.

By the original project design, obligation of the National park Skadar Lake was to prepare general design and obtain construction permit for the monitoring (ornithological) stationary and project funds should finance civil works up to amount of 95 000 \$US. Despite very good and productive cooperation with National park Skadar Lake in implementing all other activities in the project framework, for this activity (finalization of the general design) National park Skadar Lake has had several delays that threaten successful implementation of this activity. Finally, when general design was prepared (at beginning of

<sup>&</sup>lt;sup>7</sup> Calculated as: N° of issued licenses Vs N° of processed infringements +felonies), Official data from National Park Skadar Lake

<sup>&</sup>lt;sup>8</sup> Data for year 4 (2012) not available yet

last year of the project implementation), construction permit could not be obtained due to the noncompliance of developed general design with higher-level spatial document for that area.

After number of joint meetings with stakeholders, it has been found that technical error in high-level spatial plan documentation (elevation quotas of the named object was not accurate- indicating that object should be built on the hill slope instead in hill foot, as envisaged by general design) causing noncompliance and thus inability to obtain the construction permit according to national procedures.

Since changing of high-level spatial document, involve certain Government procedures and since closure of the project at that time was only 3 months away, additional time was needed. Based on that, no cost 8 month partial extension of the closing date of project implementation for this activity has been proposed but not granted by the World Bank Team. Therefore, only this activity of Component II has not been fully implemented.

#### **Component C:** Catalyse Pollution Reduction Investments

Objective of this component is to support selected investments to stimulate pollution reduction activities: educate and encourage people to replicate demonstration projects of village-level wastewater treatment and buffer vegetation restoration; and provide Technical Assistance (TA) to catalyse remediation of the lake's largest-scale industrial pollution "hotspot" at KAP.

Key outcome indicators of this Component according to the PAD are: a) Government of Montenegro/KAP owners (Rusal) agreement on preferred solution and joint action plan for containment/disposal of hazardous waste dump site at KAP site and b) Sewage collection and wastewater treatment system established at Vranjina village (Montenegro)

Implementation of the activities under this component partly fulfils objectives set. Objective b) has not been completed (details provided in following text).

#### **OUTCOME** a)

• International Technical Adviser (ITA) has provided technical assistance to the Government for implementing activities related to the remediation of KAP hazardous waste dump site and capacity building of Environmental Protection Agency for implementation of Integrated Pollution and Prevention Control (IPPC) legislation.

- KAP Project Steering Committee established and 11 members (high level representatives of the stakeholders) held 14 meetings for discussions in details of all activities toward remediation of KAP site which resulted by unanimously adaptation of proposal for remediation for KAP hazardous waste (16,8 EUR million) with feasibility study and respective EIA.
- KAP hazardous Waste categorization study (including site investigation activities) and Options Analysis report has been completed. Based on those results, Feasibility study/preliminary design for remediation of KAP hazardous waste dump site completed and adopted on 14<sup>th</sup> meeting of KAP SC.
- Independent Environmental Impact Assessment on the Feasibility study for KAP hazardous dump site has been developed and adopted after two public consultations held.

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<sup>&</sup>lt;sup>9</sup> Letter from Montenegro Ministry of Finance dated: September 21, 2012

• Government of Montenegro in cooperation with International Bank for Reconstruction and Development (IBRD) is seeking modules to finance investments directed to reduce the environmental and public risks of five selected industrial waste disposal sites in country. One of the locations planed for financing is KAP hazardous waste dump site. Project is in the preparation phase (IWCP) <sup>10</sup> and will incorporate outputs (Feasibility study and EIA) from Component 3 of LSIEMP.

As mentioned, second important activity of this component: Sewage collection and wastewater treatment system at Vranjina village on the Lake shore has not been completed, affecting overall assessment of successfulness of this Component.

According to Project Agreement Government of Montenegro has been responsible for general project design and civil works should be financed thought GEF donation (up to amount of 440.000 \$US). Feasibility study (that concluded that soio-economic costs are at the edge of sustainability) and then General design for construction of WWTP in Varanjina (submerged wetland type) has been developed with certain delay (in reference to the original implementation date). Due to the various reasons (configuration of terrain, lake level oscillations, quantity of preparations works need, etc.) price for construction of WWTP in Vranjina (submerged wetlands type) has been estimated by the General design to be 2.084.000 EUR (1.380.000 EUR for first phase) for 325 inhabitants. Ministry of Sustainable Development and Tourism asked for revision of general design ending with conclusion of revision committee the overall price will be probably closer to the 3 mil EUR. Additional expert opinion on quality of general design has been asked from respective Slovenian international company, but unfortunately, just to confirm extremely high costs for construction.

Ministry of Sustainable and Development decided that investment is highly financially unsustainable (based on ratio of return of investment and number of inhabitants concerned) and inform World Bank<sup>11</sup> that will not continue with implementation of activities for construction WWTP in Vranjina (submerged wetlands type), proposing at the same time re-allocation of funds available for different activities.

Ministry of Sustainable Development and Tourism have submitted several detailed proposals for reallocation of respective funds (440 000 USD) to the different activities and extension of project duration and to extra cost in order to utilize remaining funds that should not be spent for construction. In the period of March-August 2012 in total 5 proposals $^{12}$  for reallocation has been submitted to the World Bank team, but none of them where granted.

<sup>11</sup> Letter by Minister of Sustainable development and Tourism to the Project TTL in World Bank from March 13, 2012

1. financing of low cost waste water treatment technology type "floated islands" in order to be financially feasible demonstration investment that will contribute to the reduction of pollution and awareness rising.

