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Annual Work Plan

February – September 2013

Resilience in the Limpopo Basin Program (RESILIM)

December 3, 2012

This document was produced for review by the United States Agency for International Development. It was prepared by Chemonics International Inc.

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List of Acronyms

CSO	Civil Society Organization
CC	Climate Change
CCA	Climate Change Adaptation
DRR	Disaster Risk Reduction
EWS	Early Warning Systems
ESARO	Eastern and Southern Africa Regional Office
FEWS NET	USAID Famine Early Warning Systems Network
IUCN	International Union for Conservation of Nature
IWRM	Integrated Water Resource Management
GBIF	Global Biodiversity Information Facility
GEF	Global Environment Facility
GIS	Geographic Information Systems
GIZ	Gesellschaft Fur Internationale Zusammenerbeit
GLTFCA	Greater Limpopo Transfrontier Conservation Area
GWP - SA	Global Water Partnership - Southern Africa
LBPTC	Limpopo Basin Permanent Technical Committee
LTP	Limpopo Trans-boundary Program
LIMCOM	Limpopo Watercourse Commission
LIMIS	Limpopo Management Information System
M&E	Monitoring and Evaluation
NAPAs	National Adaptation Programs of Action
OSC	Overseas Strategic Consulting
PPP	Public-Private Partnership
KRA	Key Result Areas
RATES	USAID Regional Agricultural Trade Expansion Support Project
RBO	River Basin Organizations
RESILIM	USAID Resilience in the Limpopo River Basin Program
SADC	Southern Africa Development Community
SOAG	Strategic Objective Grant Agreement
STTA	Short Term Technical Assistance
TFCA	Transfrontier Conservation Area
USAID	United States Agency for International Development
UNFCCC	United Nations Framework Convention on Climate Change
WDM	Water Demand Management

Executive Summary

The USAID/Southern Africa-funded Resilience in the Limpopo Basin (RESILIM) project, which commenced operation in June 2012, seeks to improve the transboundary water resources management of the Limpopo River, improving the resilience of communities and ecosystems, particularly with regard to climate change adaptation. The project operates in support of the Southern Africa Development Community (SADC) Climate Change Adaptation Strategy and the SADC Revised Protocol on Shared Watercourses.

The RESILIM project is part of a larger RESILIM program, which will include a cooperative agreement recently awarded to the Association for Water and Rural Development (AWARD). The Chemonics RESILIM team will engage with AWARD to communicate and coordinate project planning and implementation activities. Chemonics is committed to closely working with the cooperative agreement (to be called "RESILIM-Olifants") to obtain synergies, gain economies of scale, eliminate any redundancy of efforts, and to maximize the sharing of information and knowledge between the two RESILIM projects in accomplishing the overall objectives of USAID's RESILIM Program.

The RESILIM project's key counterpart and stakeholder, among others, is the Limpopo Watercourse Commission (LIMCOM), an organization conceived in 2003 and ratified in 2011 to provide a forum for South Africa, Botswana, Zimbabwe, and Mozambique to collaborate, coordinate, and cooperate on Limpopo water-related challenges. LIMCOM has developed a five year Integrated Water Resources Management (IWRM) Plan (2011-2015), focused on disaster management, water quality, and water allocation. In developing the proposed year 1 work plan, Chemonics and partners designed activities that contribute to USAID's RESILIM project objectives while also ensuring alignment with the objectives of the LIMCOM's IWRM plan. A detailed representation of the linkages between this annual plan and LIMCOM's objectives is contained within Annex B.

This plan presents a schedule of proposed activities identified and developed by RESILIM project leadership and our consortium partners: the International Union for Conservation of Nature – Eastern and Southern Africa Regional Office (IUCN/ESARO), Global Water Partnership – Southern Africa (GWP-SA), and OneWorld (OW). It is based on the feedback received over the course of numerous meetings and consultations between RESILIM project leadership and its partners, as well as USAID, LIMCOM Commissioners, LIMCOM's Executive Secretary, and a number of other key stakeholders in the region. Most recently, a workshop was held in Pretoria with Chemonics and its consortium partners on December 18th and 19th to address review comments from USAID on the first draft of the project work plan. . This revised annual project work plan, covering the period from February 2013 through September 2013, reflects the RESILIM project's approach to addressing issues and to reaching the objectives prescribed by USAID. At the strategic level Chemonics and consortium partners adopted a three-pronged approach to delivering the RESILIM objective: i) building evidence to guide the change needed to strengthen resilience, ii) supporting the establishment of an enabling environment to effect the change needed for building/developing resilience; and, iii) catalyzing the sustainable action required to build/develop resilience in the Basin.

<u>Components, Key Result Areas, and Results Framework</u>

This annual work plan is structured around the results framework shown below, with three components and nine key result areas serving as the framework against which the project's activities are designed and measured. The three project components are described below,

with details of the activities proposed to meet these objectives contained within Section III of the annual plan.

Component 1: Reduce Climate Vulnerability

KRA 1.1 - Science, technology, and capacity for decision-making and development of climate change adaptation strategies improved.

We seek to understand the existing climate change adaptation (CCA) capacity within the basin, identify gaps and opportunities in current thinking and plans, and improve the quality thereof. Activities will identify key stakeholders in the Limpopo Basin that have an interest or mandate in resilience building and climate change adaptation, understand where the balance of power lies and how decisions are made, and map the activities / projects that key stakeholders are involved in and analyze how these function together to optimize results.

Activities under this key result area will also assist in the understanding of the social and environmental thresholds related to climate change and identify and, as far as possible, quantify critical 'tipping points' in both social and environmental systems. Activities will include analysis of the links between climate change and Disaster Risk Reduction (DRR) / Disaster Preparedness that not only identifies links, but also makes recommendations on how this information may be used to strengthen existing Early Warning Systems (EWS), improve preparedness for disasters and be a tool for DRR strategies. Effort will be invested in identifying opportunities to leverage additional finance and /or other support for specific activities.

KRA 1.2 – Water conservation and water demand management responding to climate change improved.

Activities seek to integrate climate change considerations into existing water resource management practices. We will seek to understand existing water management practices, and analyze water management options that will improve climate change adaptation. We will provide technical support leading to implementation of climate change integrated water management practices. Partnerships around water demand management will be initiated, working closely with LIMCOM, GWP and other development partners.

KRA 1.3 – Integration of climate change adaptation strategies into long-term management plans and policies increased.

Related to the water management practice interventions under KRA 1.2, KRA 1.3 will seek to integrate climate change adaptation considerations into existing transboundary water management plans and policy. We will work closely with LIMCOM structures to integrate CCA strategies into the long-term LIMCOM IWRM Strategy and incorporate relevant information into LIMIS. Activities under this KRA will also focus on increasing the capacity and knowledge resources available to policy makers in the basin, so that ongoing and future transboundary resource management plans will include critical climate change adaptation considerations.

Component 2: Conserve Biodiversity and Sustainably Manage High-Priority Ecosystems

KRA 2.1 – Natural resources management practices that mitigate threats to biodiversity improved.

We seek to address current resources management practices that adversely impact biodiversity, such as the current over-allocation of limited water resources. RESILIM will assess ecological flow requirements, and will work with LIMCOM, GIZ, and the GIZ monograph study team to identify prioritized areas for collaboration. We will provide technical support to LIMCOM to include water auditing and an assessment of current water allocation plans, and will specifically contribute to the water allocation and water quality strategic objectives of the LIMCOM IWRM Plan.

RESILIM will work with key stakeholders to identify indicators for biodiversity and ecosystem health monitoring, and will conduct a basin-wide biodiversity and ecosystem health assessment. As with the environmental flows assessments, RESILIM will train decision makers on how to interpret and use biodiversity and ecosystem information for ecosystem and water management purposes. Additionally, RESILIM will support LIMCOM to establish a Biodiversity Technical Task Team as one of its functional organs to provide a vision for long-term, strategic integration of biodiversity management objectives into transboundary water resources management. We will move towards action by scaling up existing water quality/aquatic weed monitoring programs, as well as supporting local Community Based Natural Resource Management (CBNRM) interventions that mitigate threats to biodiversity.

KRA 2.2 – Ecological integrity and resilience to climate change in key/priority conservation areas improved.

We will seek to show improvement in ecological health and climate change resilience in priority protected areas. RESILIM will consult with stakeholders to identify priority "hotspots," geographic areas within the basin where issues of conservation, water, and livelihoods converge, including TFCAs, national parks, and private game reserves. Activities under this KRA will involve coordination with the RESILIM cooperative agreement team to ensure inclusion of stakeholders at the sub-catchment level and advise national government agencies on how to integrate priority areas into national biodiversity action plans or similar processes.

KRA 2.3 – Integration of climate change adaptation and biodiversity conservation in basin water and resource management plans increased.

We will seek to incorporate CCA and biodiversity conservation practices into basin-wide water and resource management plans. First, RESILIM will work to incorporate (through LIMCOM) best practices around ecosystem-based water management into transboundary water management (e.g. the IWRM plan). Activities under this KRA will involve adapting existing models to the Limpopo context, and coordination with other key stakeholders in the basin, such as authorities of protected areas to ensure that current science and ecosystem management practices are incorporated into transboundary water management. This will ensure alignment between strategies, plans, activities, and stakeholder input and agreement. In addition, RESILIM will work with LIMCOM and other key counterparts to assist in expanding the range and nature of data and information currently held by and in LIMIS, with a particular focus on biodiversity and climate change-related information and data. Additionally, there are several river basin governance toolkits available that integrate water, conservation, and climate change adaptation, such as those developed by IUCN (e.g. the WANI toolkits on flow,

payment for ecosystem services, governance, etc). RESILIM will work with and support LIMCOM to determine the appropriateness of these and other existing tools, in part or whole, and adapt them to the LIMCOM context. Application of these tools may require training to ensure effective use.

Component 3: Build Capacity of Stakeholders

KRA 3.1 – Capacity of all levels of government to formulate transboundary and integrated water, ecosystem management and climate change adaptation policies and strategies improved.

Linked closely with the objectives of components 1 and 2, we seek to improve the capacity of government-level policy and decision-makers to effectively manage water resources in the Limpopo Basin. Activities under this KRA will determine the capacity needs of LIMCOM and other key government stakeholders, and develop a capacity building strategy to address prioritized needs. With effective transboundary, climate change-responsive, ecosystem-based IWRM as a guiding pillar, RESILIM will engage training resources to allow key government counterparts to make informed and effective decisions.

KRA 3.2 – Knowledge and awareness of climate change impacts and adaptation measures increased.

We will seek to increase knowledge and awareness of climate change adaption within the Limpopo Basin. Activities under this KRA will be weighted towards the development and implementation of a comprehensive Knowledge Management and Communication Plan (KMCP). The plan will be designed to ensure that stakeholders and decision makers at critical levels within the basin will have access to the information necessary to support sound decision making with regard to climate change impacts. This will be implemented in line with activities under Component 1. Activities will ensure that vulnerable groups like women and children are a priority, and will design materials that cater to a wide target audience. Activities under this KRA will also utilize grants to promote study tours and learning from more mature RBOs and transboundary contexts.

KRA 3.3 – Knowledge and awareness of integrated and sustainable water management strategies and practices increased.

We will seek to increase knowledge and awareness of sustainable water management within the Limpopo Basin. Activities under this KRA will be weighted towards the development and implementation of a comprehensive Knowledge Management and Communication plan (KMCP). The plan will be designed to ensure that stakeholders and decision makers at all critical levels within the Basin will have the information necessary to support sound decision making with regard to integrated and sustainable water management. Activities will ensure that vulnerable groups like women and children are a priority, and will design materials that cater to a wide variety of stakeholders. Activities under this KRA will also utilize grants to promote study tours and learning from more mature RBOs and transboundary contexts.

<u>Operating Structure</u>

In order to accomplish the activities proposed in this plan, and to meet the objectives of the RESILIM Results Framework, Chemonics will use an experienced technical team, along with a pool of other resources, including subcontracts, grants, STTA, and partnerships.

Chemonics' technical team will identify, design, and supervise the delivery of technical assistance while key partners and a pool of local experts and organizations will directly provide most of the technical assistance through subcontract and grant mechanisms. OneWorld will principally provide technical support to integrate climate change adaptation into transboundary water resource management. IUCN/ESARO will support activities to improve biodiversity conservation and management of priority ecosystems through effective water governance. GWP-SA will facilitate activities to engage stakeholders across sectors, build capacity and expand knowledge networks in water resource management and climate change adaptation. OSC will support program communications and outreach strategies.

In addition to the pool of resources described above, the RESILIM team will devote significant time in 2013 to developing the associated Public Private Partnership Plan for RESILIM. This plan will indentify prioritized opportunities to develop PPPs that will help leverage additional resources toward reducing climate vulnerability, conserving biodiversity and sustainability managing high-priority ecosystems, and building capacity of stakeholders.

Finally, the RESILIM team will take an adaptive management approach over the course of implementation of the project. As new information becomes available, as stakeholders evolve, as the Limpopo Basin changes and develops, and as the outcomes of initial activities become clear, project leadership, in consultation with USAID, will examine opportunities to adapt the work plan to meet the evolving needs of the program and benefit from emerging opportunities.

Section I. Program Overview[1]

I.A - Background

Introduction

The Resilience in the Limpopo Basin program (RESILIM) is designed to improve the management of the Limpopo River Basin's resources at the trans-boundary level, improving the resilience of communities, in particular with regard to climate change adaptation and biodiversity conservation. The Limpopo River Basin is comprised of 416,296 square kilometers of catchment area in Botswana, South Africa, Zimbabwe, and Mozambique. The basin's catchment areas are both environmentally and economically diverse, with land and water uses that range from subsistence farming to heavy industry and mining. Agriculture, mining, and industry account for 75% of the basin's water demand, with nearly 50% of the resources used for irrigation. The basin's population is approximately 14 million people across the four riparian countries, and its resources are critical for livelihoods throughout. Protected areas also comprise a large portion of the Limpopo River Basin (the Basin). These areas are home to unique and threatened biodiversity, and ecosystems in protected areas are vital for supporting livelihoods and tourism as well. Water resources have been stressed for decades, and the growth of industry, mining, and urban population centers will continue to strain the basin's weakening health.

It is likely that climate change will further exacerbate the basin's increasing water scarcity, as the entire southern Africa region becomes hotter and drier. In addition, climate change will increase the likelihood of severe meteorological events like droughts, flash floods, and wildfire. The Limpopo basin is considered extremely susceptible to the risks of climate change, as changing weather patterns will continue to stress ecosystems, livelihoods, and economies across Botswana, South Africa, Zimbabwe, and Mozambique.

LIMCOM

The commitment of the four riparian countries to manage their water resources collaboratively dates back to 1986 when the 'Limpopo Basin Permanent Technical Committee' (LBPTC) was jointly established. The LBPTC advised the Member States on different aspects associated with droughts and floods, pollution, as well as water resources planning and development across the Basin.

In 2003, the four cooperating countries further strengthened their collaborative management of water resources through the multilateral agreement to establish the Limpopo Watercourse Commission (LIMCOM), which was officially ratified in 2011. This agreement emanated from the Southern Africa Development Community (SADC) Revised Protocol on Shared Watercourses, which fostered regional "River Basin Organizations" (RBOs), like LIMCOM, which provide a forum for riparian countries to coordinate on water-related issues. LIMCOM plays an advisory role to Member States, and is comprised of four main branches: Council of Ministers; Commissioners; Technical Task Forces and the Executive Secretariat (Figure 1). The Council and Commissioners are the primary governing body of LIMCOM and are supported by an Executive Secretariat, located in Maputo, and three Task Forces (Legal, Flood Forecasting, and Technical). Yet to be established, through support from GWP-SA, is a National Consultative Forum, which would support and facilitate LIMCOM's work at national level.

[1] Content for this section was largely drawn from the LIMCOM IWRM Plan (2011-2015), USAID contract No. AID-674-C-12-00006, and the accepted Chemonics Technical Proposal for RESILIM.

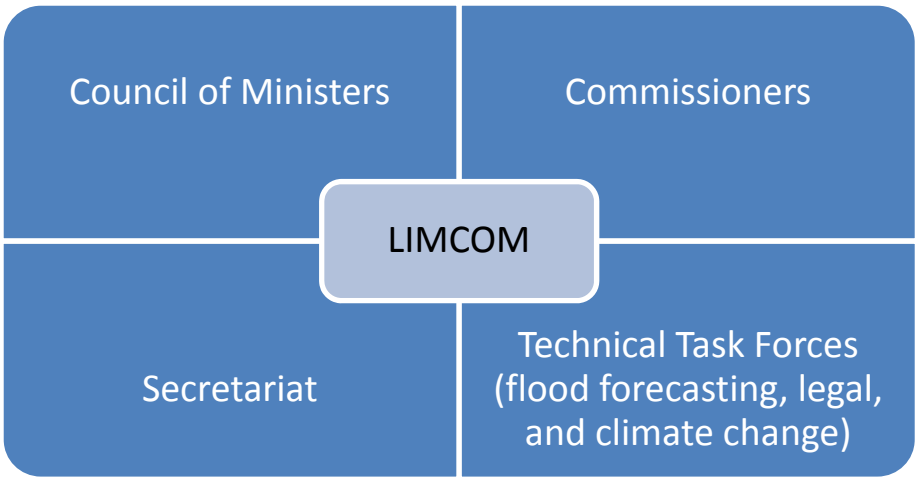


Figure 1. LIMCOM Structures

LIMCOM has developed a five-year Integrated Water Resources Management (IWRM) Plan (2011-2015) focused on disaster management, water quality, and water allocation. Successful implementation of this plan will strengthen the riparian countries against the growing stress on the Limpopo's resources and the effects of climate change.

RESILIM

RESILIM is implemented and funded by USAID under an agreement with the Southern Africa Development Community, in support of the LIMCOM Agreement, the SADC Climate Change Adaptation Strategy and the SADC Revised Protocol on Shared Watercourses. In particular, USAID/Southern Africa supports the SADC Protocol under the framework of a Strategic Objective Grant Agreement (SOAG) signed with the SADC Water Division on April 27, 2006. Under the SOAG, USAID has supported two trans-boundary river basin management programs in the Okavango River Delta: the Integrated River Basin Management (IRBM) Project (2004 to 2009) and the South Africa Regional Environment Program (ongoing since 2010). RESILIM will expand these efforts to support sound management of water resources in a new additional river basin in Southern Africa, the Limpopo River Basin.