- 3. Purchase of the special micro mini garbage compactor truck (max capacity 5 m3) and suitable trash containers for collection of the garbage in order to improve garbage collection system in the dispersed settlements around the Skadar Lake
- 4. Purchase of the garbage collection truck for the municipality of Podgorica to be used for waste collection in municipality settlements belonging to the National Park Skadar Lake borders as requested by Municipality of Podgorica
- 5. Purchase of additional 4 vessels for enhance of protection service of National park Skadar Lake-as requested by National park Skadar Lake

<sup>&</sup>lt;sup>10</sup> Industrial Waste Clean-Up Project Montenegro

<sup>2.</sup> Purchase of the professional multi-use amphibian machine (e.g. Truxor dm 5000 or similar) for dredging, reed cutting, garbage collection, waterway's excavation works, oil remediation and cultivation —to be managed by the Skadar Lake Commission

Finally, Ministry of Finance of Montenegro has requested<sup>13</sup> re-allocation of named sources to the proposed activities and 8 month extension at no cost for the project, but this request was not granted by the World Bank.

#### V. Evaluation of the Bank and Borrower Performance

#### a) Evaluation of the Bank

Bank team made notable efforts and strongly contributed to the successfulness of Project working jointly with government, local stakeholders and especially PMU and TSU. Bank team supported project activities by supervision (regular WB supervision missions was highly appreciated and beneficiary for the project implementation) and by providing valuable inputs, comments, guidelines and recommendations that improved project outcomes but, not less importantly, capacities of project related country structures as well.

Bank Team played one of main and crucial role for managing of project risks and timely implementing original plan of activities. However, achieving of goals related to implementation of two activities which implementation failed (Construction of WWTP in Vranjina and construction of monitoring-ornithological stationery) could benefit from more adaptive management approach and more intensive dialogue with government/local stakeholders in the last year of project implementation.

#### b) Evaluation of government performance

#### (i) Central and Local Government

The government worked closely with World Bank and Local stakeholders during preparation and implementation of project and support provided was essential for proper project implementation. Government closely collaborated with all stakeholders in order to achieve proper ownership of project and secure future sustainability of project results. Government secured that all decisions and administrative procedures required are taken with due respect by all stakeholders.

Montenegro Ministry of Sustainable Development and Tourism MSTD, through the MSTD PMU, have overall responsibility for project implementation and created good environment and actions that was essential for project successfulness. Designated Project director (deputy minister) has been identified (from stakeholders) as crucial in establishment of good environment and main power behind securing proper project implementation and timely resolving of implementation issues from very begging of the Project .

Aspect identified to be of major implementation influence, has been identified as low capacities of TSU has in first two years of implementation which eventually strongly contributed to slow implementation of project procurement aspects until year 2. After restructuring of the TSU officer and change of personal, capacities has been significantly improved

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<sup>&</sup>lt;sup>13</sup> Letter of Ministry of Finance of Montenegro to World Bank Country Director and Regional Coordinator for Southeast Europe from September 21, 2012

In addition, change of project coordinator, that has been involved in project implementation since preparatory phase and investigated significant effort and personal commitment in speeding up of implementation (especially procurement ones), unfortunately occurred near the middle of project implementation period. Couple of months for selection and contracting of new project coordinator was needed. Since project coordinator is only full time position paid by the project funds, this situation also contributed to some registered delays in implementation of project activities.

MSTD has been prompt in fulfilling administrative and managing requirements needed for timely project implementation (procurement aspects, operational and communication support, etc.) Still, since having overall responsibility for project implementation, some activities that required negotiations and very wide consultation (such as decision on abandonment of the WWTP in Vranjina construction investment) have been significantly time consuming and eventually contributed to the some delays in finalization of implementation. This can be linked to the limited administrative capacities and mentioned personal changes in PMU and TSU as well.

National park Skadar Lake has established and kept very good cooperation with Montenegrin PIU from the very beginning of project implementation and contributed to the successfulness of some project activities. Administration of National park Skadar Lake contributed to the effectiveness of implementation of activities in the National park and developing of cooperation with local stakeholders except during preparation of the activity: general design for construction of monitoring and ornithological station where National park has been slow in taking decisions and actions towards resolving the identified issues and completing this activity.

Municipality of Podgorica (city municipality of Golubovci) has been cooperative stakeholder during implementation of project activities.

## (ii) Project management team

The MPU has been established at the very beginning of the project and was located in the premises of MSTD, which secured easy daily information exchange (including reports, procurement, expenditures and issues). PMU was staffed with qualified professionals who have demonstrated high degree of dedication and personal commitment to achieve project objectives and timely implementation of the project activities (especially related to both project coordinators). Excellent communication contributed to integration of project results in other activities of the MSTD as well as in creating of additional synergies and avoiding overlapping. Work of PMU has been rated as very good by the MSTD. Montenegrin PMU have established and kept very good cooperation with Albanian PMU and other stakeholders.

#### (iii) Evaluation of other partner's performance

The cooperation with Albanian Ministry of Environment, Forestry and Water Administration (MoEFW), City of Shkodra, Fishery management organizations from Shkodra, representatives of Albanian Institutions in WG's and SLC and especially Albanian PMU has been very good and fruitful. Thought whole project implementation period, good environment of understanding and respect has been created. All of joint activities have been implemented without any constrains. Hopefully, this good example of cooperation created in the framework of project will be transferred to the institutional networking by signing of technical bilateral agreements in the near future.