Sustainable Integrated Water Resource Management in the Limpopo demands a holistic, multi-sector approach. USAID recognizes that its resources alone are not sufficient to support all aspects of such an initiative. RESILIM will coordinate with others working in the region to ensure that USAID programs are aligned with overall sustainability goals for the Basin and LIMCOM strategies in particular. USAID resources will focus predominantly on supporting intact, healthy ecosystems and climate adaptation aspects of an IWRM approach.

The RESILIM project is implemented by prime contractor Chemonics International and a consortium of qualified partner organizations:

- The International Union for Conservation of Nature – Eastern and Southern Africa Regional Office (IUCN/ESARO). IUCN is a world renowned biodiversity conservation union that works on biodiversity, climate change, water resources management, energy, human livelihoods and greening the world economy using integrated approaches; ESARO is its regional entity in eastern and southern Africa.
- Global Water Partnership – Southern Africa (GWP-SA), an intergovernmental water resource management network, supports the sustainable development and management of water resources at all levels in Southern Africa;

- OneWorld, a regional climate change entity, has experience in developing and implementing climate change programs and strategies across Sub-Saharan Africa;
- Overseas Strategic Consulting (OSC) provides strategic communications programs with measurable results throughout the world.

Chemonics' technical team will identify, design, and supervise the delivery of technical assistance while the key partners listed above and a pool of local experts and organizations will directly provide most of the technical assistance through subcontract and grant mechanisms. Led by Chief of Party (COP), Dr. Nkobi Mpho Moleele, Chemonics will be responsible for oversight and management of all programmatic areas, alliance and public-private partnership (PPP) development, program M&E, and strategic delivery of technical assistance.

OneWorld will principally provide technical support to integrate climate change adaptation into transboundary water resource management. IUCN/ESARO will support activities to improve biodiversity conservation and management of priority ecosystems through effective water governance. GWP-SA will facilitate activities to engage stakeholders across sectors, build capacity, and expand knowledge networks in water resource management and climate change adaptation. Each of these partners brings expertise in all RESILIM components, which will enable and enhance integration of climate change, biodiversity and water — an ecosystem view — across program activities. OSC will support program communications and outreach strategies.

The head office in Maputo will be led by the COP, Dr. Nkobi Mpho Moleele, and supported by a qualified local technical team. The Maputo office will also house staff responsible for cross-cutting program management — IWRM/GIS, M&E, communications, outreach, grants, and operations. Deputy Chief of Party/Partnership Advisor, Kule Chitepo, will lead the satellite office in Pretoria supported by an operations officer.

The Maputo office will primarily work with and support LIMCOM to implement its IWRM plan. The Pretoria office will facilitate regional coordination — developing and maintaining partnerships and alliances with public sector, civil society, and private sector entities at the regional level and within the four riparian countries. The Pretoria office will also facilitate coordination and engagement with our key partners OneWorld, IUCN/ESARO, and GWP-SA, each with offices in the area, the USAID mission, and the implementing partner of the RESILIM cooperative agreement.

It is important to recognize that the RESILIM program as a whole will be implemented through two mechanisms. One, the contract that was awarded to Chemonics, will focus on transboundary-level policy and coordination between governments, LIMCOM, civil society and the private sector and stakeholders (as need arises). That mechanism is the subject of this work plan and its scope is explained in detail in the sections that precede and follow. The second mechanism is a cooperative agreement, recently awarded to Association for Water and Rural Development (AWARD). The cooperative agreement will focus on testing and demonstrating the results of integrated water, climate change, and natural resources management strategies at the sub-catchment level. The two mechanisms will coordinate throughout the project, with the progress and findings of each informing the approach of the other.

I.B – Geographic Scope[2]

The Limpopo River flows north from origins in Botswana and South Africa, where it creates the border between the two countries, then the border between South Africa and Zimbabwe, before crossing into Mozambique, where it runs across a broad floodplain and then narrows into a thin drainage basin before spilling into the Indian Ocean.

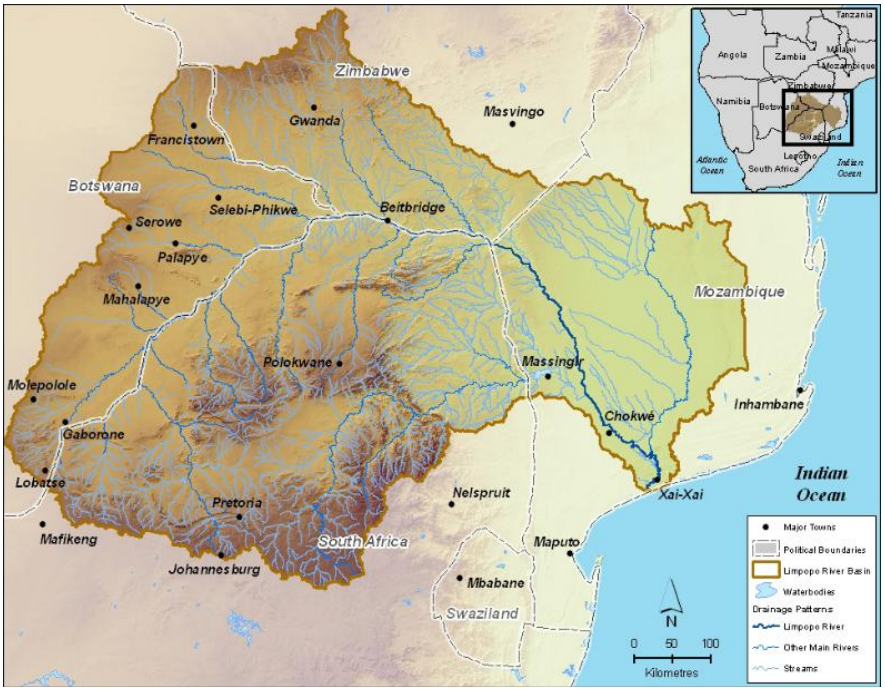


Figure 2: Limpopo River Basin Map Showing Major Towns and Water Bodies

There is a wide array of economic activity and demographic characteristics throughout the basin, but the four riparian countries each have a vital socioeconomic stake in the health of the system. Botswana accounts for 20% of the basin area, the majority of which is rural. However, the growing population center of Gaborone (the capital city) accounts for a large part of Botswana's water usage in the basin. South Africa accounts for 45% of the basin area, and is the largest economy in the region, as well as the largest user of Limpopo basin water. Large population centers, including Pretoria (the capital city) and parts of Johannesburg use Limpopo basin water, and the basin's resources are used heavily for agriculture, industry, and tourism as well. Zimbabwe accounts for 15% of the basin area, but uses significant amounts of the basin's water, mostly in the form of irrigation for commercial and subsistence agriculture. Mozambique accounts for 20% of the basin area, and is the downstream riparian country in the basin, the vast majority of Mozambique's water usage is for irrigation.

Table 1: 2001 population estimates for the Limpopo Basin by country[3]

Population			
Country	**Estimated Population**	**Limpopo Basin population**	**% in Basin**
Botswana	1,700,000	1,000,000	59%
Mozambique	17, 400, 000	856, 456	5%
South Africa	44, 600, 000	10, 700,000	24%
Zimbabwe	11, 700, 000	1,000, 000	9%

[2] This section was mostly based on the Limpopo River Awareness Kit; http://www.limpoporak.org/.
[3] Source: Atlas for Disaster Preparedness and Response in the Limpopo Basin.

Section II. Programmatic Approach

II.A - Objectives and Results Framework[4]

The results framework below illustrates RESILIM's strategy to achieve the key results needed to accomplish the vision of each program component, and the overall program objective. The overall program objective is to improve trans-boundary management of the Limpopo river basin in order to enhance resiliency of people and ecosystems. Each component presents a critical element in improving management of the basin — reduction of climate vulnerability, improved conservation and management of key conservation areas, and improved capacity of stakeholders to manage water and ecosystem resources. Success in all components will result in achievement of the overall program objective and contribute to the fulfillment of USAID's development objectives in climate change and natural resource management, and support the LIMCOM IWRM plan and the water and climate change priorities of SADC.

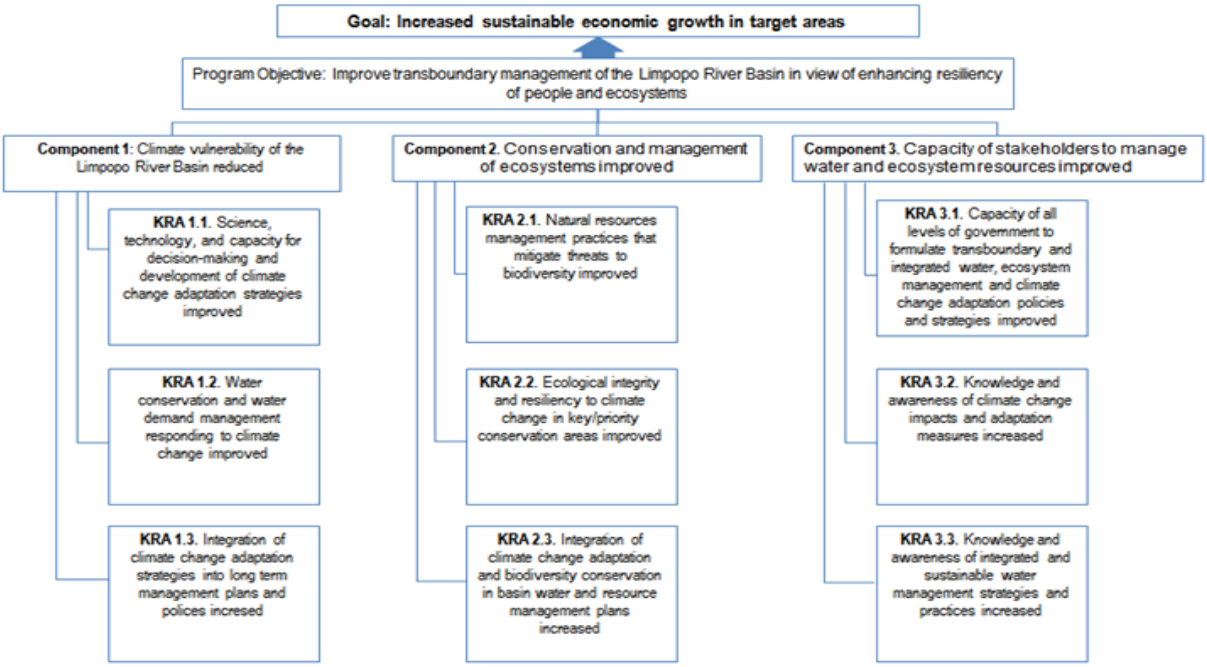


Figure 3: Life of RESILIM Program Results Framework

The results framework provides a structure around which consensus and shared ownership—between staff, partners, and key stakeholders—can be developed. During the work planning process, the RESILIM team used the results framework as a tool to reach agreement on RESILIM's key results and approach to achieving results. The results framework has also been used to structure discussions with stakeholders on program scope and direction. Finally, the results framework will serve as a management tool in several contexts. Measurement and assessment of performance data against framework results will enable poorly performing activities to be identified, then scrutinized and adjusted. It will also enable the framework to be periodically revisited and, as needed where results are not being achieved, assumptions no

[4] This section is based on USAID contract No. AID-674-C-12-00006, and the accepted Chemonics Technical Proposal for RESILIM.

longer valid or critical resources no longer available, revised in consultation with USAID to reflect a more realistic framework.

Strategically, the RESILIM Program aims to improve trans-boundary management of the Limpopo River Basin and enhance resilience of people and ecosystems through three integrated strategic approaches:

- **Building evidence** to guide the change needed to strengthen resilience;
- Supporting the establishment of an **enabling environment** to effect the change needed for resilience; and
- Catalyzing the **sustainable action** required to build resilience in the basin.

Building evidence: There is already a significant body of scientific evidence that demonstrates the need for accelerating the building of climate change resilience and the improved protection and management of biodiversity in the Limpopo River Basin. However this evidence is not fully integrated and the resulting lack of coherence makes it difficult to pinpoint the priority actions that would strengthen resilience in the basin through increasing water flows and improving water quality. Identifying these entry points and hence action for enabling water flows requires knowledge of the critical thresholds or tipping points in the basin, as determined on an ecosystem and livelihoods basis.

Establishing an enabling environment: Improving transboundary management of the Basin and strengthening resilience requires a strategic focus on sustainably translating evidence into action. This Science-Policy-Implementation interface needs to be built on knowledge, harmonized and adaptive institutions, entrenched adaptive management, and action that is driven by a common purpose. In addition, some or all of these actions frequently require dialogue and cooperation between multiple countries in the basin. This is always important for effective water resource management in a shared basin, and especially so in the likely scenario where certain seasonal water flows may decrease due to the result of climate change.

Catalyzing sustainable action for resilience: Opening basin water flows[5] and building resilience requires programmatic and scalable interventions and actions. A wide range of adaptation projects are under implementation in the basin, all at a national and many at a sub national level. Given the challenges in the Limpopo Basin, 'a closed system'[6], adaptation of scale will need to be trans-boundary and multi-sector. Lessons learned from existing interventions should be reviewed and used to demonstrate what works and does not, what can be replicated and what can be scaled beyond boundaries. This, in addition to the evidence-base and an adaptive enabling environment, will in turn facilitate access to large scale funding for implementation.

II.B - Program Components[7]

Component 1: Reduce Climate Change Vulnerability

This objective promotes the integration and adoption of interdisciplinary adaptation strategies that are effective across sectors and provide multiple benefits, including climate change

[5] The Limpopo River is no longer a perennial river system as was in the past. This is partly due to all water being allocated/committed for use in the Riparian Countries, thus a "Closed River System."
[6] The Limpopo River is no longer a perennial river system as was in the past. This is partly due to all water being allocated/committed for use in the Riparian Countries, thus a "Closed River System."
[7] Sources: USAID contract No. AID-674-C-12-00006, and the accepted Chemonics Technical Proposal for RESILIM.

adaptation, promotion of sustainable economic development, and ecosystem conservation. To integrate climate change adaptation considerations into water resource management at a basin ecosystem level, RESILIM will first work with LIMCOM and other basin stakeholders to define the characteristics of the basin in the climate change context. Our activities will then promote climate-friendly policies and planning and innovative strategies to improve human and ecological resiliency. Activities will improve water resource management and biodiversity conservation, using the best available climate science and management information, including indigenous knowledge and management systems.

Component 2: Conserve Biodiversity and Sustainably Manage High-Priority Ecosystems

This objective promotes conservation of biodiversity, ecosystem resiliency, and sound community-based natural resource management within key biodiversity areas in the Basin. Activities under this objective will address threats to biodiversity by improving the management of natural resources in critical areas of the Basin and supporting regional, national, and local government entities to integrate climate change adaptation and biodiversity conservation efforts. Our approach to conserve biodiversity and manage high-priority ecosystems in the basin centers on linking with and leveraging existing activities to assess water resources, such as the GIZ monograph study, and utilizing local resources — partners, experts, and organizations — to define the characteristics of the basin in a biodiversity and ecosystem health context. The information generated from these assessments will serve as the foundation for technical assistance to integrate biodiversity conservation and ecosystem management considerations into planning and management of the basin's water resources.

Component 3: Build Capacity of Stakeholders

Activities under this objective strengthen stakeholder capacity to use available knowledge to formulate and implement integrated strategies balancing human development, biodiversity conservation and climate change adaptation in the Limpopo Basin. Activities will support cross-sector, trans-boundary dialogue and exchange, capturing and sharing of lessons learned, and development of a basin-wide knowledge management system to strengthen the advisory role of LIMCOM. Activities will also provide training and technical assistance to strengthen institutional and individual capacity for collaborative Basin management and increase knowledge and awareness of climate change and ecosystem conservation. We will evaluate LIMCOM's state of development — an interim commission and secretariat that is undergoing change— and will leverage more mature RBOs, in southern Africa and other regions of the world, as models. This project component will coordinate closely with the capacity building initiatives, under the Cooperative Agreement project.