During the project implementation period, number of complementary activities where financed on the Skadar Lake (Montenegrin part) by different donors. Some of them are:

- ongoing projects: Protection and sustainable use of the Lakes Prespa, Ohrid and Skadar (2011-) financed by GIZ (German Technical Cooperation) and Project: Implementation of integrated management system on Skadar Lake (2012-) implemented by NGO Green Home and supported by European Delegation (thought IPA programme).
- Finished projects: GIZ/ADA financed touristic infrastructure trough Project: "Support to Central and Mountainous Regions of Montenegro (2007-2011) and Study: Water regime of Moraca River and Skadar Lake has been developed by NGO Green Home and WWF (2009).

#### VI. Lessons learned

- 1. The overal project Objective "to help establish and strengthen institutional mechanisms for transboundary cooperation through joint efforts to improve sustainable management of Lake Skadar/Shkodra" has been well and realistically set in the terms of actual demands and needs and coping the project objective with wider objective to straighten bilateral cooperation between two countries (based on need for joint resources management, implementation of ratified international agreements and EU approximation requirements for both countries) that was at very low level until '90's.
- 2. Project created a solid ground for bilateral cooperation in management of Lake as a joint resource and for improving bilateral cooperation in environmental field between both countries.
- 3. Example of very good cooperation between institutions in the framework of the project is easily transferable to the other fields of bilateral cooperation. This is especially case in Montenegrin and Albanian environmental institutions, since capacities are limited and personal experience and connections developed in the framework of the project are of the great value in future institutional cooperation. This is considered to be an added value from the project.
- 4. Location of PMU should be in the premises of the institution responsible for implementation, allowing not just easy access to the administrative matters but a good two-way communication channel. This allows synergies to be made for the benefit of achieving project objectives and thus, contribute to future sustainability of the results.
- 5. There were no issues related to the time constrains of the Deputy Minister to act as a Director of the project due to the very good communication established in PMU. Still, generally speaking, due to the work overload of the deputy ministers additional arrangements need to be made to secure constant commitment of the project directors to the projects.
- 6. Due to the limited capacity of public administration, capacity building of administration could benefit from finding of the model for engagement of civil servants in project management. In regard to this, institutional memory, personal commitment (no "runaway" of personal when project end is close) and supervision may be improved in one hand, while in other sustainable base for future implementation of various projects is created localy.
- 7. The early involvement of the project stakeholders and continuous process of consultation and information sharing was a very positive step for the design and implementation of the project activities. This creates synergies between the implementing Ministry, PIU and beneficiaries and proper ownership of project results.

- 8. Joint bilateral structures (SLC and WG's) need constant financing and work of the Secretariat (or coordinator) to serve their administrative needs in order to be fully functional and productive.
- 9. Donor meetings proved to be very effective because they created synergies and avoided overlapping of different projects directly or indirectly implemented in LS. Therefore it such meetings should be organized and coordinated at least twice per year.
- 10. Future Project should avoid design where government contribution is preparation of general design and project contribution is civil works. This is because different national requirements and procurement procedures (at the national level usually price is most important evaluation factor) that can easily lead to the design that is not in accordance with World Bank standards. In addition, this should be especially avoided when general design is needed for innovative technologies that have never been implemented at national level. For instance, Government contribution can be secured as % of total civil works.
- 11. Within the project such as this one, with diversified structure of payment approval (6 signatures of which two from deputy ministers) it is sound to have longer payment period of min. 30 days in all contracts and respectively, additional time for period of implementation.
- 12. When planning conducting of civil works, additional safety time period should be added to the overall estimated period needed for finalization of activity. This is because national legislation in non EU countries is sometimes different from legislation of countries from which most of the bidders came. Additional repackaging of technical documentation, translation, national licencing issues, etc. are usually necessary time consuming steps prior obtaining of national constructing permit. Timeframe for those steps cannot be easily taken into account, so construction projects should start as early as possible in the project lifetime.
- 13. Training and learning opportunities for members of PMU are of great importance for proper implementation, since most of the project has long life cycles.
- 14. There is substantial risk that sustainability of the project outcomes may not be achieved in a short term, due to the lack of financing for joint structures and limited institutional capacities to use project deliverables. This risk can be mitigated by preparation and adaptation of joint agreements that specify procedures of use and responsibilities of each party.

## VII. Key recommendations for the follow-on projects

- 1. The joint institutional structures (SLC, Secretariat and WGs) established by the project should continue operation based on the singed Agreements. Long term (at least 5 years) financing scheme should be agreed and founds should be timely available. Secretariat should be proactive and main driving force behind work of joint structures.
- 2. Mainstreaming of joint strategies and programs developed in the framework of the LSIEMP into future national strategies and programs. Indicators of harmonization should be established and regularly monitored by SLC. Harmonization of legislation will be continued in the framework of EU accession.
- 3. SLC should be recognized as important bilateral body, capable of monitoring and steering of all projects that are implemented in Lake Skadar area. In addition, SLC and Secretariat should be advisory bilateral body for planned investments and should improve capacities, during time, to eventually propose and implement EU funded projects in order to achieve financial sustainability.
- 4. Initiate creation of early warning system for accidents (natural disasters) on the bilateral level. This system should include PHM developed in the framework of LSIEMP.
- 5. Develop Lake Basin Management plan in accordance with Water Framework Directive.

- 6. Support to the national institutions in both countries (Agency for environmental protection, Hydrometeorlogical Institute, Fishery organizations) to implement joint monitoring program continuously.
- 7. Automatic data exchange on monitoring results should be supported, through joint database or otherwise.
- 8. Support to the establishment of additional fisherman organization and their capacity building on the Montenegrin part of the Lake
- 9. Support to the promotion of sustainable fishery by creating network of fisherman organizations in both sides of the lake and establishment of controlled fish market.
- 10. Continue support for the tourism development by contributing to reconstruction of vast historical heritage around the lake (fortresses, prisons etc.)
- 11. Support activities towards reduction of household's pollution on the Lake shores, or pollution received from Moraca and Drin River.
- 12. Support reduction of untreated waste waters of City of Shkoder to the Skadar Lake
- 13. Support to the investment that will reduce industrial pollution that threatens Skadar Lake, especially red mud basin and hazardous dump site in KAP. Project IWCP Montenegro (in preparatory phase) has been designed to support such activities.

## **Annex 1: Project Costs**

## 1. Grant Allocation and actual expenditures:

NR	Project cost by component	PAD US\$	According to the PP US\$	ACTUAL (ESTIMATE) US\$ <sup>14</sup>	GoM direct financing US\$
1	Component One: Understanding and Management of Lake Shkodra Ecosystem	720.000	629.700	628.203	1400 direct + 140 000 in kind <sup>15</sup>
2	Enhancing Sustainable Use of Lake Ecosystem	410.000	401.300	329.635	20.800
3	Catalyze Pollution Reduction Investments	1.430.000	1.523.000	1.129.673	150.000
	Total cost USD	2.560.000	2.554.000	2.087.523 <sup>16</sup>	293.480

#### 2. Procurement Plan (Montenegro) Revised September 18, 2012.

1	2	3	4	5	6	7	8	10
Contract (Description)	Type of contract	Amount financed by the GEF (million USD)	Number of Contract	Procureme nt Method	Review by Bank (Prior / Post)	Expected  Contract signature  Date	Expected contract completion date	Status
Component 1 – Understanding and management	of Lake Skadar E	cosystem				•		
1. Project Coordinator (local)	CS	0.105	1	Individual	Prior	02/21/2009	09/30/2012	ongoing <sup>17</sup>
2. Operating cost for Project Coordination Team	OC	0.0267	-	-	-	Annual Plan		ongoing
3. Office equipment (Combined with Line 18)	G	0.0013	1	Shopping	Prior	02/23/2010	03/15/2010	finalized
4. Operating cost for the TSU (**)	OC	0.048	-	-	-	Annual Plan		ongoing
5. Seminars, workshops, study tours for working groups (*)	TR	0.050	-	-	-	Annual Plan		finalized
6. Operating cost for working groups (*)	OC	0.020	-	-	-	Annual Plan		ongoing

<sup>&</sup>lt;sup>14</sup> US/EUR conversation rate: 1.3/1. Due to the fact that all payments were made in EUR trough project implementation with variable exchange rate, estimation in USD is given with indicated fixed exchange rate.

<sup>&</sup>lt;sup>15</sup> This figure represent rough estimation for the in-kind contribution from the Ministry (project director and accounting costs, financial revision, offices maintenance, meeting rooms, petrol, etc.)

<sup>&</sup>lt;sup>16</sup> Exact figure at the closing balance may be slightly different from actual one due fixed (EUR =1,3UDS) exchange rate used (see above comment)

Ongoing activities are financed based on Partial Extension of Closing date for finalization of activity: Legal Harmonization and Bilateral Binding Agreement" until December 31,2012 (letter from WB dated: September 27, 2012)

7. Development of Lake-wide Management Strategy, including Fishery Management Plans (*)	CS	0.060	1	CQ	Post	06/27/2011	03/31/2012	finalized
Develop joint lake water/ecological Monitoring Program (*)	CS	0.040	1	CQ	Prior	11/05/2010	09/15/2012	finalized
TA for designing predictive hydrological model     (*)	CS	0.280	1	QCBS	Prior	11/15/2010	09/30/2011	finalized
Component 2. Enhancing Sustainable use of Lake	ecosystem							
10. Capacity building on tourism (local - first year contract financing only from GEF)	CS	0.0125	1	Individual	Prior	02/15/2010	02/15/2011	Finalized
11. Project Design for selected cultural monument	CS	0.100	1	CQ	Prior	06/21/2011	02/28/2012	finalized
12. Works on migratory waterfowl monitoring stations	CW	0.0950	1	Shopping	Prior	03/31/2012	30/07/2012	Not finalized
13. Capacity building for local communities cooperation (local – first year contract financing only from GEF)	CS	0.0125	1	Individual	Prior	02/15/2010	02/15/2011	finalized
14. Different Equipment for fishermen organization support (fishing nets, etc)	G		1	Shopping	Post	06/01/2012	07/01/2012	finalized
15. Expertise on fishermen organization support	CS	0.018	1	Individual	Post	03/15/2012	07/15/2012	finalized
16. Motorized Small Boats (three types) for Enhancing Lake protection enforcement capacity	G	0.090	2	Shopping	Prior	02/12/2010	03/15/2010	Finalized
17 Vehicles for Enhancing Lake protection enforcement capacity	G	0.050	2	Shopping	Prior	02/26/2010	03/16/2010	Finalized
18. Other equipment (binoculars, cameras, walkietalkie, compass, etc) for Enhance Lake protection enforcement capacity	G	0.010	1	Shopping	Prior	02/23/2010	03/15/2010	Finalized
Component 3. Investment to protect water	quality							
19. Vranjina WWTP building construction	CW	0.440	1	NCB	Prior	05/01/2012	09/15/2012	Not finalized
20. Study on waste inventory, site investigation, option analyses and feasibility study	CS	0.880	1	QCBS	Prior	11/15/2010	05/15/2012	finalized
21. Environmental impact assessment	CS	0.100	1	CQ	Prior	03/15/2012	05/15/2012	finalized
22 International advisor KAP hazardous waste containment	CS	0.103	1	Individual	Prior	11/01/2009	05/31/2012	finalized
Total for Montenegro (***))		2.530						