II.C - Contribution to USAID Mission[8]

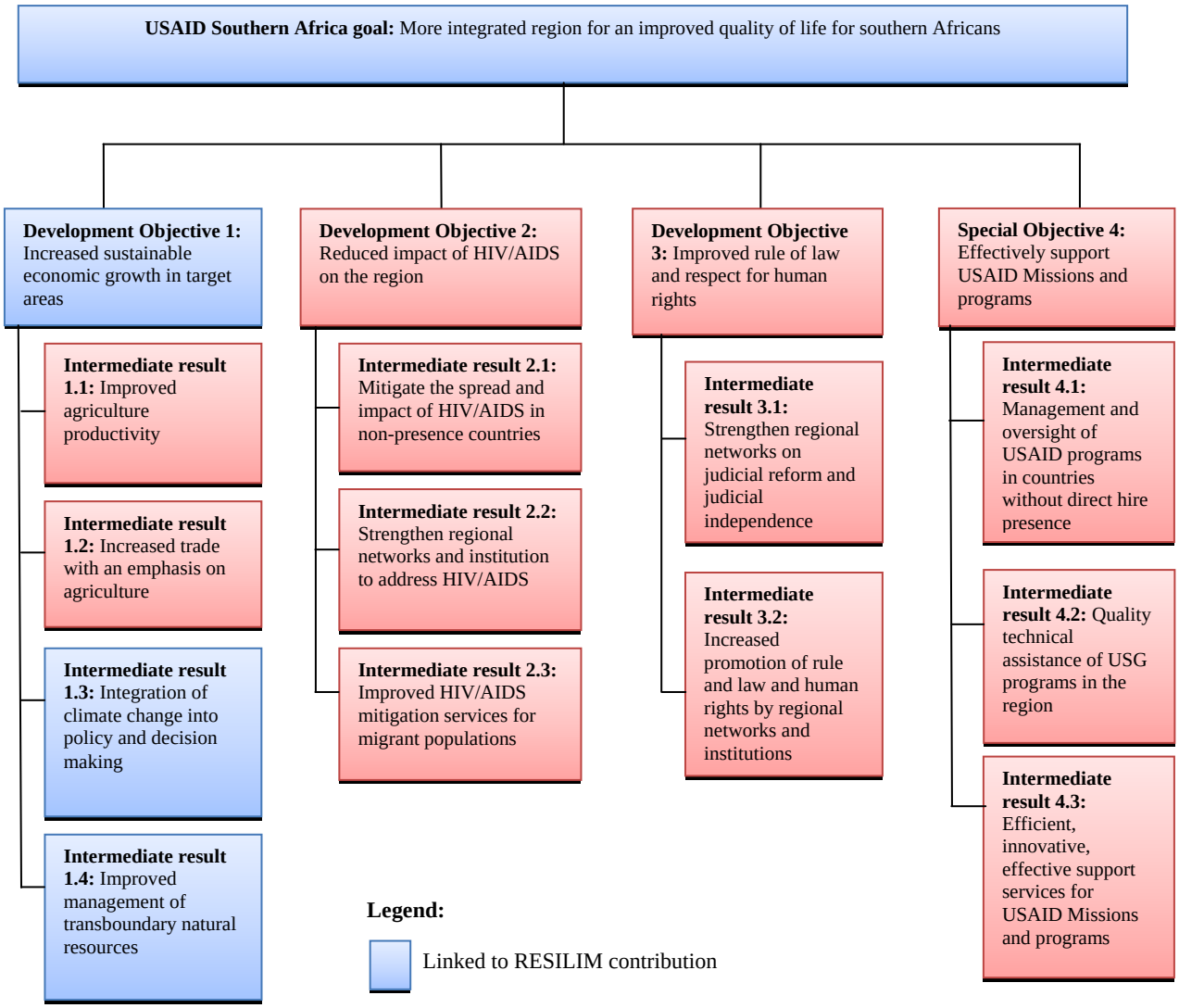
USAID-Southern Africa believes that water and other natural assets are crucial to promote regional economic growth, and the majority of countries in the region is either currently experiencing water scarcity[9] or is vulnerable to water stress. As water is a critical resource for agricultural production, extractive industry (mining), ecotourism, energy generation, biodiversity survival, ecosystem existence, and human health, it is important to ensure that this resource is not overused and mismanaged. As part of USAID's development objective 1, and intermediate results 1.3 and 1.4 (see table below), RESILIM will support LIMCOM to (a) assess water demand, risks, and users; (b) integrate climate, hydrology, biodiversity and water

[8] Source: USAID-Southern Africa Regional Development Cooperation Strategy, 2011-2016.
[9] Water scarcity could be a result of low quantities of water or poor quality of water.

system in decision making and management support tools; (c) advance protocol on information, data sharing, and monitoring procedures to improve governance of water resources; (d) expand flow forecast and early warning systems; (e) conduct cost benefit and feasibility analysis of recommended interventions to increase water availability; and (f) develop public awareness campaigns and communication systems for climate change and water management in the Limpopo River Basin.

With Intermediate Result 1.3 (climate change integrated into policy and decision making), USAID is focused on strengthening regional capacity for utilization of clean energy technologies and expanding key stakeholder capacities to adapt to anticipated climatic change impacts. RESILIM will provide technical assistance to improve capacity at necessary levels of government to formulate trans-boundary and integrated water ecosystem management and climate change adaptation policies and strategies. Additional technical assistance will be provided to increase the knowledge and awareness of climate change impacts and adaptation measures among government authorities and civil society.

Figure 4: USAID-Southern Africa Results Framework



With intermediate result 1.4 (improved management of trans-boundary natural resources), USAID is addressing capacity improvement of sustainable use of water and decreasing threats to biological diversity, both critical natural assets that support economic well-being and prosperity in the region. In the same way, RESILIM is focused on improvement of natural resources management practices that mitigate threats to biodiversity and improve ecological integrity and resiliency to climate change in key/priority conservation areas.

By combining the integration of climate change into policy and decision making with improved management of trans-boundary natural resources, USAID is helping the region ensure the long-term sustainability of essential resources and contribute to increased sustainable economic growth. Similarly, RESILIM is focused on increasing the integration of climate change adaptation and biodiversity conservation into Limpopo water and resource management plans, strategies and systems, and supporting the development and application of ecosystem-based integrated water resource management.

II.D - Contribution to LIMCOM Objectives[10]

With the LIMCOM IWRM Plan of 2011-2015, the Limpopo Watercourse Commission adopted a comprehensive approach to integrated water resources management (IWRM). Through this plan, LIMCOM has taken an important step forward in seeking social equity, economic efficiency, and environmental integrity towards sustainable development in the Basin. Though multi-governmental cooperation with regard to water resources is a complex, high-stakes undertaking, the LIMCOM countries have shown admirable commitment to their goals, and the RESILIM project aims to support LIMCOM's objectives.

LIMCOM has identified several core challenges facing the Limpopo river basin, which were reaffirmed by a basin scoping study in 2010. These challenges include natural disasters such as droughts and flooding, increasing pollution of water resources, and limited availability of water to drive economic growth. The LIMCOM IWRM Plan is structured around the following three strategic objectives, which have been defined to address the three core challenges presented above, namely: i) Disaster Management, ii) Water Quality, and iii) Water Allocation.

The RESILIM work plan presented in this document has taken the LIMCOM objectives into account when designing its activities. A full demonstration of how RESILIM's activities fit into the LIMCOM objectives is shown in Annex 3.

II.E - Critical assumptions

In order to fully implement RESILIM activities as well as monitor and evaluate its outputs and impacts, there are some determinants of success which are outside of the control of the project. These share much in common with the critical assumptions and risks of the overall USAID Southern Africa Regional Development Cooperation Strategy, namely:

- The continued political commitment of the national/country governments to a more integrated region for an improved quality of life for Southern Africans;
- The continued commitment of donors to support core and complementary activities – especially GIZ (on behalf of BMZ, DFID and AusAID), World Bank, private companies, and others operating in the basin;
- A substantial proportion of highly qualified expertise supporting climate change adaptation and biodiversity management programs in the region;

[10] Source: LIMCOM IWRM Plan (2011-2015)

- Continued political and environmental stability;
- Continued political will for cooperation under LIMCOM, including funding support from Member States.
- The RESILIM project is able to fund Government officials from Zimbabwe for project-related travel.

Despite the potential for disruption contained within the assumptions above, we are confident that through continued cooperation between donors and stakeholders, and adaptive program management, we will be able to overcome any obstacles and produce meaningful results. A more detailed risks assessment and mitigation matrix for the RESILIM Program is provided in Section IV of this Report.

Section III. Activities, tasks, and timing

III.A – Work plan development process

Chemonics International was awarded the contract to implement the RESILIM Program on June 4th, 2012, and according to the original contract, was to have produced the Annual Work Plan within 60 days, by 31 July 2012. Chemonics made every effort to assemble the project team necessary for the delivery of the work plan within the prescribed 60 days, a process which included the establishment of a home office project management unit (PMU), field office startup team, and onboarding of the program's long-term staff.

The PMU's priority task in putting together the team for the Work Plan development was the on-boarding of the RESILIM Field Project Leadership, comprising the Chief of Party (Nkobi Moleele), and Deputy Chief of Party (Kule Chitepo). Within three weeks of contract award, Chemonics conducted a week-long Chemonics Home Office Orientation program in Washington DC for the COP and DCOP, and utilized this period to actively commence work on the RESILIM Work Plan.

A critical component of the Work Plan development process was the consultation with the program's lead beneficiary, LIMCOM. To this end, on July 5th, 2012, project leadership met with the LIMCOM Executive Secretary (Sergio Sitoe) in Maputo, Mozambique, and was advised of the need to formally present the RESILIM Program to the LIMCOM Commissioners. The process of securing and confirming dates for this consultation proved to be difficult, given the LIMCOM Commissioners are full-time employees of the governments of their respective countries, and that they therefore seldom are able to all meet together. Consequently, Chemonics requested an extension from USAID for the submission of the Work Plan, and was awarded a further 30 days, making the total 90 days from contract signing.

In the meantime and in parallel, the Chemonics team worked to on-board additional RESILIM staff, as well as to initiate collaboration between primary partners/sub-contractors – One World, IUCN, and the Global Water Partnership (GWP). A project inception and work planning meeting with these sub-contractors was held in Pretoria during August 14-16, 2012, and the outcome of the meeting was broad agreement on the roles (Scopes of Work) of the sub-contractors in the process of developing the Annual Work Plan. A management decision was made to bring OSC into program activities at a later date to assist with strategic communication planning and development.

LIMCOM Commissioners were formally notified that RESILIM was awarded to Chemonics during a presentation by USAID on the 17th of August 2012 – two weeks before the deadline for Work Plan submission, per the extension granted by USAID. The RESILIM team and USAID Southern Africa representatives (Mission Director, and Contract Officer Representative) met with LIMCOM Commissioners and Technical Task Team members on this date, and the outcome of the meeting was consensus on the relevance and technical soundness of RESILIM. These meetings also generated consensus to develop and sign a Memorandum of Understanding (MoU) between USAID and LIMCOM that would also define the governance framework of RESILIM (clearly indicating the role of LIMCOM in project decision-making and implementation). It was agreed that formal signature on the aforementioned, by both USAID and LIMCOM, would be a pre-requisite for any formal and overt RESILIM Program implementation activities to take place.

In acknowledging the need for more time to accommodate the development of the aforementioned MoU between USAID and LIMCOM, USAID agreed to a further postponement of the deadline for the submission of the RESILIM Work Plan, and the date December 3rd,

2012 was set for initial submission. LIMCOM, in turn, acknowledged that some parallel project preparatory work would need to be carried out by Chemonics and its sub-contractors, in the period before legal representatives of USAID and Chemonics would review the MoU and project governance agreements, and sign off on them. In this regard, Chemonics proceeded to contract its sub-contractors to engage in work plan development activities, in anticipation of sign-off on the collaboration agreement by LIMCOM and USAID – initially by October, then by November, and later by early December 2012. These delays in securing sign-off were due to unforeseen circumstances that were beyond the control of the USAID COR and the LIMCOM Executive Secretary.

With the provision described above, Chemonics engaged the sub-contractors on the RESILIM Program to work with the Chemonics field office and PMU to:

1. Develop and finalize a schedule of activities for the development of the RESILIM Work Plan;
2. Define the specific nature of the sub-contractors' envisaged long-term support to the RESILIM Program;
3. Develop a comprehensive list of regional stakeholders of the RESILIM Program;
4. Agree to a regional stakeholders' consultation process, and have sub-contractors use their existing regional networks and contacts in the region to commence consultations on RESILIM;
5. Commence the process of drafting the RESILIM Annual Work Plan, in anticipation of engaging and incorporating input from the LIMCOM Technical Teams as soon as MoU between LIMCOM and USAID has been signed.

III.B – Activities by component

The specific activities the RESILIM project will undertake in order to meet the objectives in its three components are detailed below, as well as in the Gantt chart in Annex 1. Although these activities are proposed to accomplish the goals of the program, the RESILIM team will take an adaptive management approach during project implementation. As new information becomes available, as stakeholders evolve, as the Limpopo Basin changes and develops, and as the outcomes of initial activities become clear, project leadership, in consultation with USAID, will examine opportunities to adapt the work plan to meet the evolving needs of the program and benefit from emerging opportunities.

In order to carry out the activities listed below and others that emerge, the project has at its disposal a number of resources. Chemonics' technical staff will be able to oversee and participate in a number of the activities listed below. In addition, the program has a subcontracts budget available. Many of the activities below will be led by subcontractors, including Chemonics' four consortium partners (OneWorld, GWP, IUCN, and OSC) who had a combined proposed budget of approximately $2.5 million. In addition to these consortium partners, there are funds available for other subcontracts, if necessary. Many activities, especially those in the piloting and implementing stage, will have a grants component. The program has approximately $2 million available in TBD grants funds. The program also has a pool of short-term technical assistance (STTA) funds available when external, short-term expertise becomes necessary to carry out an activity. Finally, the program will seek to develop public-private partnerships that leverage resources outside of RESILIM in order to pursue shared goals.

Though they are woven into the activities below where appropriate, there are a number of "cross-cutting" activities that do not necessarily fit into one component, but are nevertheless an important part of the RESILIM program. Partnership development, mentioned above, will

be an important aspect of the program's work and will occur across all components. Partnerships will be an area in which we will practice adaptive management and planning, and the program will have to be nimble to respond to emerging opportunities.

RESILIM will, in consultation with USAID, develop a strategy for partnerships to deliver this proposed work plan. The Partnerships Strategy will be informed by key components and deliverables of the Work Plan, and as such, RESILIM may enter into partnerships at the lead/sub activity level, as well as at the level of outputs. At the output level, the partnerships approach will be closely linked to the conducting and outcomes of the various analyses (vulnerability, threat, institutional etc.) that will be undertaken under Components 1 & 2, from which a prioritized and strategic set of partnerships will be developed. However, RESILIM makes a clear distinction between its developing of the partnerships and relationships that are essential to the implementation of the Annual Plan, and the specific activities of developing Public-Private Partnership (PPP) projects and initiatives in order to leverage USAID resources, and to expand impact.

i) With regard to PPPs, (for example, under activities 1.3.2 and 2.3.3: develop a framework for evaluating opportunities for PPPs around climate adaptation strategies), RESILIM will adopt an approach that engages the private sector (commercial agriculture, mining companies) through the relevant business chambers and associations, and to provide platforms for dialogue between these businesses and the relevant (local, provincial, national) government institutions, with a view to identifying and structuring opportunities for their collaboration and partnership around specific projects and initiatives (PPPs) that are aimed at increasing resiliency in the Limpopo river basin.

ii) RESILIM will develop and maintain robust and effective partnerships and alliances with regional, national and local institutions, across all sectors (public, private, community and civil society). The extensive networks and members of RESILIM's Consortium Partners (IUCN, Global Water Partnership, and One World) will further enhance the depth and spread of partnerships and alliances that can be leveraged. A mechanism through which to engage with, and coordinate activities of, all partners and alliances will be developed. RESILIM will place particular emphasis on engagement and collaboration (through joint workshops, seminars, training sessions, basin study tours) with regional USG entities (US Embassies, relevant USAID programs and personnel), with other USAID-funded projects (such as RESILIM-Oliphants, SAREP, and FEWS NET), and with USAID-supported organizations (such as the Council for Scientific and Industrial Research; the Wildlife and Environment Society of South Africa; and the Institute of Natural Resources) – all with a view to enhancing the delivery of the RESILIM program in a manner that responds to local/regional needs, with a high level of impact, and in a sustainable manner.

Communications is also an important aspect of the program. Communications activities are specifically outlined below, but all activities within the program will have a communications aspect, as RESILIM will take every opportunity to raise awareness of our work and tell our story. Finally, monitoring and evaluation (M&E) is envisioned as an important aspect of each activity, and the program as a whole. More details will be provided in the accompanying M&E plan, as RESILIM plans to have a robust system for monitoring and evaluating its work against its objectives.

Component 1 – Reduce climate change vulnerability

KRA 1.1 – Science, technology, and capacity for decision-making and development of climate change adaptation strategies improved.

To understand how vulnerability to climate change can be reduced, it is first necessary to isolate and understand the driving factors of vulnerability; how the management of water resources promotes or constrains resilience; and how decisions are made that determine policies and activities related to how water is managed in the basin. It is also necessary to refine this understanding to determine the critical environmental and social 'tipping points' that will move the users of the basin into situations from which recovery is difficult.

KRA 1.1 seeks to understand the existing climate change adaptation (CCA) capacity within the basin, identify gaps and opportunities in current thinking and plans, and improve the quality thereof. Activities will identify key stakeholders in the Limpopo Basin that have an interest or mandate in resilience building and climate change adaptation, understand where the balance of power and how decisions are made, and map the activities / projects that key stakeholders are involved in and analyze how these function together to optimize results.

Activities under this key result area will also assist in the understanding of the social and environmental thresholds related to climate change, as well as and identify and quantify, to the extent possible, critical 'tipping points' in both social and environmental systems. It will also identify opportunities for opening up water flows in parts of the basin, and will investigate whether there are options to improve upon 'closed basin' status. Activities will include an analysis of the links between climate change and Disaster Risk Reduction (DRR) / Disaster Preparedness that not only identifies links, but also makes recommendations on how this information may be used to strengthen existing Early Warning Systems (EWS), improve preparedness for disasters. This KRA is the starting point for identifying opportunities for RESILIM (and others) to invest in adaptation interventions in the Limpopo Basin. It will include identifying opportunities to leverage additional funding and/or support for specific activities.

Activity 1.1.1 Conduct assessments to understand vulnerability and climate change adaptation needs (including current and projected vulnerabilities and impacts)

Year 1 (February 2013 through September 30, 2013)

<u>Sub-activities</u>

- Desk reviews to identify assessments (including the GIZ funded monograph study) that have been done and information gaps, focusing on transboundary gaps/needs
- Stakeholder participatory analysis of assessments and gaps
- Develop internal working document & external guide, including lessons learned from demonstration pilot projects
- Analysis of current and projected vulnerabilities and impacts

Pontential stakeholders include:

- LIMCOM
- SADC Transboundary Water Programme
- Climate Action Network
- WWF
- Earthlife Africa
- COMESA
- Department of Science and Technology
- Departments of Water
- Departments of Environmental Affairs
- Departments of Natural Resources
- FARPAN
- FEWS NET
- GIZ
- IPACC
- National Institute of Desaster Management
- National Association of Conservancies of South Africa
- PPCR
- Research and academics institutions
- UGBL
- Etc.