## **Annex 2: Water quality indicators**

Monitoring of quality of Water of Skadar Lake for years 2009, 2010 and 2011<sup>18</sup>

YEAR 2011: Water quality classes registered in Skadar Lake (required class is A2). Red indicates measurements above range for required class

Monitoring	рН	con	Ca/	BPH	HPK	Fe <sup>2+</sup>	NH4 <sup>+</sup>	Cl	SO4 <sup>†</sup>	PO <sub>4</sub> <sup>3-</sup>	NO3 <sup>-</sup>	NO <sub>2</sub> -	Phen	Dter	T Coli.
Station		d	mg	5 mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/N/I	ols	g.	
Vranjina	Α	Α	A1	A2	A2	A1	A3	Α	Α	VK <sup>19</sup>	Α	VK	Α	A2	A2
Virpazar	Α	Α	A2	A1	A2	A1	A2	Α	Α	VK	Α	VK	Α	A3	A2
Plavnica	A2	Α	Α	A1	A2	A1	A3	Α	Α	A2	Α	A2	Α	A2	A2
Kamenik	A1	Α	A2	A1	A2	A1	A2	Α	Α	A2	Α	A3	A1	A2	A1
Podhum	A2	Α	A1	A1	A2	Α	A1	Α	Α	A2	Α	Α	Α	A1	A1
Starcevo	A2	Α	Α	A1	A1	A1	A2	Α	Α	A2	Α	A1	Α	A2	A1
Moracnik	A2	Α	A2	A1	A1	Α	A2	Α	Α	A3	Α	Α	A1	A2	A1
Ckla	A1	Α	Α	A1	Α	Α	A2	Α	Α	A3	Α	A1	Α	Α	A1
Middle of SL	A3	Α	A2	A1	A2	Α	A2	Α	Α	A2	Α	A1	A2	A2	A1

## YEAR 2010: Water quality classes registered in Skadar Lake(required class is A2)

Monitoring	рН	con	Ca/	BPH	HPK	Fe <sup>2+</sup>	NH4 <sup>†</sup>	Cl	SO4 <sup>†</sup>	PO <sub>4</sub> <sup>3-</sup>	NO3	NO <sub>2</sub> -	Phen	Dter	T Coli.
Station		d	mg	5	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/N/I	ols	g.	
				mg/l											
Vranjina	Α	Α	A3	A2	A1	A1	A3	Α	Α	A2	Α	VK	Α	A2	A2
Virpazar	Α	Α	A2	A2	A1	A1	A3	Α	Α	A1	Α	VK	Α	A3	A1
Plavnica	Α	Α	A2	A2	A2	Α	A3	Α	Α	A1	Α	VK	Α	A2	A1
Kamenik	Α	Α	A2	A2	A1	A1	A3	Α	Α	A2	Α	VK	Α	A2	A2
Podhum	Α	Α	A1	A1	A1	A1	A3	Α	Α	A2	Α	A3	Α	A2	A1
Starcevo	Α	Α	A2	A3	A1	A1	A2	Α	Α	A3	Α	A3	Α	A2	A2
Moracnik	Α	Α	A2	A3	A1	Α	A2	Α	Α	A1	Α	A3	Α	A2	A2
Ckla	Α	Α	A2	Α	A1	Α	A1	Α	Α	A1	Α	A1	Α	Α	A1
Middle of SL	Α	Α	A2	A1	A1	Α	A3	Α	Α	A1	Α	A3	Α	A2	A1

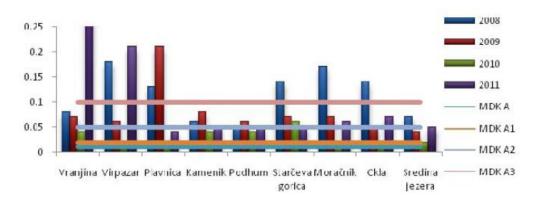
## YEAR 2009: Water quality classes registered in Skadar Lake (required class is A2)

Monitoring	рН	con	Ca/	ВРН	HPK	Fe <sup>2+</sup>	NH4 <sup>+</sup>	Cl	SO4 <sup>+</sup>	PO <sub>4</sub> <sup>3-</sup>	NO3 <sup>-</sup>	NO <sub>2</sub> -	Phen	Dter	T Coli.
Station		d	mg	5	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/N/I	ols	g.	
				mg/l											
Vranjina	A1	Α	A2	A1	A1	A2	A3	Α	Α	A3	Α	VK	Α	A3	A2
Virpazar	Α	Α	A3	A1	A2	A2	A3	Α	A1	A3	Α	VK	Α	A3	A2
Plavnica	A1	Α	A1	A1	A2	A2	A3	Α	Α	VK	Α	A3	Α	A2	A2
Kamenik	A1	Α	A2	A1	A2	A2	A3	Α	Α	A3	Α	A3	Α	A3	A2
Podhum	A1	Α	A1	A1	A2	A1	A3	Α	Α	A3	Α	A2	Α	A3	A2
Starcevo	A1	Α	A1	A1	A2	A1	A3	Α	Α	A3	Α	A2	Α	A2	A1
Moracnik	A1	Α	A1	A1	A1	A2	A3	Α	Α	A3	Α	A1	Α	A2	A2
Ckla	A1	Α	A1	Α	A1	A1	A3	Α	Α	A3	Α	A3	Α	A2	A2
Middle of SL	A1	Α	A1	Α	A1	A1	A2	Α	Α	A2	Α	Α	Α	A1	A2