Milestones/deliverables

- Basin baseline report and vulnerability assessment report (current and projected vulnerabilities and impacts)
- Basin baseline report incorporating prioritized stakeholder needs
- Baseline vulnerability and impacts publications (including tipping points and transition states)
- Cost-benefit analysis of key threshold interventions
- Lessons learned report on pilot climate change adaptation initiatives incorporating vulnerability and climate change adaptation needs

Resources

- RESILIM technical staff
- Subcontractors, including OneWorld and GWP
- Counterparts and stakeholders
- Grants for possible demonstration projects

Activity 1.1.2 Conduct water demand analysis (including users and risks)[11]

Year 1 (February 2013 through June 2013)

Sub-activities

- Quantify current and future users and demand (considering climate change realities)
- Conduct an assessment on ecosystem water demand (considering climate change realities)
- Identify interventions within the basin aimed at managing the demand of water in response to climate variability and change (identify marginal waters)
- Conduct cost-benefit and feasibility analyses of basin countries marginal water[12] interventions (with aim to make recommendations in activities that could increase water availability considering climate change realities)

Pontential stakeholders include:

- LIMCOM
- SADC Transboundary Water Programme
- Climate Action Network
- Departments of Water
- Departments of Environmental Affairs
- Departments of Natural Resources
- FARPAN
- GIZ
- UGBL
- Etc.

Milestones/deliverables

- Report on water demand (current and projected) and water use scenarios (water futures)
- Ecosystem water use and demand scenarios
- Cost-benefit and feasibility analyses report on marginal waters

Resources

- RESILIM technical staff
- Subcontractors, including GWP and OneWorld

[11] Activity also links to 2.1.1 (conduct assessments of environmental water requirements).

[12] Water that can be recycled, reused or reclaimed, including naturally occurring non-potable water, such as sea water, brackish water, saline and sodic water, unpotable groundwater, rainwater and fog harvesting. Marginal water can be used to supplement/augment intensively exploited conventional sources.

Activity 1.1.3 Provide technical support to develop/access flow forecasting and early warning systems and disaster risk reduction

Year 1 (February 2013 through June 2013)

Sub-activities

- Identify links between existing "early warning systems" or EWS, climate change and disaster risk reduction(DRR)/disaster preparedness in the basin
- Identify strategies for improved DRR and preparedness in the basin and integrate with activity 1.1.4 (DRR/preparedness as an adaptation project of scale)
- Identify and assess capacity of stakeholders receiving information on flow forecasting and early warning systems and identify those best placed to implement DRR and preparedness strategies
- Identify partnerships that can be built in order to support forecasting and building EWS' at basin level
- Support LIMCOM in developing a communications and implementation plan to strengthen existing EWS and DRR plans by integrating climate change impacts, specifically as seen through an ecosystem and social resilience lens at a basin level.

Pontential stakeholders include:

- FARPAN
- FEWS NET
- GIZ
- National Institute of Desaster Management
- Departments of Water
- UGBL
- UN-HABITAT
- Etc.

Milestones/deliverables

- Basin-wide review report
- DRR/preparedness strategy for the Limpopo Basin
- Partnerships developed to support forecasting and EWS
- Capacity needs assessment and recommendations for requisite capacity enhancement (for integration into the capacity building strategy and plan in 3.1.2)
- Information sharing protocols

Resources

- RESILIM technical staff
- Subcontractors, including OneWorld and GWP
- Collaboration with other stakeholders, including FEWSNET project
- STTA if necessary

Life of project (through June 2017)

Description

- Support LIMCOM in developing a communications and implementation plan to strengthen existing EWS and DRR plans by integrating climate change impacts, especially as seen through an ecosystem and social resilience lens at a basin level.
- Provide technical support to enable LIMCOM to initiate protocols on data and information management and sharing

Milestones/deliverables

- Capacity needs assessment and recommendations for requisite capacity enhancement (for integration into the capacity building strategy and plan)
- Information sharing protocols

Resources

- RESILIM technical staff
- Subcontractors, including OneWorld and GWP
- Collaboration with other stakeholders, including FEWSNET project
- STTA if necessary

Activity 1.1.4 Develop basin-level climate change adaptation strategy

Year 1 (April 2013 through September 2013)

Sub-activities

- Develop participatory-based climate and development future scenarios at a basin level with key system stakeholders (including analysis of balance of power and decision-making processes)

Pontential stakeholders include:

- LIMCOM
- Ministry of Planning and Development
- Ministry of State Administration
- SADC Transboundary Water Programme
- Climate Action Network
- COMESA
- Departments of Environmental Affairs
- Departments of Water
- Departments of Natural Resources
- FARPAN
- FEWS NET
- GIZ
- National Institute of Disaster Management
- Departments of Water
- UGBL
- UN-HABITAT
- Etc.

Milestones/deliverables

- Climate and development scenarios for the Limpopo basin
- Basin political analysis report
- Stakeholders activity map
-

Resources

- RESILIM technical and communications staff
- Subcontractors, including OneWorld, GWP and IUCN
- STTA if necessary

Life of project (through June 2017)

Description

- Building on the SADC Climate Change Adaptation Strategy for the Water Sector support LIMCOM and its stakeholders in developing a Limpopo CCA Strategy and Action Plan
- Support LIMCOM and its stakeholders in developing a CCA strategy and action plan

Milestones/deliverables

- Identification of climate adaptation responses with LIMCOM and basin stakeholders
- Critical threshold (basin level) cost benefit analysis (of key threshold interventions)
- Build on SADC Climate Change Adaptation Strategy
- Final Limpopo CC basin adaptation strategy and action plan

Resources

- RESILIM technical and communications staff
- Subcontractors, including OneWorld, IUCN and GWP

Activity 1.1.5 Develop adaptation projects of scale

Year 1 (January 2013 through September 2013)

Sub-activities

- Identify and prioritize with basin system stakeholders scalable adaptation projects (incorporating indigenous knowledge and practices and ensuring a focus on women-led adaptations, with related gender, equity and cultural considerations)

Milestones/deliverables

- Limpopo Basin adaptation projects review report
- Prioritized list of adaptation projects

Resources

- RESILIM technical and communications staff
- Subcontractors, including OneWorld

Life of project (through June 2017)

Description

- Review of adaptation projects in the basin to assess effectiveness
- Leverage partnerships to finance and implement CC adaptation pilot projects

Milestones/deliverables

- Adaptive management guide for the Limpopo basin
- Basin priority adaptation assessment report (projects of scale for the Limpopo basin for stakeholder review)
- Limpopo adaptation investment brief; detailed design for specific projects prioritized by key adaptive system stakeholders

Resources

- RESILIM technical and communications staff
- Subcontractors, including OneWorld
- Grants
- Partnerships to leverage resources
- STTA

KRA 1.2 – Water conservation and water demand management responding to climate change improved

KRA 1.2 seeks to integrate climate change considerations into existing water resource management practices. Activities under this KRA will seek to understand existing water management practices, and analyze water management options that will improve climate change adaptation. Activities under this KRA seek to move toward action with technical support leading to implementation of climate change-integrated water management practices.

The Limpopo Monograph study is a baseline assessment of the Limpopo River supported by GIZ and LIMCOM. The Monograph is comprised of ten (10) components: i) Basin delineation into basin, country and sub-catchment levels; ii) Surface water resources; iii) Ecological/environmental flow requirements; iv) Ground water resources; v) Socio-economic aspects, including water resources economics; vi) Water demand analysis; vii) Water balance

analysis; viii) Management systems/Governance Structures; ix) Training and capacity building; and x) the Limpopo information management system (LIMIS). LIMIS is a web-GIS for data management and information exchange. Its intention is to facilitate the joint access to data from all basin states, which is crucial for collaborative water resources management and development. LIMIS is also envisioned to function as a decision support system and a clearing house mechanism for LIMCOM on data and information related to the Basin. RESILIM will add value to LIMIS by supporting the generation and inclusion of data and information on biodiversity conservation and climate change adaptation. This addresses an identified gap in the IWRM Plan for the Limpopo river basin.

Water is everyone's business—within the Limpopo Basin there are many stakeholders, including private sector water users, municipalities, commercial and subsistence farmers, conservation and ecotourism organizations, all of whom have a vested interest in better water management. Partnerships around water demand management will be initiated under these activities working closely with LIMCOM, GWP and other development partners. Focus will also be on ensuring that strategies on water conversation are developed with particular emphasis on marginalized groups within the basin.

Activity 1.2.1 Provide technical support to integrate climate, water, and ecosystems data and information into LIMIS

Year 1 (February 2013 through September 30, 2013)

Sub-activities

- Scope existing tools, mechanisms, and practices for integrating climate and water information at national and transboundary levels
- Identify gaps in LIMIS (as a decision support system for LIMCOM in the context climate change, water and ecosystems data needs)
- Provide technical support to LIMCOM to enhance LIMIS by integrating climate, water, and ecosystems data and information
- Provide technical support to enable LIMCOM to initiate protocols on data and information management and sharing

Potential stakeholders include

- LIMCOM
- GIZ
- Aurecon
- SADC Water Division
- Environmental Departments (Climate Services)
- SADC FANR
- Etc.

Milestones/deliverables

- Scoping report on existing tools, mechanisms and practices for integrating climate and water information
-
- An improved LIMIS, integrating climate, water, and ecosystem data and information
- Information sharing protocols

Resources

- RESILIM technical and communications staff
- Subcontractors, including OneWorld, IUCN and GWP
- STTA, training resources for capacity building plan

Life of project (through June 2017)

Description

- Provide technical support to LIMCOM to enhance LIMIS by integrating climate, water, and ecosystems data and information
- Provide technical support to enable LIMCOM to initiate protocols on data and information management and sharing

Milestones/deliverables

- An improved LIMIS, integrating climate, water, and ecosystem data and information
- Training plan for LIMIS, including:
    - toolkits on the use of LIMIS;
    - awareness raising and training initiatives;
    - training materials and training event reports

Resources

- RESILIM technical and communications staff
- Subcontractors, including OneWorld, IUCN and GWP
- STTA, training resources for capacity building plan

Activity 1.2.2 Support the implementation of water demand management (WDM) projects in the basin

Year 1 (February 2013 through September 30, 2013)

Sub-activities

- Identify and promote water management practices and strategies that respond to climate change
- Identify and prioritize with stakeholders areas where water demand management projects can be carried out as a climate change adaptation strategy
- Build partnerships that will lead to the implementation of water demand management strategies and projects in the basin
- Develop strategies to ensure inclusion of vulnerable and marginalized groups (such as poor women and youth) in water demand management initiatives

Potential stakeholders include

- LIMCOM
- Catchment/District Councils
- Departments of Water
- SADC Water Division
- Ministries of Local Government
- NGO dealing with Community Development
- Etc.

Milestones/deliverables

- Prioritized water management options to respond to climate change in the Limpopo
- Identified and prioritized project areas for WDM interventions in the basin
- Partnerships for implementing WDM interventions
- Strategies for incorporating gender-related issues into water demand management initiatives

Resources

- RESILIM technical staff
- Subcontractors, including GWP and OSC
- Partnership development
- Grants for project piloting and support to youth and women groups in the basin

Life of project (through June 2017)

Description

- Build partnerships that will lead to the implementation of water demand management strategies and projects in the basin
- Develop strategies to ensure inclusion of vulnerable and marginalized groups (such as poor women and youth) in water demand management initiatives

Milestones/deliverables

- Partnerships for implementing WDM interventions
- School and women's groups pilot projects on water conservation

Resources

- RESILIM technical staff
- Subcontractors, including GWP
- Partnership development
- Grants for project piloting and support

KRA 1.3 – Integration of climate change adaptation strategies into long-term management plans and policies increased

At present, climate change adaptation is not integrated into long-term management plans and policies in the Limpopo basin. KRA 1.3 (in parallel with KRA 1.2) will seek to integrate climate change adaptation considerations into existing transboundary water management plans and policy. LIMCOM will be a major counterpart under this KRA, and we will work closely with the Commission to integrate CCA strategies into the long-term LIMCOM IWRM Strategy and LIMIS. Activities under this KRA will also focus on increasing the capacity of and knowledge resources available to policy makers in the basin, so that ongoing and future transboundary resource management plans include critical climate change adaptation considerations.

Activity 1.3.1 Build capacity to improve effective decision-making in relevant sectors to integrate climate change adaptation strategies into long-term management plans and policies

Year 1 (February 2013 through September 30, 2013)

Sub-activities

- Identify sectors and decision/policy makers to target for integration of CCA strategies into long-term plans

Milestones/deliverables

- Prioritized list of sectors and decision/policy makers in water management

Resources

- RESILIM technical staff
- Subcontractors, including OneWorld, GWP, and OSC
- STTA as necessary

Potential stakeholders include

- LIMCOM
- Ministries of Environment
- Departments of Water
- Planning Units
- GIZ
- FARPAN
- FEWS NET
- Water Net/CapNet
- Research and academic Institutions
- National Basin-wide Foruns
- COMESA
- SADC Secretariat – Food and Natural Resources Division
- SADC Transboundary Programme

Life of project (through June 2017)

Description

- Assist LIMCOM and other targeted decision/policy makers to develop a CCA-based water management approach for integration into IWRM Strategy

Milestones/deliverables

- Guidelines/toolkits on CCA-based water management
- CCA integrated into the LIMCOM IWRM Strategy

Resources

- RESILIM technical staff
- Subcontractors, including OneWorld, GWP, and OSC
- STTA as necessary

Activity 1.3.2 Develop a framework for evaluating opportunities for public-private partnerships (PPPs) around climate change adaptation strategies[13]

Year 1 (January 2013 through September 30, 2013)

Sub-activities

- Develop a strategy (including civil society) that will highlight opportunities where PPPs can help to drive climate change adaptation in the basin
- Build an awareness on the importance of private sector involvement in CCA in the basin
- Facilitate dialogue between possible PP Partners

Potential stakeholders include

- LIMCOM
- Ministries of Environment
- Departments of Water
- Private sector
- Water infrastructure institutions
- Statistics Offices
- Etc.

Milestones/deliverables

- Framework for evaluating opportunities for PPPs in climate change adaptation in the Limpopo Basin PPP strategy
- Awareness materials promoting PPPs in CCA

Resources

- RESILIM technical staff
- Subcontractors, including GWP and OneWorld
- STTA as necessary
- Grants
- Partnerships

Life of project (through June 2017)

Description

- Build an awareness on the importance of private sector involvement in CCA in the basin
- Pilot PPP initiatives and adapt as necessary

[13] This acitivity is the same as 2.3.3--- The idea being to emphasize that some activities respond to several objectives across RESILIM's three components.

- Develop a database of potential PPPs in the Limpopo Basin to implement CCA in the basin

Milestones/deliverables

- Awareness materials promoting PPPs in CCA
- PPP initiatives/projects established
- Database of PPP opportunities

Resources

- RESILIM technical staff
- STTA as necessary
- Grants
- Partnerships

Activity 1.3.3 Review and incorporate applicable components of the UN-Habitat Flood and Drought Disaster Risk Reduction Strategy into LIMCOM IWRM plan

Year 1 (February 2013 through September 30, 2013)

Sub-activities

- Review results of UN-Habitat Floods and Droughts Disaster Risk Reduction Strategy and provide recommendations for basin CCA strategy
- Provide technical support to LIMCOM to incorporate findings into basin climate change adaptation strategy and LIMCOM IWRM Strategy

Potential stakeholders include

- LIMCOM
- Research institutions
- Ministries of Environment
- National Disaster and Risk Reduction and Preparedness institutions
- SADC Water Unit
- Departments of Water
- Private sector
- Water infrastructure institutions
- Etc.

Milestones/deliverables

- Recommendations for integration into basin CCA strategy and LIMCOM IWRM Strategy

Resources

- RESILIM Technical staff
- Subcontractors as necessary
- Partners and stakeholders

Life of project (through June 2017)

Description

- Provide technical support to LIMCOM to incorporate findings into basin climate change adaptation strategy

Milestones/deliverables

- CCA strategy incorporating updated information and recommendations from UN-Habitat Floods and Droughts Disaster Risk Reduction Strategy
- CCA strategy continually updated

Resources

- RESILIM Technical staff
- Subcontractors as necessary

- Partners and stakeholders
- Grants

Component 1 – Cost information

Management and Administrative costs

- Approximately $22,385 per month in year 1
- January –September 2013: approximately $201,462
- Remaining life of project total: approximately $1,212,145

Technical Services costs

- Approximately $66,280 per month in year 1
- January –September 2013: approximately $596,526
- Remaining life of project total: approximately $3,277,234

Component 2 – Conserve Biodiversity and Sustainably Manage High-Priority Ecosystems

KRA 2.1 – Natural resources management practices that mitigate threats to biodiversity improved

KRA 2.1 seeks to address current resource management practices that adversely impact biodiversity, such as the current over-allocation of limited water resources. This effort will be led by the RESILIM partner IUCN, working in partnership with its members, such as Ministries of Environment and the Kalahari Conservation Society, and key stakeholders such as Southern Waters. In this context, and at the onset of implementation, RESILIM will assess ecological flow requirements in relevant sites and catchments and will complement the work already being done by Aurecon for the monograph study. We will work with LIMCOM, GIZ, and the GIZ monograph study team to identify prioritized areas for other similar forms of collaboration. For example, working with and through relevant water management authorities, ministries etc in the basin, RESILIM will also provide technical support to LIMCOM to include water auditing and an assessment of current water allocation plans, and will specifically contribute to the water allocation and water quality strategic objectives of the LIMCOM IWRM Plan.

RESILIM will work with key stakeholders to identify indicators for biodiversity and ecosystem health monitoring, and will conduct a basin-wide biodiversity and ecosystem health assessment. As with the environmental flows assessments, RESILIM will train decision makers on how to interpret and use biodiversity and ecosystem information for ecosystem and water management purposes. Additionally, RESILIM will support LIMCOM to establish a Biodiversity Technical Task Team as one of its functional organs to provide a vision for long-term, strategic integration of biodiversity management objectives into transboundary water resources management.

Activities under this KRA will move towards action by collaborating with and, when appropriate, scaling up existing water quality monitoring programs, as well as supporting local Community Based Natural Resource Management (CBNRM) interventions.

Activity 2.1.1 Conduct assessments of environmental water (ecological flow) requirements[14]

Year 1 (January 2013 through September 30, 2013)

Sub-activities

- Review existing or ongoing environmental flow assessments done for parts of the Limpopo basin (including the ongoing environmental flows assessment component under the GIZ Monograph Study) and identify and prioritize areas for collaboration and expansion to the basin level

Milestones/deliverables

- Environmental flow assessment review report

Resources

- RESIILM technical and communications staff
- Subcontractors, including IUCN, GWP, OneWorld
- Grants as necessary

Potential stakeholders include

- Departments of water affairs
- Departments of environmental affairs
- GIZ
- Aurecon
- Ministry of Agriculture
- SADC Water Division
- SADC FANR
- Southern Waters
- UGBL Mozambique
- Water infrastructures owners and operactors
- Departments of Tourism

Life of project (through June 2017)

Description

- Provide technical support to LIMCOM and its associated institutions at the national level to evaluate water availability and demand issues through water auditing and an assessment of current water allocation plans (activity is the same as in 1.1.2. It is shown here as an indication that some activities will fulfill different objectives of the three components of RESILIM)
- Undertake or expand environmental flow assessments identified to cover critical habitats in the basin level

Milestones/deliverables

- Report on water availability and demand in the basin
- Report on results of expanded environmental flow assessments
- Environmental flow requirement scenarios (hydro-ecological models)

Resources

- RESILIM technical and communications staff
- Subcontractors, including IUCN, GWP and OneWorld
- Grants as necessary

[14] Acitivity has linkages to 1.1.2; RESILIM recognizes the need to align these two during implementation to ensure concurrent delivery.

Activity 2.1.2 Conduct basin-wide biodiversity and ecosystem health monitoring

Year 1 (January 2013 through September 30, 2013)

Sub-activities

- Consult with key stakeholders and review current science to identify and determine methodologies, projects and programs in use for conducting biodiversity and ecosystem health monitoring
- Consult with key stakeholders to identify and determine extent (geographical, institutional, etc) of use of and support for existing methodologies
- Based on stakeholder consultation, agree appropriate comparative methods and locations (gaps) for conducting biodiversity and ecosystem health monitoring

Potential stakeholders include:

- Departments of Environmental Affairs
- Departments of Water Affaris
- SANBI and similar organizations in another countries
- FANRPAN
- Bird Life
- KCS
- IES (Zimbabwe, Botswana)
- SADC FANR
- Universities
- TFCAs

Milestones/deliverables

- Report on methodologies and programs in use for determining biodiversity and ecosystem health monitoring
- Report on use of and support for identified methods
- Report on identified methods and locations for conducting biodiversity and ecosystem health monitoring

Resources

- RESIILM Technical staff
- Subcontractors, including IUCN
- STTA as necessary

Life of project (through June 2017)

Description

- Set baselines and implement agreed methodologies in target areas
- Determine training needs and recipients (among decision makers and other stakeholders) on use and interpretation of biodiversity and ecosystem information
- Provide/facilitate appropriate training on use and interpretation of biodiversity and ecosystem information
- Based on existing information and that collected for the project, compile a “state of the basin ecosystem” report. The nature of the report, i.e. format, availability etc, will be discussed and agreed with relevant regional and national bodies, such as Ministries of Environment, and LIMCOM prior to development. The aim is that the report will be utilized by the same stakeholders as a baseline that highlights areas for action for future. The report will be derived from and refer to other relevant basin monitoring systems.

Milestones/deliverables

- Baseline data and reports on results of implemented methodologies
- Training needs report
- Training plan, training materials, and event reports

- "State of the basin ecosystem" report (highlighting key ecosystems, transboundary threats and root causes, and governance and institutional framework)
- Training plan, training materials, and event reports

Resources
- RESIILM Technical staff
- Subcontractors, including IUCN
- STTA as necessary

Activity 2.1.3 Support and scale up to basin level joint water quality and aquatic weed monitoring programs

Year 1 (February 2013 through September 30, 2013)

Sub-activities
- Assess ongoing sub-basin level water quality and aquatic weed monitoring initiatives

Milestones/deliverables
- Assessment report of ongoing initiatives

Resources
- RESILIM technical staff
- Subcontractors, including IUCN
- Grants as necessary

Potential stakeholders include
- Departments of water affairs
- Departments of environmental affairs
- Ministry of Agriculture
- SADC Water Division
- SADC FANR
- Water infrastructures owners and operators
- Industries (e.g. mines and agriculture)
- Etc.

Life of project (through June 2017)

Description
- Develop and implement a scaling plan for a basin-wide water quality/aquatic weed monitoring system
- Support joint Basin baseline water quality/aquatic weed surveys
- Generate water quality/aquatic weed data and information for purposes of LIMIS

Milestones/deliverables
- Scaling plan for basin wide monitoring program
- Guidelines on scaling up of pilot monitoring program
- Baseline water quality data/reports
- Pilot programs implemented
- Water quality data/aquatic weed data information incorporated into LIMIS

Resources
- RESILIM technical staff
- Subcontractors, including IUCN
- Grants as necessary

Activity 2.1.4 Support sub-catchment CBNRM and co-management interventions that mitigate threats to biodiversity

Year 1 (February 2013 through September 30, 2013)

Sub-activities

- Identification of existing CBNRM initiatives that support mitigation of threats to biodiversity in the basin
- Identification of best practices

Milestones/deliverables

- Database of CBNRM initiatives(including best practices) mitigating threats to biodiversity in the basin

Resources

- RESILIM technical staff
- Subcontractors, including IUCN
- Grants for piloting and scaling up initiatives

Potential stakeholders include:

- Departments of Environmental Affairs
- Departments of Wildlife
- SANBI and similar organizations in another countries
- KCS
- Campfire Association
- Resource Africa
- IES (Zimbabwe, Botswana)
- SADC FANR
- TFCAs
- Environmental Fund
- Departments of Tourism
- Park Authorities

Life of project (through June 2017)

Description

- Assess scalability and replication of best practices to the transboundary level
- Pilot scaling up/facilitate replication of best practices to transboundary level
- Provide technical support on replicating best practices in the Basin

Milestones/deliverables

- Guidelines on scaling up of best practices on CBNRM and co-management /Guidelines on replication of best practices
- Reports on scaling up initiatives
- Guidelines on replication of best practices on CBNRM and co-management

Resources

- RESILIM Technical staff
- Subcontractors, including IUCN
- Grants for piloting and scaling up initiatives

KRA 2.2 – Ecological integrity and resilience to climate change in key/priority conservation areas improved

KRA 2.2 seeks to show improvement in ecological health and climate change resilience in priority protected areas in the face of on-going degradation of ecosystem health and anticipated adverse impacts of climate change in the basin. Lead by IUCN, RESILIM will consult with stakeholders to identify priority "hotspots," geographic areas within the basin where issues of conservation, water, and livelihoods converge, including TFCAs, national parks, and private game reserves in collaboration with relevant bodies and authorities, such as Ministries of Environment, environmental NGOs etc. Activities under this KRA will involve coordination with the RESILIM cooperative agreement team to ensure inclusion of stakeholders at the sub-

catchment level and advise national government agencies on how to integrate priority areas into national biodiversity action plans or similar processes.

Activity 2.2.1 Conduct assessment and prioritization of critical habitats projected to be impacted by climate change and water scarcity and hazards such as flooding

Life of project (through June 2017)

Description

- Support LIMCOM and other relevant regional and national bodies in jointly developing criteria for the identification and mapping of biodiversity "hotspots" (ie- geographic areas where issues of conservation, water, and livelihoods converge) in the basin. The above will be based on work already undertaken through NBSAPs
- Develop conservation management plans for biodiversity hotspot areas to minimize human-natural resource conflicts
- Develop guidelines on how to integrate biodiversity hotspots into transboundary water resources management and Limpopo CCA Strategy

Potential stakeholders include:

- Departments of Environmental Affairs
- Departments of Water Affaris
- SANBI and similar organizations in another countries
- FANRPAN
- Bird Life
- KCS
- IES (Zimbabwe, Botswana)
- SADC FANR
- Universities
- TFCAs
- IPACC
- WWF (add all before)
- Climate Action Network
- National Institute for Disaster Risk and Preparedness and similar in other countries

Milestones/deliverables

- Basin-wide criteria for identification and mapping of biodiversity hotspots
- Map of biodiversity hotspots in basin
- Conservation management plans
- Guidelines for integration of Biodiversity Hotspots into transboundary water resources management
- Conservation management strategies in hotspots integrated into CCA Strategy

Resources

- RESILIM technical staff
- Subcontractors, including IUCN and OSC
- Counterparts and stakeholders
- Grants
- STTA

KRA 2.3 – Integration of climate change adaptation and biodiversity conservation into basin water and resource management plans increased

KRA 2.3 seeks to incorporate CCA and biodiversity conservation practices into basin-wide water and resource management plans in the face of on-going degradation of ecosystem health and associated services, and anticipated adverse impacts of climate change in the basin. First, and led by IUCN, RESILIM will work to incorporate (through LIMCOM) best practices around ecosystem-based water management into transboundary water management (e.g. the IWRM plan) based on experience gathered from work on the Pangani, Okavango and other watercourses in the region. Activities under this KRA will involve adapting existing models to the Limpopo context, and coordination with other key stakeholders in the basin, such as

authorities of protected areas and SADC FANR to ensure that current science and ecosystem management practices are incorporated into transboundary water management. This will ensure alignment between strategies, plans, activities, and stakeholder input and agreement.

In addition, RESILIM will work with LIMCOM and other key counterparts to assist in expanding the range and nature of data and information currently held by and in LIMIS, with a particular focus on biodiversity and climate change related information and data. Additionally, there are several river basin governance toolkits available that integrate water, conservation, and climate change adaptation, such as those developed by IUCN (e.g. the "WANI toolkits" on flow, payment for ecosystem services, governance etc). RESILIM will work with and support LIMCOM to determine the appropriateness of these and other existing tools, in part or whole, and adapt them to the LIMCOM context. Application of these tools may require training to ensure effective use.

Activity 2.3.1 Develop/strengthen decision-support tools for transboundary water management (incorporating climate change realities, economic, social, and environmental data)

Year 1 (April 2013 through September 30, 2013)

Sub-activities

- Review of decision-support tools used in other River Basin Organizations, with a view to determine where LIMIS can be enhanced to incorporate ecosystem-based water management

Potential partners include:
- LIMCOM
- SADC Water Division
- SADC FANR
- TFCA

Milestones/deliverables

- Review report with recommendations for the improvement of LIMIS

Resources

- RESILIM technical staff
- Subcontractors, including IUCN, GWP, OneWorld, and OSC
- Counterparts and stakeholders
- STTA as necessary
- Grants as necessary

Life of project (through June 2017)

Description

- Provide technical support to LIMCOM to include data and information on ecosystem maintenance, biodiversity conservation, and human development needs into LIMIS database
- Provide river basin governance toolkits that integrate water, conservation, and climate change adaptation (eg- Limpopo River Basin Awareness Kit, FLOW and Governance of Shared Waters)

Milestones/deliverables

- Improved LIMIS, incorporating data and information on ecosystem maintenance, biodiversity conservation and human development
- Existing governance toolkits acquired and distributed and training provided to relevant stakeholders in the Limpopo basin

Resources

- RESILIM technical staff
- Subcontractors, including IUCN, OneWorld, and OSC
- Counterparts and stakeholders
- STTA as necessary
- Grants as necessary

Activity 2.3.2 Support decision/policy makers in relevant sectors to integrate biodiversity conservation strategies into long-term management plans and policies

Year 1 (February 2013 through September 30, 2013)

Sub-activities

- Identify sectors and decision/policy makers to target for integration of biodiversity conservation strategies into long-term plans

Potential partners include:

- Ministries of Environemental
- Ministries of Development and Planning
- Ministries of Water
- Ministries of Agriculture
- Ministries of Mines
- Etc.

Milestones/deliverables

- Prioritized list of sectors and decision/policy makers in water management

Resources

- RESILIM technical staff
- Subcontractors, including IUCN, GWP, and OSC
- STTA as necessary
- Grants

Life of project (through June 2017)

Description

- Develop guidelines for integration of biodiversity conservation strategies into sectoral plans and policies
- Assist LIMCOM and other targeted decision/policy makers to develop a biodiversity conservation-based water management model

Milestones/deliverables

- Guidelines/toolkits on integration of biodiversity conservation-strategies into sectoral plans and polices
- Ecosystem-based transboundary water management models

Resources

- RESILIM technical staff
- Subcontractors, including IUCN, GWP, and OSC
- STTA as necessary

Activity 2.3.3 Develop a framework for evaluating opportunities for public-private partnerships (PPP) around biodiversity conservation strategies

Year 1 (January 2013 through September 30, 2013)

Sub-activities

- Develop a strategy (including civil society) that will highlight opportunities where PPPs can help to drive biodiversity conservation in the basin
- Build an awareness on the importance of private sector involvement in biodiversity conservation in the basin
- Facilitate dialogue between possible PP Partners

Milestones/deliverables

- Framework for evaluating opportunities for PPPs in biodiversity conservation in the Limpopo Basin
- PPP strategy
- Awareness materials promoting PPPs in biodiversity conservation

Resources

- RESILIM technical staff
- STTA as necessary
- Partnerships

Life of project (through June 2017)

Description

- Build an awareness on the importance of private sector involvement in biodiversity conservation in the basin
- Pilot PPP initiatives and adapt as necessary
- Develop a database of potential PPPs in the Limpopo Basin to implement biodiversity conservation in the basin

Milestones/deliverables

- Awareness materials promoting PPPs in biodiversity conservation
- PPP initiatives/projects established
- Database of PPP opportunities

Resources

- RESILIM technical staff
- STTA as necessary
- Partnerships

Component 2 – cost information

Management and Administrative costs

- Approximately $22,385 per month in year 1
- January –September 2013: approximately $201,462
- Remaining life of project total: approximately $1,212,145

Technical Services costs

- Approximately $59,375 per month in year 1

- January –September 2013: approximately $534,375
- Remaining life of project total: approximately $3,053,047

Component 3 – Build Capacity of Stakeholders

KRA 3.1 – Capacity of all levels of government to formulate transboundary and integrated water, ecosystem management and climate change adaptation policies and strategies improved

KRA 3.1, linked closely with the objectives of components 1 and 2, seeks to improve the capacity of government-level policy and decision-makers to effectively manage water resources in the Limpopo basin. Activities under this KRA will determine the capacity needs of LIMCOM and other key government stakeholders, and develop a capacity building strategy to address prioritized needs and the skills gap. The capacity development will utilize existing guidelines and tools (such as the GWP IWRM ToolBox, IUCN WANI Toolkits) and those developed in Component 1 and 2. With effective transboundary, climate change-responsive, ecosystem-based IWRM as a guiding pillar, RESILIM will engage training resources to allow key government counterparts to make informed and effective decisions.

RESILIM will support LIMCOM to develop communications materials, such as guidelines, manuals, policy briefs on effective transboundary ecosystem-based water management for LIMCOM commissioners, secretariat and national government authorities and planning/decision-makers to improve their awareness and skills. RESILIM also will support exchange visits of these key stakeholders to other river basins within the region, such as Okavango-Senqu, Orange, Zambezi, and if necessary to other African river basin, as well as through the promotion of links to professional networks and knowledge hubs.

Activity 3.1.1 Conduct capacity needs assessment for effective transboundary ecosystem-based water management/IWRM for LIMCOM

Year 1 (May 2013 through September 30, 2013)

Sub-activities

- Carry out an institutional analysis on transboundary governance institutions of which national governments are a member (e.g. COMESA, SADC), as well as LIMCOM, the TFCAs, department of water affairs, environment/natural resources departments, to determine areas needed for strengthening
- Collate identified needs/areas where capacity building support is required (to deepen the understanding of integrating water, ecosystem management, and climate change adaptation in transboundary water management)

Potential stakeholders include:

- LIMCOM
- Ministries of Environment
- Departments of Water
- Water Net/CapNet
- Research and academic Institutions
- National Basin-wide Foruns
- Etc.

Milestones/deliverables

- Database of key institutions for RESILIM
- Institutional (SWOT-Strengths, Weaknesses, Opportunities and Threats) analysis on key institutions benefiting from RESILIM (linked to systems analysis in component 1)

- Prioritized list of sectors and decision/policy makers in water management
- Capacity building needs assessment report with recommendations

Resources
- RESILIM technical staff
- Subcontractors, including GWP (contributions on capacity building needs from OneWorld and IUCN from Component 1 and 2)

Activity 3.1.2 Establish and implement a capacity building plan for effective transboundary ecosystem-based water management/IWRM for LIMCOM

Year 1 (February 2013 through September 30, 2013)

Sub-activities
- Assess capacity needs (individual, institutional) in climate change impacts and adaptation
- Develop a basin-wide capacity building strategy and plan regarding ecosystem-based approaches to water management/IWRM responding to the needs assessment

Potential stakeholders include:
- LIMCOM
- Ministries of Environment
- Departments of Water
- Water Net/CapNet
- Research and academic Institutions
- National Basin-wide Foruns

Milestones/deliverables
- Assessment report on capacity needs
- Capacity building strategy and plan (to cover IWRM, ecosystem approach, climate change)
- Reports on assistance responding to capacity building plan (guidelines, manuals, policy briefs, exchange visits, tools, study tours, links to professional networks, knowledge hubs, etc)

Resources
- RESILIM technical staff
- Subcontractors, including OneWorld, GWP, IUCN and OSC
- Grants

Life of project (through June 2017)

Description
- Pilot prioritized components of the capacity building strategy and plan

Milestones/deliverables
- Reports on assistance responding to capacity building plan (guidelines, manuals, policy briefs, exchange visits, tools, links to professional networks, knowledge hubs, etc)

Resources
- RESILIM technical staff
- Subcontractors
- STTA
- Grants

KRA 3.2 – Knowledge and awareness of climate change impacts and adaptation measures increased

KRA 3.2 seeks to increase knowledge and awareness of climate change adaption within the Limpopo Basin. Activities under this KRA will be weighted towards the development and implementation of a comprehensive Knowledge Management and Communication Plan (KMCP) for RESILIM. The plan will be designed to ensure that stakeholders and decision makers (RESILIM beneficiaries – potential stakeholders who have been identified for the various activities in Component 1 and 2) at all levels within the basin will have access to the information necessary to support sound decision making with regard to climate change impacts. A stakeholder assessment will be carried out to identify the target group, what information is relevant to them and how it will packaged for their use. This will be implemented in line with activities under Component 1. The Knowledge Management and Communication Strategy will also focus on ensuring there is an emphasis on responding to vulnerable groups including women and children to adapt to climate change. Activities will ensure that vulnerable groups like women and children are a priority, and will design materials that cater to a wide target audience. Activities under this KRA will also utilize grants to promote study tours and learning from more mature RBOs and transboundary contexts.