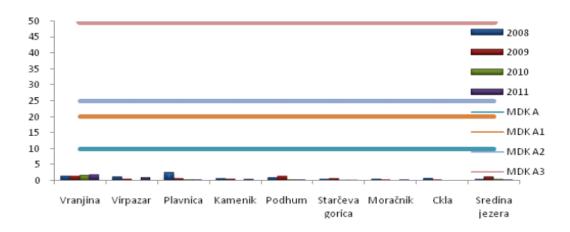
 $<sup>^{18}</sup>$  Official data from Hydrometerological institute of Montenegro  $^{19}$  Above the range for class

TERNDS: for PO<sub>4</sub><sup>3-</sup> , NO3<sup>-</sup> and BPK<sub>5</sub> in Skadar Lake

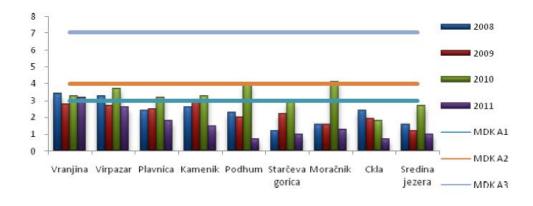
Trends of PO<sub>4</sub><sup>3-</sup> (mg/l) in Skadar Lake for years 2008, 2009, 2010 and 2011



Trends of NO3<sup>-</sup> (mg/l) in in Skadar Lake for years 2008, 2009, 2010 and 2011



Trends of BPK<sub>5</sub> (mg/l) in in Skadar Lake for years 2008, 2009, 2010 and 2011



# **Annex 3: Project Indicators**

Data Collection and Reporting													
Project Outcome Indicators	Baseline	YR1	YR2	YR3	YR4 (Until June 30)								
	Immediate threats: improperly stored hazardous waste in dumpsite affecting groundwater; pollution hotspots from untreated sewerage and soil erosion  Long term threats: lack of institutional mechanisms (agreements, plans, agreements, regulations, incentives), data and analytical tools for protection and sustainable management of the lake and its resources  Basic water quality indicators (BOD, Ammonia, Nitrite, Nitrate, CN, Zn, Pb,Cr,Hg, PAH, PCB) at multiple sampling sites all below detection or within Class 1A water quality parameters (see Annex 4);  Status of selected transboundary indicators (algal concentrations, PAH/PCB and heavy metals in fish tissues, etc.)	See Intermediate Outcome Indicators for Components 1, 2 and 3  Basic water quality indicators indicators at baseline levels or better	Basic water quality indicators at baseline levels or better  Quality of the water is good and some of the baseline indicators on better level than expected (parameters in Annex 2)  72 water samples were tested for physico-chemical parameters. The temperature ranged from 14.1-28.2 °C and pH values ranged from 8.1 to 8.5. The DO values ranged from 6.7 - 9.7 mg\l or 82.3 % - 111 %. The results of conductivity changed from 215-232 µS\m. The average values of NH4-N ranged from 0.025-0.05 mg/L and the levels of NO3-N ranged from 0.18-0.27 mg/L. The average of fecal coli forms was from 101-102 cfu/100ml in Buna, Zogaj, and Livadhet during June, July, September and October According to the degree of total coli forms the water can be classified as good to moderate From the results taken during this study we can resume that the quality of the Shkodra lake water is good according to the European Community Standards.	Basic water quality indicators at baseline levels or better  According to the MNE EPA State of environment report for the 2010 y quality of the water of Skadar Lake is very good (Water Quality index 85) Only few locations with exceeding parameters for A2 class (mainly: Nitrates, BPK, temperature) (please see Annex 2)	Basic water quality indicators at baseline levels or better  Quality of the water is very good and showing trends of constant improvement (parameters in Annex 2) to be updated for year 2012								
			According to the physical- chemical analyses water quality of Lake Shkodra can be classified as good. According to the										

			microbiological parameters analyzed and EU-Directive for surface waters (Quality of Bathing Water 76/160/EEC), Lake Shkodra results with slight pollution, fecal coli forms (100-2000 cfu/100ml) and total coli forms (100-500 cfu/100ml). I and in most cases G-values of the EU- directive on bathing waters for total coli forms and fecal coli forms were		
			resulted was Middle lake and the most problematic point regarding both chemical and microbiological parameters was Buna, because of the discharging of sewages of the municipality, which has an impact to the water quality in particular areas of river Buna		
Development and water use decisions/actions are guided by bilateral objectives, agreements and structures (P)	2003 MOU signed;  Draft Bilateral Agreement signed before project negotiations  No bilateral structures in place	Skadar-Shkodra Lake Commissionand 4 Working Groups formally established;	Working Groups submit to SLC drafts of bilateral plans called for in SAP (tourism, communications/ outreach, monitoring)	SLC approval of bilateral plans  Specific policy and action measures for bilateral adoption identified	SAP updated based on bilateral plans  Bilateral Agreement updated based on Working Group/SLC recommendations  Bilateral governmental binding
		4 WGs established: WG on Planning and legal; WG on Water Management; WG on Monitoring and research; WG on Communication, Outreach and Tourism Promotion  Working Groups	The WGs discussed Terms of Reference, reviewed reports and gave their input to several joint bilateral documents: Social Economic Assessment, Predictive Hydrological Model, Legal Framework Review, Joint Database, Fish Stock Assessment etc	On the fourth SLC meeting decision was made to prepare MoU between respective ALB and MNE institutions regarding use of the PHM developed in the framework of the project.  Decision to made technical bilateral	agreement with specific focus on the joint structures including SLC and WGs is under preparation. Completion foreseen for end of November 2012.  Additional three (use of PHM, use of joint database and implementing of joint Monitoring) technical agreements should