Activity 3.2.1 Develop basin-wide knowledge management and communication strategies for climate change impacts and adaptation measures

Year 1 (February 2013 through September 30, 2013)

Sub-activities

- Conduct assessment of knowledge management and communications capacity needs to support implementation of Component 1
- Develop knowledge management and communications strategy and plan aimed at ensuring RESILIM outputs are relevant to key stakeholders in the basin to support decision making in climate change impacts and adaptation measures
- Implement prioritized aspects of the plan aimed at increasing awareness and knowledge of CCA

Potential stakeholders include:

- LIMCOM
- Ministries of Environment
- Departments of Water
- Water Net/CapNet
- Research and academic Institutions
- National Basin-wide Foruns

Milestones/deliverables

- Needs assessment report on knowledge management and communication for stakeholders (including capacity of LIMIS)
- Knowledge Management and Communications Strategy and Plan

Resources

- RESILIM technical and communications staff
- Subcontractors, including OSC, OneWorld, IUCN, and GWP
- STTA
- Grants

Life of project (through June 2017)

Description

- Implement prioritized aspects of the plan aimed at increasing awareness and knowledge of CCA

Milestones/deliverables

- Awareness campaigns on climate change, biodiversity, ecosystems, and water management
- Knowledge management and communications products generated to enhance stakeholder needs (including LIMIS)
- Awareness campaigns on climate change, biodiversity, ecosystems, and water management

Resources

- RESILIM technical and communications staff
- Subcontractors, including OSC and OneWorld
- STTA
- Grants

Activity 3.2.2 Develop strategies for cooperation on resiliency-building

Year 1 (July 2013 through September 30, 2013)

Sub-activities

- Review best practices in transboundary basin cooperation and coordination mechanisms (include legal, regulatory and policy)
- Develop appropriate strategies for improved cooperation and coordination in the Limpopo River Basin

Potential stakeholders include:

- LIMCOM
- Ministries of Environment
- Departments of Water
- Water Net/CapNet
- Research and academic Institutions
- National Basin-wide Foruns

Milestones/deliverables

- Best practices review report
- Report on recommendations for LIMCOM
- Transboundary cooperation framework on CC adaptation (including climate change and ecosystem approach)

Resources

- RESILIM technical staff
- Subcontractors, including OneWorld

Life of project (through June 2017)

Description

- Integrate relevant strategies into CCA Strategy and LIMCOM IWRM Strategy
- Provide technical support to LIMCOM for an institutional analysis, with a view to develop a LIMCOM business plan

Milestones/deliverables

- Guidelines on how to integrate relevant strategies into IWRM plan (developed from meetings, workshop reports)
- Report on institutional analysis
- LIMCOM Business Plan to enhance sustainable financing model for LIMCOM

Resources

- RESILIM technical staff
- Subcontractors, including OneWorld

KRA 3.3 – Knowledge and awareness of integrated and sustainable water management strategies and practices increased

KRA 3.3 seeks to increase knowledge and awareness of sustainable water management within the Limpopo Basin. Activities under this KRA will be weighted towards the development and implementation of a comprehensive Knowledge Management and Communication plan. The plan will be designed to ensure that the identified stakeholders to benefit from RESILIM and decision makers at all levels within the basin will have the information necessary to support sound decision making with regard to integrated and sustainable water management. Activities will ensure that vulnerable groups like women and children are a priority, and will design materials that cater to a wide variety of stakeholders. Activities under this KRA will also utilize grants to promote study tours and learning from more mature RBOs and transboundary contexts.

Activity 3.3.1 Develop basin-wide knowledge management and communication strategies for integrated and sustainable water management

Year 1 (February 2013 through September 30, 2013)

Sub-activities

- Conduct assessment of knowledge management and communications capacity of RESILIM stakeholders to address integrated and sustainable water management strategies and practices
- Develop Knowledge Management and Communications Strategy and Plan aimed at ensuring key stakeholders in the region have information to support decision making in integrated and sustainable water management strategies and practices (prioritize gathering indigenous knowledge and information aimed at ensuring vulnerable groups including women and children participate in sustainable water management)
- Implement prioritized aspects of the plan aimed at increasing awareness and knowledge of integrated and sustainable water management

Potential stakeholders include:

- LIMCOM
- Ministries of Environment
- Departments of Water
- Water Net/CapNet
- Research and academic Institutions
- National Basin-wide Foruns

Milestones/deliverables

- Review Report on capacity needs for RESILIM stakeholders on knowledge management communication
- Integrated and sustainable water management issues included in the Knowledge Management and Communications Strategy and Plan
- Knowledge management and communications products generated
- Awareness campaigns on integrated and sustainable water management

Resources

- RESILIM technical and communications staff
- Subcontractors, including OSC and GWP
- STTA
- Grants

Life of project (through June 2017)

Description

- Implement prioritized aspects of the plan aimed at increasing awareness and knowledge of integrated and sustainable water management

Milestones/deliverables

- Awareness campaigns on integrated and sustainable water management

Resources

- RESILIM technical and communications staff
- Subcontractors, including OSC, GWP and IUCN
- STTA
- Grants

Activity 3.3.2 Develop and implement mechanisms for operationalizing cooperation for building resilience in transboundary integrated water management

Year 1 (July 2013 through September 30, 2013)

Potential stakeholders include:

- LIMCOM
- Ministries of Environment
- Departments of Water
- Water Net/CapNet
- Research and academic Institutions
- National Basin-wide Foruns
- Etc.

Sub-activities

- Review best practices in transboundary basin cooperation and coordination mechanisms (include legal, regulatory and policy)
- Develop appropriate mechanisms on improved cooperation and coordination in the Limpopo River Basin

Milestones/deliverables

- Best practices review report
- Report on recommendations for LIMCOM
- Transboundary cooperation framework on IWRM

Resources

- RESILIM technical staff
- Subcontractors, including GWP

Life of project (through June 2017)

Description

- Integrate relevant mechanisms into LIMCOM IWRM Strategy
- Develop a sustainable business model for LIMCOM

Milestones/deliverables

- Guidelines on how to integrate relevant mechanisms into IWRM Strategy (developed from meetings, workshop reports)
- Business Plan for LIMCOM

Resources

- RESILIM technical staff
- Subcontractors, including GWP

Activity 3.3.3 Provide support to promote skills development in integrated and sustainable water management strategies and practices

Year 1 (June 2013 through September 30, 2013)

Sub-activities

- Assess skill needs (individual, institutional) in integrated and sustainable water management strategies and practices
- Develop skills capacity building plan
- Implement skills capacity building in integrated and sustainable water management strategies and practices

Potential stakeholders include:

- LIMCOM
- Ministries of Environment
- Departments of Water
- Water Net/CapNet
- Research and academic Institutions
- National Basin-wide Foruns
- Etc.

Milestones/deliverables

- Assessment report on skills needs
- Skills capacity building plan included in Capacity Development Strategy and Plan
- Improved local and regional skills in integrated and sustainable water management (through scholarships, curriculum development, study tours, conferences, etc)

Resources

- RESILIM technical staff
- Subcontractors, including GWP
- Grants

Life of project (through June 2017)

Description

- Implement skills capacity building in integrated and sustainable water management strategies and practices

Milestones/deliverables

- Improved local and regional skills in integrated and sustainable water management (through scholarships, curriculum development, study tours, conferences, etc)

Resources

- RESILIM technical staff
- Subcontractors, including GWP
- Grants

Component 3 – cost information

Management and Administrative costs

- Approximately $23,063 per month in year 1
- January –September 2013: approximately $207,567
- Remaining life of project total: approximately $1,248,877

Technical Services costs

- Approximately $50,919 per month in year 1
- January –September 2013: approximately $458,269
- Remaining life of project total: approximately $3,141,951

Section IV. Risks Assessment and Mitigation

The risks confronting the RESILIM Program have been carefully considered during program conceptualisation and preparation, and to a large extent risk mitigation measures have been internalised into the design of the RESILIM program (i.e. through program interventions). A careful analysis of threats to biodiversity, water resources, and other production sectors using a climate change lens have been considered, and will need to be evaluated in more detail during the implementation phase. At this juncture, the order and magnitude of threats are considered serious and expected to become worse in the long-term with increasing human-induced pressures. As such, program interventions have been designed to anticipate changes in the threat profile. Six key risks have been identified, and are summarised below. Other assumptions behind the design are detailed in the technical proposal for the RESILIM Program.

Table 1: Risks, Ratings, and Mitigation Measures

Risk	Risk Rating*	Risk Mitigation Measure
1. Upstream Risks: The four riparian countries of the Limpopo River basin fail to reach a mutual consensus on water sharing arrangements.	M	Associated Activities: Strengthen transboundary river basin governance. Establishment of the Limpopo Watercourse Commission (LIMCOM) and associated Secretariat to coordinate water resource management decisions and activities in the Basin. RESILIM Program: RESILIM is designed to work through LIMCOM and in partnership with LIMCOM to analyse and interpret threats in the context of climate change and biodiversity conservation, and assimilate best practices into transboundary water resources management.
2. Downturn in tourism industry owing to factors external to the program adversely affecting the relative price and value of protected areas and key ecosystems in the Limpopo Basin.	M	Generally, the four riparian states are considered politically and socially stable and safe tourism destinations. The demand for tourism in the Basin has proven over time to be relatively inelastic. RESILIM Program: The maintenance of healthy, functioning ecosystems and diverse tourism products (tapping biodiversity and socio-cultural aspects of the Basin) and emphasis on development of CBNRM initiatives geared towards minimising conflicts between humans and protected areas (and also adaptable to climate change challenges) will serve to mitigate this risk.
3. Failure by the riparian states to support the structural and operational requirements of the LIMCOM structure and its Secretariat.	M	Associated Activities: GIZ has a financing agreement with LIMCOM, which is geared towards supporting the positions of Executive Secretary and IWRM specialist. The financing agreement also includes technical support on the Limpopo Monograph Study (baseline assessment on water resources management related issues) and a Limpopo Information Management System (LIMIS). RESILIM Program: RESILIM will provide targeted support to LIMCOM and its Task Teams in order to ensure that capacity to incorporate biodiversity and climate change best practices in trans boundary water resources management is strengthened. RESILIM would provide technical support to LIMCOM

		for an institutional analysis that will result in, inter alia, the development of a business plan.
4. Breakdown in social relations between different stakeholder groups with stake in climate change, biodiversity and water resources management	L	RESILIM Program: Establishment of collaborative decision-making/basin wide fora and joint transboundary mechanisms for attenuating conflicts/problems between stakeholders regarding the use of water resources and associated ecosystems. The basin-wide fora would also ensure a systematic approach to engaging and soliciting input from all (private sector, public and civil society) basin stakeholders into transboundary water resources management decisions taken and implemented in view of climate change challenges. The partnership with consortium members (IUCN and GWP), which are themselves membership and network organisations, also serves to mitigate this risk.
5. Risk of new intensified infestations of alien aquatic invasive weeds (e.g. Water Hyacinth) and deteriorating water quality in the Limpopo River (within the four riparian countries).	H	Associated Activities: Joint water quality and Water Hyacinth surveys were carried out to establish the baseline; this was initiated by the Water Affairs Departments of South Africa and Botswana in 2011 after farmers on both sides had complained about deteriorating water quality and increasing infestations of Water Hyacinth. RESILIM Program: RESILIM will provide technical support for joint water quality and aquatic invasive species monitoring between South Africa and Botswana, with the view to upscale best practices to a basin-wide ecosystem health monitoring program. Definition of safe minimum standards for water quality. Risks to be codified and incorporated into the LIMCOM IWRM Plan.
6. Significant increase in external development pressures, beyond projected baselines.[#] [#]This risk also links to the exponential increase in the number of mining (coal mines) and power plant projects in the Basin, specifically in South Africa and Zimbabwe.	L	RESILIM Program: Activities have been designed based on a thorough[15] analysis of threats. Development of adaptive management strategy and framework, gearing responses to threats. Strengthened M&E system will provide early warning of threats, allowing mitigation measures to be proactively instituted. [#]The RESILIM PPP strategy is a direct attempt to mitigate threats emanating from mining.
Overall Rating	**M**	

*Risk rating – H (High Risk), S (Substantial Risk), M (Modest Risk), and L (Low Risk). Risks refer to the possibility that assumptions, defined in the technical proposal and the work plan, may not hold.

[15] This is based upon expert opinion derived from stakeholder consultations, informal review of existing literature, and information gathered by Chemonics in the technical proposal development process. A detailed threats analysis will be carried out as part of the assessments under Components 1 and 2.

ANNEX B
COMPARISON OF RESILIM ACTIVITIES, KRAS, AND LIMCOM IWRM PLAN

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
1.1 Disaster Preparedness	1.1.1 Disaster preparedness plan for Limpopo	LIMCOM is to review and update the UN-Habitat study dated July 2007 in close collaboration with the relevant stakeholders and on the basis of existing national disaster-management contingency plans. The plan will assess risks, adaptation capacities and exposure, and include a vulnerability assessment of potentially affected areas. The plan will include a national database of 'Disaster Contact Points'.	1.3.3 Review and incorporate UN-Habitat Flood and Drought Disaster Risk Reduction Strategy into LIMCOM IWRM plan 1.3.3.1 Review results of UN-Habitat Floods and Droughts Disaster Risk Reduction Strategy and provide recommendations for basin CCA strategy 1.3.3.2 Provide technical support to LIMCOM to incorporate findings into basin RESILIM's climate change adaptation strategy	i) Recommendations for integration to basin CCA strategy; ii) CCA strategy incorporating updated information and recommendations from UN-Habitat Floods and Droughts Disaster Risk Reduction Strategy
	1.1.2 Information and data sharing protocol between Member States on disaster management	LIMCOM is to facilitate a process between the Member States to develop an information- and data-sharing agreement in order to ensure smooth and prompt access to available data and information in disaster situations. This will mainly be an internal process. The current mechanisms applied by the Flood Forecasting Team will be formalised and expanded to include coverage of drought issues. The Team will become the 'LIMCOM Working Group on Disaster Management'.	1.1.3 Provide technical support to develop/access flow forecasting and early warning systems & disaster risk reduction 1.1.3.1 Identify links between existing 'Early Warning Systems', climate change and disaster risk reduction (DRR) / disaster preparedness in the Limpopo basin 1.1.3.2 Identify strategies for improved DRR and preparedness in the Basin and integrate with 1.1.4 (DRR/preparedness as an adaptation project of scale) 1.1.3.3 Assess capacity of stakeholders receiving information on flow forecasting and EWS and identify those best placed to implement DRR and preparedness strategies 1.1.3.4 Support LIMCOM in developing a communications and implementation plan to support EWS and DRR 1.1.3.5 Support LIMCOM in developing a communications and implementation plan to strengthen existingsupport EWS and DRR plans by integrating climate change impacts, especially as seen through an ecosystem and social resilience lens at a basin level 1.1.3.6 Provide technical support to enable LIMCOM to initiate protocols on data and information management and sharing 1.2.1 Provide technical support to integrate climate, water, and	i) DRR/preparedness Strategy (with implementation guidelines for the Limpopo Basin ii) Capacity needs assessment and recommendations for requisite capacity enhancement iii) Communications and Implementation plan to support EWS and DRR v) An improved LIMIS, integrating climate, water and ecosystem data and information vi) Information sharing protocol (s)

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
			ecosystems data and information into LIMIS 1.2.1.1 Scope existing tools, mechanisms, and practices for integrating climate and water information at all levels 1.2.1.2 Identify gaps in LIMIS [as decision support system(s) used by LIMCOM] 1.2.1.3 Provide technical support to LIMCOM to enhance LIMIS by integrating climate, water and ecosystems data and information 1.2.1.4 Provide technical support to enable LIMCOM to initiate protocols on data and information management and sharing	
1.1 Disaster Preparedness	1.1.3 Stakeholder participation/public-awareness campaigns on disaster-risk management	LIMCOM is to undertake an initial participatory assessment of indigenous knowledge relating to disaster preparedness. This will include recommendations on public-relations activities as regards preparedness and responses before and during disaster events.	3.2.1 Develop basin wide Knowledge Management and Communication Strategies for Climate Change Impacts and adaptation measures 3.2.1.1 Conduct assessment of knowledge management and communications capacity needs to support implementation of components 1 and 2 (including capacity assessment of LIMIS) 3.2.1.2 Develop knowledge management and communications strategy and plan aimed at ensuring RESILIM outputs are relevant to key stakeholders in the basin to support decision making in climate change impacts and adaptation measures 3.2.1.3 Implement prioritized aspects of the knowledge management and communication plan aimed at increasing awareness and knowledge of climate change impacts and adaptation	i) Needs assessment knowledge management and communication (including LIMIS); ii) Knowledge management and communications strategy; iii) Knowledge management and communications products generated to enhance LIMIS iv) Awareness campaigns on climate change, biodiversity, ecosystems, and water management

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
1.1 Disaster Preparedness	1.1.4 Climate change adaptation and mitigation strategies for the Limpopo River Basin	Two climate change strategies will be developed for the Limpopo: The Climate Change Adaptation Strategy will be based on the SADC-wide Climate Change Adaption Strategy, but scaled down to the level of the Limpopo River Basin; and The Climate Change Mitigation Strategy for the Limpopo River Basin will largely be derived from other regionally developed strategies and extrapolated to the Limpopo River Basin.	1.1.4 Develop basin-level climate change adaptation strategy (using a systems-based approach) 1.1.4.1 Develop participatory-based climate and development futures scenarios at a basin level with key system stakeholders (including analysis of balance of power and decision-making processes) 1.1.4.2 Building on the SADC Climate Change Adaptation Strategy, support LIMCOM and its stakeholders in developing a Limpopo climate change adaptation strategy and action plan 1.1.5 Develop adaptation projects of scale 1.1.5.1 Review of adaptation projects in the basin to assess what works and what does not 1.1.5.2 Identify and prioritize with basin system stakeholders scalable adaptation projects (incorporating Indigenous Knowledge and Practices and ensure a focus on women-led adaptations, with related gender, equity and cultural considerations) 1.1.5.3 Leverage partnerships to finance and implement CC adaptations pilot projects	i) Climate and Development Scenarios for the Limpopo Basin ii) Basin Political Analysis report iii) Stakeholders activity Map iv) Critical threshold (Basin level) v) Cost Benefit Analysis (of key threshold interventions) vi) Final Limpopo Basin CC Adaptation Strategy and Action Plan vii) Adaptive Management Guide for the Limpopo Basin viii) Limpopo Basin Priority Adaptation Assessment Report ix) Limpopo Adaptation Investment Brief

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
1.2 Early Warning	1.2.1 Water-related hazard monitoring system	A water-related hazard-monitoring system will be established on the basis of relevant early-warning parameters, e.g. flood- and drought- forecasting for monitoring events, and automated flood- and drought-disaster maps for communications on preparedness and on responses during a disaster event. Links with the existing SADC HYCOS network will complement the early-warning system in the Limpopo River Basin. An inventory of the existing equipment in the four Member States relevant to the early-warning system will be drawn up, and recommendations for equipment to be purchased and installed, provided.	1.1.3 Provide technical support to develop/access flow forecasting and early warning systems & disaster risk reduction 1.1.3.1 Identify links between existing 'Early Warning Systems', climate change and disaster risk reduction (DRR) / disaster preparedness in the Limpopo basin 1.1.3.2 Identify strategies for improved DRR and preparedness in the Basin and integrate with 1.1.4 (DRR/preparedness as an adaptation project of scale) 1.1.3.3 Identify and assess capacity of stakeholders receiving information on flow forecasting and EWS and identify those best placed to implement DRR and preparedness strategies 1.1.3.4 Support LIMCOM in developing a communications and implementation plan to support EWS and DRR 1.1.3.5 Support LIMCOM in developing a communications and implementation plan to strengthen existing support EWS and DRR plans by integrating climate change impacts, especially as seen through an ecosystem and social resilience lens at a basin level 1.1.3.6 Provide technical support to enable LIMCOM to initiate protocols on data and information management and sharing	i) Basin-wide review report ii) DRR/preparedness Strategy and implementation guidelines for the Limpopo Basin iii) Capacity needs assessment and recommendations for requisite capacity iv) Communications and Implementation plan to support EWS and DRR

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
1.2 Early Warning	1.2.2 Communication and dissemination system for early-warning information	Formats and procedures for providing national disaster institutions with LIMCOM information relevant to the entire Basin will be established. In addition, there will be an improvement in the capacities of water-disaster contact points to communicate and disseminate disaster data and information to national disaster-management institutions. The capacity development of national disaster-management institutions in respect of contact points will involve improving the understanding and performance of these contact points	3.2.1 Develop basin wide Knowledge Management and Communication Strategies for Climate Change Impacts and adaptation measures 3.2.1.1 Conduct assessment of knowledge management and communications capacity needs to support implementation of components 1 and 2 (including capacity assessment of LIMIS) 3.2.1.2 Develop knowledge management and communications strategy and plan aimed at ensuring RESILIM outputs are relevant to key stakeholders in the basin to support decision making in climate change impacts and adaptation measures 3.2.1.3 Implement prioritized aspects of knowledge management and communication plan aimed at increasing awareness and knowledge of CCA and impacts	i) Capacity needs assessment report on knowledge management and communication (including LIMIS); ii) Knowledge management and communications strategy and plan; iii) Knowledge management and communications products generated to enhance LIMIS iv) Awareness campaigns on climate change, biodiversity, ecosystems, and water management
1.3 Water Infrastructure	1.3.1 Infrastructure inventory	An inventory of existing water infrastructure will be drawn up. A common template with key parameters will be adopted, and the information included in an online database e.g. with links to Google Earth.	1.1.2 Conduct water demand analysis (including users and risks) 1.1.2.1 Quantify current and future uses and demand (considering climate change realities) 1.1.2.2 Conduct an assessment on ecosystem water demand (considering climate change realities) 1.1.2.3. Conduct cost-benefit and feasibility analyses of basin countries marginal interventions (with aim to increase water availability considering climate changes realities)	i) Report on water demand , uses, and risks (current and projected) ii) Water use and demand scenarios (water futures) iii) Ecosystem water use and demand scenarios iv) Cost-benefit and feasibility analyses report on marginal water
1.3 Water Infrastructure	1.3.2 Operating rules and flooding study	An assessment of operating rules will be undertaken to understand the scope of managing floods in the Limpopo River Basin with the existing infrastructure for storing water. The study will also include any measures to be adopted in managing water	1.1.2 Conduct water demand analysis (including users and risks) 1.1.2.1 Quantify current and future uses and demand (considering climate change realities) 1.1.2.2 Conduct an assessment on ecosystem water demand (considering climate change realities) 1.1.2.3. Conduct cost-benefit and feasibility analyses of basin countries marginal water interventions (with aim to increase water	i) Report on water demand , uses, and risks (current and projected) ii) Water use and demand scenarios (water futures) iii) Ecosystem water use and demand scenarios

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
		infrastructure in connection with mitigating the impact of droughts. A financial and social assessment of the recommended interventions will be undertaken to provide guidance for decision-makers.	availability considering climate changes realities) 1.1.3 Provide technical support to develop/access flow forecasting and early warning systems & disaster risk reduction 1.1.3.1 Identify links between existing 'Early Warning Systems', climate change and disaster risk reduction (DRR) / disaster preparedness in the Limpopo basin 1.1.3.2 Identify strategies for improved DRR and preparedness in the Basin and integrate with 1.1.4 (DRR/preparedness as an adaptation project of scale) 1.1.3.3 Identify and assess capacity of stakeholders receiving information on flow forecasting and EWS and identify those best placed to implement DRR and preparedness strategies 1.1.3.4 Support LIMCOM in developing a communications and implementation plan to support EWS and DRR 1.1.3.5 Support LIMCOM in developing a communications and implementation plan to strengthen existing support EWS and DRR plans by integrating climate change impacts, especially as seen through an ecosystem and social resilience lens at a basin level 1.1.3.6 Provide technical support to enable LIMCOM to initiate protocols on data and information management and sharing	iv) Cost-benefit and feasibility analyses report on marginal water v) Basin-wide review report vi) DRR/preparedness Strategy and implementation guidelines for the Limpopo Basin vii) Capacity needs assessment and recommendations for requisite capacity viii) Communications and Implementation plan to support EWS and DRR

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
1.3 Water Infrastructure	1.3.3 Identification of strategic water infrastructure for disaster management in the Basin	Strategic water infrastructure for disaster management in the Limpopo River Basin will be identified in line with the intervention measure of implementing rules for operating dams. The result of this intervention measure will be an overview of existing strategic infrastructures with recommendations for eventual upgrading of the facilities, together with an assessment of key strategic water infrastructures or measures for mitigating the adverse impact of disasters.	1.1.1 Conduct assessments to understand vulnerability and climate change adaptation needs (including current and projected vulnerabilities and impacts) 1.1.1.1 Desk Reviews to identify assessments (including the monograph study) that have been done, focusing on transboundary gaps/needs 1.1.1.2 Stakeholder participatory analysis of assessments and gaps 1.1.1.3 Build evidence to identify basin-level ecosystem thresholds (social, economic and environmental) 1.1.1.4 Develop internal working document & external guide, including lessons learned from demonstration pilot projects 1.1.1.5 Analysis of current and projected vulnerabilities and impacts 1.1.4 Develop basin-level climate change adaptation strategy (using a systems-based approach) 1.1.4.1 Develop participatory-based climate and development futures scenarios at a basin level with key system stakeholders (including analysis of balance of power and decision-making processes) 1.1.4.2 Building on the SADC Climate Change Adaptation Strategy, support LIMCOM and its stakeholders in developing a Limpopo climate change adaptation strategy and action plan 1.1.5 Develop adaptation projects of scale 1.1.5.1 Review of adaptation projects in the basin to assess what works and what does not 1.1.5.2 Identify and prioritize with basin system stakeholders scalable adaptation projects (incorporating Indigenous Knowledge and Practices and ensure a focus on women-led adaptations, with related gender, equity and cultural considerations) 1.1.5.3 Leverage partnerships to finance and implement CC adaptations pilot projects	i) Basin Baseline vulnerability assessment Report ii) Basin Baseline Report incorporating prioritized stakeholders needs; iii) Lesson learned report on pilot CC adaptation initiatives incorporating vulnerability and CC adaptation needs iv) Climate and Development Scenarios for the Limpopo Basin; v) Basin Political Analysis report vi) Stakeholders activity Map; vii) Critical threshold (Basin level) Cost Benefit Analysis (of key threshold interventions) viii) Limpopo Basin Priority Adaptation Assessment Report ix) Limpopo Adaptation Investment Brief x) Projects Review report

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
1.3 Water Infrastructure	1.3.4 Climate-proofing of water infrastructure	LIMCOM's objective is to establish common practices and experiences on the climate-proofing of infrastructure projects. The purpose of climate-proofing (CP) is to minimise and prepare for the potential adverse impacts of climate change, thereby increasing the resilience of water infrastructures. It is important to incorporate adaptations to climate change at the planning stage of infrastructure activities, and to make LIMCOM and the public aware of the impacts of climate change and adaptation measures. The first step to initiate the adoption of CP in the Limpopo is to identify methodologies appropriate in the Member States by initiating two pilot CP projects. As an output of this process, a guideline on CP will be developed specifically for LIMCOM.	1.1.4 Develop basin-level climate change adaptation strategy (using a systems-based approach) 1.1.4.1 Develop participatory-based climate and development futures scenarios at a basin level with key system stakeholders (including analysis of balance of power and decision-making processes) 1.1.4.2 Building on the SADC Climate Change Adaptation Strategy, support LIMCOM and its stakeholders in developing a Limpopo climate change adaptation strategy and action plan 1.1.5 Develop adaptation projects of scale 1.1.5.1 Review of adaptation projects in the basin to assess what works and what does not 1.1.5.2 Identify and prioritize with basin system stakeholders scalable adaptation projects (incorporating Indigenous Knowledge and Practices and ensure a focus on women-led adaptations, with related gender, equity and cultural considerations) 1.1.5.3 Leverage partnerships to finance and implement CC adaptations pilot projects 1.3.3 Review and incorporate UN-Habitat Flood and Drought Disaster Risk Reduction Strategy into LIMCOM IWRM plan 1.3.3.1 Review results of UN-Habitat Floods and Droughts Disaster Risk Reduction Strategy and provide recommendations for basin CCA strategy 1.3.3.2 Provide technical support to LIMCOM to incorporate findings into basin RESILIM's climate change adaptation strategy	i) Basin Baseline vulnerability assessment Report iii) Climate and Development Scenarios for the Limpopo Basin; iv) Basin Political Analysis report v) Stakeholders activity Map; vi) Critical threshold (Basin level) Cost Benefit Analysis (of key threshold interventions) viii) Limpopo Basin Priority Adaptation Assessment Report ix) Limpopo Adaptation Investment Brief x) CCA strategy incorporating updated information and recommendations from UN-Habitat Floods and Droughts Disaster Risk Reduction Strategy
1.3 Water Infrastructure	1.3.5 Potential for micro hydro-power generation	The production of green energy could potentially contribute to the national economies of the Limpopo Basin states. An assessment of the existing level and future potential of micro hydro-power in the Limpopo River Basin will be carried out.	N/A	

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Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
2.1 Standards	2.1.1 Harmonized water quality standards in the Member States	A baseline (monograph) will identify and assess the key parameters, methods and practices of water-quality monitoring applied by the Member States. An assessment of the requirements for aligning/harmonizing standards, methods (based on internationally accepted methodologies) and practices of water-quality monitoring will, furthermore, be carried out. The assessment will also make use of guidelines for water-quality standards, which are included in SADC instruments such as the Regional Water Policy.	2.1.2 Conduct basin- wide biodiversity and ecosystem health monitoring 2.1.2.1 Consult with key stakeholders, and review current science, to identify and determine methodologies, projects and programs in use for conducting biodiversity and ecosystem health monitoring 2.1.2.2 Consult with key stakeholders to identify and determine extent (geographical, institutional, etc.) of use of and support for existing methodologies 2.1.2.3 Based on the stakeholders consultations, agree appropriate compatible methods and locations (gaps) for determining biodiversity and ecosystem health monitoring 2.1.2.4 Set baselines and implement methodologies in target areas 2.1.2.5 Determine training needs and recipients (among decision makers and other stakeholders) on use and interpretation of biodiversity and ecosystem information 2.1.2.6 Provide/facilitate appropriate training on use and interpretation of biodiversity and ecosystem information 2.1.2.7 Based on existing information and that collected for the project, compile a "State of the Basin Ecosystem" report 2.1.3 Support and scale up to basin level joint water quality and aquatic weed monitoring programs 2.1.3.1 Assess ongoing sub-basin level water quality and aquatic weed monitoring initiatives 2.1.3.2 Support baseline water quality/aquatic weed survey 2.1.3.3 Develop and implement a scaling plan for a basin-wide water quality /aquatic weed monitoring program	i) Assessment reports ii) Scaling plan for a basin-wide monitoring program iii) Guidelines on up-scaling of joint pilot monitoring program iv) Report on methodologies and programs in use for conducting biodiversity and ecosystem health monitoring v) Report on use of and support for identified methodologies vi) Report on identified methods and locations for determining biodiversity and ecosystem health monitoring vii) Baseline data and reports on results of implemented methodologies viii) State of the Basin Ecosystem Report ix) Training Needs Plan; Training Materials and Training Event Report x) baseline report/database on water quality and aquatic weed xi) scaling plan for a basin-wide monitoring program

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Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
				xii) water quality data/aquatic weed data information incorporated into LIMIS
2.1 Standards	2.1.2 Protocol on monitoring procedures as well as information and data sharing procedures relating to water quality	Develop protocol between Member States for monitoring procedures as well as information- and data-sharing procedures relating to water quality in the Limpopo River Basin. A Water-Quality Monitoring Plan will be developed on the basis of the protocol.	1.2.1 Provide technical support to integrate climate , water and ecosystems data and information into LIMIS 1.2.1.1 Scope existing tools, mechanisms and practices for integrating climate and water information at national and transboundary levels 1.2.1.2 Identify gaps in LIMIS [as decision support system(s) used by LIMCOM] 1.2.1.3 Provide technical support to LIMCOM to enhance LIMIS by integrating climate, water and ecosystems data and information 1.2.1.4 Provide technical support to enable LIMCOM to initiate protocols on data and information management and sharing	iv) A status quo review of LIMIS v) An improved LIMIS, integrating climate, water and ecosystem data and information vi) Information sharing protocol (s)
2.1 Standards	2.1.3 Raising of awareness about water quality	The aim is to enhance the general public's understanding of issues and impacts relating to water quality through a broad range of awareness-raising activities. The objective of this is to involve various stakeholder groups in the public dialogue on water quality, e.g. reporting on the status of water quality and issuing water-quality bulletins to update the public.	2.1.2 Conduct basin- wide biodiversity and ecosystem health monitoring 2.1.2.1 Consult with key stakeholders, and review current science, to identify and determine methodologies, projects and programs in use for conducting biodiversity and ecosystem health monitoring 2.1.2.2 Consult with key stakeholders determine extent (geographical, institutional, etc.) of use of and support for existing methodologies 2.1.2.3 Based on the stakeholders consultations, agree appropriate compatible methods and locations (gaps) for determining biodiversity and ecosystem health monitoring 2.1.2.4 Set baselines and implement methodologies in target areas 2.1.2.5 Determine training needs and recipients (among decision makers and other stakeholders) on use and interpretation of biodiversity and ecosystem information	i) Assessment reports ii) Scaling plan for a basin-wide monitoring program iii) Guidelines on up-scaling of joint pilot monitoring program iv) Report on methodologies and programs in use for conducting biodiversity and ecosystem health monitoring v) Report on use of and support for identified methodologies

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
			2.1.2.6 Provide/facilitate appropriate training on use and interpretation of biodiversity and ecosystem information 2.1.2.7 Based on existing information and that collected for the project, compile a "State of the Basin Ecosystem" report 3.3.1 Develop basin wide Knowledge Management and Communication Strategies for integrated and sustainable water management 3.3.1.1 Conduct assessment of knowledge management and communications capacity needs to support the implementation of components 1 and 2 (including capacity assessment of LIMIS) 3.3.1.2 Develop knowledge management and communications strategy and plan aimed at ensuring key stakeholders in the region have information to support decision making in integrated and sustainable water management strategies and practices (Prioritize gathering indigenous knowledge and information aimed at ensuring vulnerable groups including women and children participate in sustainable water management) 3.3.1.3 Implement prioritized aspects of the plan aimed at increasing awareness and knowledge of integrated and sustainable water management 3.3.2 Develop and implement mechanisms for operationalizing cooperation for building resilience in transboundary integrated water management 3.3.2.1 Review best practices in transboundary basin cooperation and coordination mechanisms (include legal, regulatory and policy) 3.3.2.2 Develop appropriate mechanisms on improved cooperation and coordination in the Limpopo River Basin 3.3.2.3 Integrate relevant mechanisms into LIMCOM IWRM plan	vi) Report on identified methods and locations for determining biodiversity and ecosystem health monitoring vii) Baseline data and reports on results of implemented methodologies viii) State of the Basin Ecosystem Report vii) Training Needs Plan; Training Materials and Training Event Report viii) Capacity needs assessment report on knowledge management and communications (including LIMIS) ix) Integrated and sustainable water management issues included in the knowledge management and communications strategy and plan x) Knowledge management and communications products generated to enhance LIMIS xi) Awareness campaigns on integrated and sustainable water management xii) Best practices review