	1				
		complete vision		agreements on	be signed until end of
		statements and		implementing	December 2012
		draft work plans		Joint Monitoring	
				and use of joint	
				database has	50% of SLC costs
				been taken and	covered by govt.
		WGs have discussed		under	budgets
		and given their		preparation.	Commitment made
		input to the		30% of costs of	for 2013 and should
				Skadar-Shkodra	be formalized in
		preparation of		Lake	December's
		Terms of Reference		Commissioncover	workshop (update
		and review of		ed by	needed after
		several joint		Government	December)
		documents such as		Budgets	,
		the Social Economic			
		Assessment, etc.		100% of the SLC	
				costs agreed to	
				be covered by	
				Government	
				budgets in 2012	
SLC and	None of these	SLC and Working	2 meetings of SLC held,	2 meetings of SLC	Both Governments'
Secretariat, lake-	structures in place	Groups established;	minutes/conclusions	held,	budgets fully support
wide database		and first meetings	publicly available	minutes/conclusio	SLC/ Secretariat/WG
and Working		held for all		ns publicly	Operating Costs.
Groups are in				available.	
place and			At least one bilateral		Government of
operating; costs		4 WGs established:	activity identified and	Fourth meeting	Montenegro has
of continuing		WG on Planning	under implementation for	was held on	allocated its share of
operation and		and legal; WG on	each Working Group	October 07, 2011	financing but not yet
participation are		Water	A set the set describes delicated	O a a bilatanal	made effective
included in		Management; WG	Activities identified: Legal	One bilateral	because Government
Governments'		on Monitoring and	Framework review, Joint Public Awareness	activity completed for each Working	of Albania has not allocated its share
budgets at		_		•	yet. Commitment is
project's close		research; WG on	campaign, Identification of Eutrophication level of	Group	for 2013 based on the
(P)		Communication,	the lake waters,	Legal Framework	legally Binding
(. /		Outreach and	establishment o the	review, First	Agreement.
		Tourism Promotion.	predictive hydrological	Contract of the	7.8.00
		First meetings held	model.	Joint Public	
				Awareness	Database kept
				campaign,	updated with input
				completed	from both countries
		Secretariat and			
		Project			Database finalized.
		Coordinators			Documents and data
		recruited; offices			uploaded. Database
		equipped and			hosting completed in
		operational			IW:LEARN
		Secretariat and			
				Database kept	
		Project Coordinators		updated with	
		recruited; offices		input from both	
		equipped and		countries	
		operational		Database in	
		- 1		finalization steps.	
		Equipment/TA for	Database operational;	Documents and	
		developing	historical data uploaded	data uploaded	
		database procured	storical data apiodaca	and apiouucu	
			TORs prepared		
		Equipments will be	· · · · · · · · · · · · · · · · · · ·		
		procured after			
		preparation of the			
		database			

Predictive hydrological model of Lake Skadar-Shkoder completed and being used to analyze likely impacts of policies and proposed investment. (P)	No model exists	TORs for development of model and consultant selection completed  TORs for development of model and consultant selection completed	Draft hydrological model submitted to SLC, distributed to appropriate stakeholders for review and comment  First Reports on hydrological model submitted to SLC and relevant stakeholders	Final hydrological model completed; outreach/dissemi nation under way  Predictive Hydrological Model completed. Installation agreed in SLC to be done in Montenegro	Hydrological model used to analyze impacts of at least 1 proposed water-related development in lake basin  Predictive Hydrological Model completed and used for development of specific scenarios. Agreement on the use of PHM reached.
Lake management plan completed and actions taken to legally operationalize the plan.  (P)	No lake management plan exists	Bilateral Working Group approves TOR for plan preparation	Draft Lake management plan completed	Lake mgt plan approved by BLCM following stakeholder consultations; identification of measures needed to legally effect the plan in both countries  The development of Joint Lake Management Strategy including National Fishery Management Plans for each country is ongoing. Inception Report submitted on July 18, 2011 was approved and Progress report is submitted in line with the project Work Plan and activity schedule, and covers the period from 12.0710.10.2011	Actions taken to legally effect the Lake wide management plan.  The development of Joint Lake Management Strategy including National Fishery Management Plans for each country completed.  It is expected that outputs of JLMS should be integrated in updated (new) bilateral agreement which is under preparation
Targeted tourism infrastructure	Minimal tourism infrastructure exists	Designs completed for hiking trails, eco-	25% of rehabilitation/construction	75% of work	100% of work
renovations/cons truction Completed. (S)	minastructure exists	camp, cultural sites)	work completed	completed. In Albania restoration works have started on	In Albania 100% of restoration works
			In Montenegro: Agreement with the European delegation in Montenegro and Ministry of Culture of Montenegro for future reconstruction of the Besac fortress achieved	December 01, 2011and foreseen to be completed 100% in May 30, 2012. In Montenegro general design for	finalized.  EU delegation launched the tender for civil works (based on the design prepared) in April 2012.
			TORs for development of general design for reconstruction of Besac	reconstruction of the Besac has been completed Based on general	

			fortress and consultant	design it is	
			selection completed.	expected that European delegation in the MNE will finance restoration works in the amount of the 0.48 mil euro in the first half of 2012.	
Reduction in numbers of fishermen using illegal fishing methods (S)	Estimated 350 unlicensed fishermen (43% of total);  814 cases of illegal methods observed during 1 week survey	In Montenegro  58 % illegal fisherman's registered (No of issued licenses VS No of processed infringements + felonies )  For the 2008 year 280 illegal methods registered during course of one year	Unlicensed fishermen not exceeding 30% of total  In Montenegro: 21 % illegal fisherman's registered (No of issued licenses VS No of processed infringements + felonies )  In Albania number of illegal fishermen decreased from 44% to 38%  Not more than 400 cases of illegal methods observed during 1 week survey period  In MN for the 2009 year 99 illegal methods registered during course one year  In Albania 576 cases of illegal fishing were observed during a one week survey in 2010	In Montenegro 17,7 % illegal fisherman's registered (No of issued licenses VS No of processed infringements + felonies)  In Albania number of illegal fishermen observed from June-December is 120 or 27% (450 legal, 120 illegal) .  In Montenegro for the 2010 year 103 illegal methods registered during course of one year  In Albania 8 cases of illegal fishing were observed during banning period in April- May (exact figure) and at least 30 cases of illegal fishing were observed in the period June- December (number of illegal fishing methods is not exact, because there was not a certain survey for such illegal fishing methods	Unlicensed fishermen not exceeding 20% of total  19 cases of illegal fishing methods were observed during a survey in April 15-May 31 in Albanian side of the lake which is 97.7 % less than 2006 and 95.7% less than 2010  The number of unlicensed fishermen observed is 39 persons, 88.9% less than 2006 and 85% less than 2010  For Montenegro updated needed for year 2012 at the end of year  Not more than 100 cases of illegal methods observed during 1 week survey period

Increased local understanding of and engagement in sustainable tourism and natural resource management (P)	TBD: survey to be undertaken during first year of project	Completion of survey, providing indicators, baseline measures and targets for awareness and engagement  Social Economic Survey initiated	Social Economic completed  Two officers for tourism and local communities cooperation engaged for one year period to contribute to the capacity building process in National Park Skadar Lake	One of the officers has been permanently employed by National Park administration after financial project support for this activity ended.	Awareness and engagement indicators reach at least 70% of target levels  On the Albanian side decrease with more than 70% in illegal fishing activities and unlicensed fishermen is an indicator of increased awareness in natural resource management.  Through the activities of the Joint Public Awareness Campaigns more than 70% of the community has been informed about the cultural, natural and tourist potentials of the lake.
Government of Montenegro/KAP owners (Rusal) agreement on preferred solution and joint action plan for containment/dis posal of hazardous waste dump site at KAP site (P)	Inadequate, outdated information on nature and quantity of legacy waste and site conditions; no basis for analysis of options; no action plan or agreement on way forward	Aluminum Plant Technical Advisor to Government in place  KAP ITA consultant selection completed and contracted  KAP Project Steering Committee Established  KAP Project Steering Committee Established with 11 members and meeting held regularly  Waste categorization study completed  TORs for Options Analysis/ feasibility study/preliminary design and for EIA completed  TORs for Options Analysis/ feasibility study/preliminary design completed	Options analysis completed  Feasibility study and EIA initiated  TORs for development of KAP feasibility study and consultant selection completed.	Feasibility study completed;  Site investigation report submitted and Feasibility study expected to be finalized until March 2012.  TORs for development of KAP EIA study completed.  GoM/KAP owners agree on preferred solution  Preliminary design work initiated  Draft Agreement on action plan, including funding, implementation responsibilities and modalities  Government of Montenegro is discussing with Bank for Reconstruction and Development (IBRD), to reduce	Preliminary design and EIA completed  Final agreement on action plan and financing, approved by both Rusal and GoM  KAP SC (including Rusal representatives) adopted Feasibility study and EIA report  Government of Montenegro is considering activities towards financing of remediation works (loan from IBRD), thought the implementation phase of the new project: Industrial Wste Clean Up Project Montenegro, which is currently in preparatory phase

Sewage	Only sanitation in	Vranjina: baseline	Vranjina: sewerage	the environmental and public risks of selected industrial waste disposal sites through investments in environmental control measures and infrastructure for management and disposal of industrial waste including KAP hazardous waste dump site. Project is in preparation phase and will build on the findings from the Feasibility study and EIA done under LSIEMP.	Vranjina: WWT
collection and wastewater treatment system established at Vranjina village (Montenegro) (S)	place is largely non- functional septic tanks. Visible pollution at outlets TORs for Feasibility study and environmental review for sewerage/WWT at Vranjina.	water quality parameters recorded at pilot sites; construction of sewerage collection system initiated	collection system completed  TORs for General design for construction of the WWTP constructed wetland and consultant selection completed.	Construction of WWT system completed (anticipated to be constructed wetland)  General design for construction of the WWTP constructed wetland finished.  Exploring possibilities for financing the works in progress	Investment rated by the Government to be financially unsustainable.  Alternative proposals for reallocation of unused funds to the other complementary activities was not agreed with World Bank project team.
Area of water buffer vegetation restored in pilot areas to reduce sedimentation and runoff. (S)	2 degraded sites for restoration sites identified; no data on vegetation cover	Indicators, baseline and targets for vegetation cover identified; TORs for contracts prepared	Contracts awarded and restoration work initiated	50% of restoration work completed 60% completed	100% of restoration work completed  100% of the planned works for the stream rehabilitation completed  100% of the planned works for the second stream rehabilitation completed