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Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
				report xiii) Report on recommendations for LIMCOM xiv) Transboundary cooperation framework on IWRM xiv) Guidelines on how to integrate relevant modalities into IWRM plan (developed from meetings, workshop reports) xv) Business plan for a sustainable funding model for LIMCOM
2.2 Monitoring and Reporting System	2.2.1 Joint Basin Water Quality Survey	Based on the positive lessons learned at regional level, a Joint Basin Water-Quality Survey will be conducted every five years with the full participation of the relevant stakeholders in the four Member States. This will establish the parameters, sampling points and frequency of water-quality monitoring, and produce an-flow assessment as well as a state-of-the-environment report.	2.1.2 Conduct basin- wide biodiversity and ecosystem health monitoring 2.1.2.1 Consult with key stakeholders, and review current science, to identify and determine methodologies, projects and programs in use for conducting biodiversity and ecosystem health monitoring 2.1.2.2 Consult with key stakeholders determine extent (geographical, institutional, etc.) of use of and support for existing methodologies 2.1.2.3 Based on the stakeholders consultations, agree appropriate compatible methods and locations (gaps) for determining biodiversity and ecosystem health monitoring 2.1.2.4 Set baselines and implement methodologies in target areas 2.1.2.5 Determine training needs and recipients (among decision makers and other stakeholders) on use and interpretation of biodiversity and ecosystem information 2.1.2.6 Provide/facilitate appropriate training on use and interpretation of biodiversity and ecosystem information 2.1.2.7 Based on existing information and that collected for the	i) Assessment reports ii) Scaling plan for a basin-wide monitoring program iii) Guidelines on up-scaling of joint pilot monitoring program iv) Report on methodologies and programs in use for conducting biodiversity and ecosystem health monitoring v) Report on use of and support for identified methodologies vi) Report on identified methods and locations for determining biodiversity and ecosystem health

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
			project, compile a "State of the Basin Ecosystem" report 2.1.3 Support and scale up to basin level joint water quality and aquatic weed monitoring programs 2.1.3.1 Assess ongoing sub-basin level water quality and aquatic weed monitoring initiatives 2.1.3.2 Support joint basin-wide baseline water quality/aquatic weed survey 2.1.3.3 Develop and implement a scaling plan for a basin-wide water quality /aquatic weed monitoring program	monitoring v) Baseline data and reports on results of implemented methodologies vi) State of the Basin Ecosystem Report vii) Capacity Building Plan; Training Materials and Training Event Report viii) Baseline report/baseline data on water quality and aquatic weeds ix) Scaling plan for a basin-wide monitoring program; x) Guidelines on scaling up of pilots monitoring program

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
2.2	2.2.2 LIMCOM Water Quality Database	LIMCOM will establish a database for monitoring water quality in the Limpopo River Basin. The database will primarily contain data collected from the Joint Basin Water-Quality Survey conducted every five years, as well as data which is collected subsequent to an agreed Water-Quality Monitoring Plan, which specifies sampling points and time frequency. The Water-Quality Monitoring Plan will also specify the format, content and frequency of the monitoring reports LIMCOM will provide to the Member States. LIMCOM will maintain and operate the Water-Quality Database, which will be a part of the LIMIS.	1.2.1 Provide technical support to integrate climate , water and ecosystems data and information into LIMIS 1.2.1.1 Scope existing tools, mechanisms and practices for integrating climate and water information at national and transboundary levels 1.2.1.2 Identify gaps in LIMIS [as decision support system(s) used by LIMCOM] 1.2.1.3 Provide technical support to LIMCOM to enhance LIMIS by integrating climate, water and ecosystems data and information 1.2.1.4 Provide technical support to enable LIMCOM to initiate protocols on data and information management and sharing	i) A status quo review of LIMIS ii) An improved LIMIS, integrating climate, water and ecosystem data and information iii) Information sharing protocol (s)

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
2.3 Best Practices	2.3.1 Guidelines on formulating and implementing pilot projects	LIMCOM will develop common guidelines on how to establish pilot projects on core topics relevant to water quality. The pilot projects will aim to illustrate practical cases relating to how different sectors are dealing with the key water-quality topics that have basin-wide implications and impacts.	2.1.3 Support and scale up to basin level joint water quality and aquatic weed monitoring programs 2.1.3.1 Assess ongoing sub-basin level water quality and aquatic weed monitoring initiatives 2.1.3.2 Support joint basin-wide baseline water quality/aquatic weed survey 2.1.3.3 Develop and implement a scaling plan for a basin-wide water quality /aquatic weed monitoring program 2.1.4 Support sub-catchment CBNRM and co-management interventions that mitigate threats to biodiversity 2.1.4.1 Identify and review existing CBNRM initiatives that support mitigation of threats to biodiversity in the basin/identify best practices 2.1.4.2 Assess scalability and replicability ability of best practices to the trans-boundary level 2.1.4.3 Pilot scaling up/facilitate replication of best practices to transboundary level	i) Assessment reports ii) Baseline report/baseline data on water quality and aquatic weeds iii) Scaling plan for a basin-wide monitoring program iv) Guidelines on up-scaling of joint pilot monitoring program v) Data base of CBRNRM initiatives (including best practices) vi) guidelines on up-scaling/replication of best practices viii) Lesson learned report on pilot CBNRM and co-management interventions

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
2.3 Best Practices	2.3.2 Pilot project on water sanitation (e.g. in relation to diseases such as cholera)	The aim of the pilot project will be to improve sanitation measures in urban areas in particular in order to prevent choleric bacteria from entering the Limpopo River. The pilot project could include the monitoring of treated water from one or more urban locations and an assessment of the causes of the inadequate treatment of wastewater. Recommendations will be made on how to improve the treatment of wastewater. The levels of unwanted bacteria in the waters of the Limpopo will be measured and monitored downstream at strategic locations. The content of phosphates will also be assessed at the measurement sites. In addition, the pilot project will aim to include public awareness-raising of how diseases such as cholera can be prevented through better personal hygiene. It could also include drawing water samples from households and public standpipes for analysis, for example.	1.1.5 Develop adaptation projects of scale 1.1.5.1 Review of adaptation projects in the basin to assess what works and what does not 1.1.5.2 Identify and prioritize with basin system stakeholders scalable adaptation projects (incorporating Indigenous Knowledge and Practices and ensure a focus on women-led adaptations, with related gender, equity and cultural considerations) 1.1.5.3 Leverage partnerships to finance and implement CC adaptations pilot projects	i) Limpopo Basin Adaptation Projects Review report ii) Prioritized list of adaptation projects iii) Limpopo Basin Adaptation Implementation Guide (for both implementing partners and beneficiaries, and outlining the modalities for prioritizing adaptation projects) iv) Limpopo Adaptation Investment Brief; v) Detailed design for specific projects prioritized by key adaptive system stakeholders
2.3 Best Practices	2.3.3 Pilot project on nonpoint source (NPS) pollution in the agricultural sector	The pilot project will be aimed at highlighting the issues around NPS pollution from agricultural practices that result in the leaching of nutrients into the groundwater and surface-water resources. The leaching of nutrients, particularly nitrogen, can be a contributing factor to potential eutrophication in the river system, and can also cause algae blooms in the	1.1.5 Develop adaptation projects of scale 1.1.5.1 Review of adaptation projects in the basin to assess what works and what does not 1.1.5.2 Identify and prioritize with basin system stakeholders scalable adaptation projects (incorporating Indigenous Knowledge and Practices and ensure a focus on women-led adaptations, with related gender, equity and cultural considerations), 1.1.5.3 Leverage partnerships to finance and implement CC adaptations pilot projects.	i) Limpopo Basin Adaptation Projects Review report ii) Prioritized list of adaptation projects iii) Limpopo Basin Adaptation Implementation Guide iv) Limpopo Adaptation Investment Brief;

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
		Limpopo Delta area. Part of the pilot project will be focused on developing communication tools to raise public awareness about this issue.		v) Detailed design for specific projects prioritized by key adaptive system stakeholders
2.3 Best Practices	2.3.4 Pilot project on mining pollution (e.g. acid mine drainage)	Acid mine drainage (AMD) is the flow or seepage of polluted water from old mining areas into groundwater and surface-water resources. Depending on the area, the water may contain toxic heavy metals and radioactive particles. These are dangerous for people's health, as well as for plants and animals. The pilot project will investigate how to reduce and stop the pollution from mines from entering the aquatic environment.	1.1.5 Develop adaptation projects of scale 1.1.5.1 Review of adaptation projects in the basin to assess what works and what does not 1.1.5.2 Identify and prioritize with basin system stakeholders scalable adaptation projects (incorporating Indigenous Knowledge and Practices and ensure a focus on women-led adaptations, with related gender, equity and cultural considerations), 1.1.5.3 Leverage partnerships to finance and implement CC adaptations pilot projects	i) Limpopo Basin Adaptation Projects Review report ii) Prioritized list of adaptation projects iii) Limpopo Basin Adaptation Implementation Guide iv) Limpopo Adaptation Investment Brief; v) Detailed design for specific projects prioritized by key adaptive system stakeholders

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
2.3 Best Practices	2.3.5 Pilot project on water quality in the industrial sector	The aim of this pilot project is to identify best practices for improving the quality of water used in industrial processes by different industries —e.g. paper mills, tanning factories— before it is released into the river or used to supply urban areas with water.	1.1.5 Develop adaptation projects of scale 1.1.5.1 Review of adaptation projects in the basin to assess what works and what does not 1.1.5.2 Identify and prioritize with basin system stakeholders scalable adaptation projects (Prioritize gathering indigenous information from vulnerable groups including women and children) 1.1.5.3 Leverage partnerships to finance and implement CC adaptations pilot projects 2.1.3 Support and scale up to basin level joint water quality and aquatic weed monitoring programs 2.1.3.1 Assess ongoing sub-basin level water quality and aquatic weed monitoring initiatives 2.1.3.2 Support joint basin-wide baseline water quality/aquatic weed survey 2.1.3.3 Develop and implement a scaling plan for a basin-wide water quality /aquatic weed monitoring program	i) Limpopo Basin Adaptation Projects Review report ii) Prioritized list of adaptation projects iii) Limpopo Basin Adaptation Implementation Guide iv) Limpopo Adaptation Investment Brief; v) Detailed design for specific projects prioritized by key adaptive system stakeholders vi) Assessment reports vii) Scaling plan for a basin-wide monitoring program viii) Guidelines on up-scaling of joint pilot monitoring program

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
2.3 Best Practices	2.3.6 Pilot project on municipal pollution	This pilot project is aimed at addressing municipalities' roles and responsibilities in treating wastewater. In the context of growing urban areas, it is important to plan strategically for the location and size of treatment plants in order to provide municipalities with clean water, and keep effluents that flow into the natural environment within acceptable boundaries.	1.1.5 Develop adaptation projects of scale 1.1.5.1 Review of adaptation projects in the basin to assess what works and what does not 1.1.5.2 Identify and prioritize with basin system stakeholders scalable adaptation projects (Prioritize gathering indigenous information from vulnerable groups including women and children) 1.1.5.3 Leverage partnerships 2.1.3 Support and scale up to basin level joint water quality and aquatic weed monitoring programs 2.1.3.1 Assess ongoing sub-basin level water quality and aquatic weed monitoring initiatives 2.1.3.2 Support joint basin-wide baseline water quality/aquatic weed survey 2.1.3.3 Develop and implement a scaling plan for a basin-wide monitoring program	i) Limpopo Basin Adaptation Projects Review report ii) Prioritized list of adaptation projects iii) Limpopo Basin Adaptation Implementation Guide iv) Limpopo Adaptation Investment Brief; v) Detailed design for specific projects prioritized by key adaptive system stakeholders vi) Assessment reports vii) Scaling plan for a basin-wide monitoring program viii) Guidelines on up-scaling of joint pilot monitoring program
3.1 Benefit sharing	3.1.1 Common understanding and practical examples of joint basin wide deployment	In order to foster a common understanding by Member States, LIMCOM will coordinate the development of a concept note/position paper that outlines concrete examples of joint basin-wide opportunities and benefit-sharing arrangements in the Limpopo River Basin. The development of the concept note/position paper will be based on both LIMCOM-specific experiences and on experiences gained from the regional and global contexts. One or two of the identified concrete pilot cases on basin-wide benefit-	2.3.1 Develop/ strengthen decision-support tools for transboundary water management (incorporating climate change realities, economic, social and environmental information and data) 2.3.1.1 Review of decision-support tools used in other River Basin Organizations, with a view to determine where LIMIS can be enhanced to incorporate ecosystem-based water information 2.3.1.2 Provide technical support to LIMCOM to include data and information on ecosystem maintenance, biodiversity conservation, and human development needs into LIMIS database 2.3.1.3 Provide river basin governance toolkits that integrate water, conservation, and climate change adaptation, e.g. FLOW and Governance of Shared Waters 3.1.2 Establish and implement a capacity building plan for effective transboundary ecosystem-based water management /IWRM for LIMCOM	i) Report on recommendations for the improvement of LIMIS; ii) Improved LIMIS incorporating data and information on ecosystem maintenance, biodiversity conservation and human development iii) Training needs assessment; iv) Capacity building plan: existing governance toolkits acquired and distributed and training

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
		sharing arrangements will be developed subsequently, with specific information on the implicit costs, benefits and risks to the parties.	3.1.2.1 Assess capacity needs (individual, institutional) in climate change impacts and adaptation 3.1.2.2 Develop a basin-wide capacity building strategy and plan regarding ecosystem-based approaches to water management/IWRM responding to the needs assessment 3.1.2.3 Pilot prioritized components of the capacity building strategy and plan 3.3.2 Develop and implement mechanisms for operationalizing cooperation for building resilience in transboundary integrated water management 3.3.2.1 Review best practices in transboundary basin cooperation and coordination mechanisms (include legal, regulatory and policy) 3.3.2.2 Develop appropriate mechanisms on improved cooperation and coordination in the Limpopo River Basin 3.3.2.3 Integrate relevant mechanisms into LIMCOM IWRM plan	provided to relevant stakeholders in the Limpopo Basin v) Assessment report on capacity needs vi) Capacity building strategy and plan (to cover IWRM, ecosystem approach, climate change) vii) Reports on assistance responding to capacity building plan (guidelines, manuals, policy briefs, exchange visits, tools, study tours, links to professional networks, knowledge hubs, etc) viii) Best practices review report ix) Report on recommendations for LIMCOM x) Transboundary cooperation framework on IWRM xi) Guidelines on how to integrate relevant mechanisms into IWRM plan (developed from meetings, workshop reports) xii) Business plan for a sustainable funding model for LIMCOM

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Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
3.1 Benefit sharing	3.1.2 LIMPOPO Information System (LIMIS)	LIMCOM will coordinate the development of a basin-wide Information-Sharing Hub on Water Resources based on a consolidation of the existing information and communication tools for sharing information about water resources among stakeholders in the Limpopo River Basin. The LIMCOM Secretariat will host the Information-Sharing Hub, which will be accessible online to the relevant stakeholders in the four Member States.	1.2.1 Provide technical support to integrate climate , water and ecosystems data and information into LIMIS 1.2.1.1 Scope existing tools, mechanisms and practices for integrating climate and water information at national and transboundary levels 1.2.1.2 Identify gaps in LIMIS [as decision support system(s) used by LIMCOM] 1.2.1.3 Provide technical support to LIMCOM to enhance LIMIS by integrating climate, water and ecosystems data and information 1.2.1.4 Provide technical support to enable LIMCOM to initiate protocols on data and information management and sharing 3.3.1 Develop basin wide Knowledge Management and Communication Strategies for integrated and sustainable water management 3.3.1.1 Conduct assessment of knowledge management and communications capacity needs to support the implementation of components 1 and 2 (including LIMIS) 3.3.1.2 Develop knowledge management and communications strategy and plan to share information to support decision making in integrated and sustainable water management strategies and practices (Prioritize gathering indigenous information from vulnerable groups including women and children) 3.3.1.3 Implement prioritized aspects of the knowledge and communication plan aimed at increasing awareness and knowledge of integrated and sustainable water	i) Scoping report on existing tools, mechanisms and practices for integrating climate and water information ii) Report on gaps in LIMIS as decision support system iii) An improved LIMIS, integrating climate, water and ecosystem data and information iii) Information sharing protocol (s) iv) Capacity needs assessment report on knowledge management and communications (including LIMIS) v) Integrated and sustainable water management issues included in the Knowledge management and communications strategy and plan vii) Knowledge management and communications products generated to enhance LIMIS, including water quality viii) Awareness campaigns on integrated and sustainable water management

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
3.2 Monitoring	3.2.1 Hydrological monitoring	An assessment of the groundwater and surface-water resources will be conducted together with an assessment of the environmental water requirements. Hydrological modelling will be applied when assessing water resources (surface and groundwater). Thereafter, the water demand of different users will be assessed to establish the 'Water Balance for the Limpopo River Basin up to 2030'. This work will be undertaken as part of developing the Limpopo River-Basin Monograph.	2.1.1 Conduct assessments of environmental water (ecological flow) requirements 2.1.1.1 Review environmental flow assessments done for parts of the Limpopo Basin and identify areas for collaboration (e.g. monograph study; IUCN Olifants flow assessment) and expansion to the basin level 2.1.1.2 Provide technical support to LIMCOM to evaluate water availability and demand issues through water auditing and an assessment of current water allocation plans 2.1.1.3 Undertake / expand environmental flow assessments identified in 2.1.2.1 to the basin level	i) Environmental Flow Assessment Review Report; ii) Environmental flows scenarios iii) Report on water availability and demand in the basin iv) Report on results of expanded environmental flow assessments

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
3.2 Monitoring	3.3.2 Development of Economic Accounts for Water (EAW) for the Limpopo River Basin	The development of Economic Accounts for Water (EAW) has already begun in two of the four Limpopo riparian states, namely in Botswana and South Africa. A follow-up of this initiative took place through the SADC Economic Accounts for Water Project (2009-2011), which saw SADC testing the concept of compiling Economic Accounts for Water at river-basin level. Establishing an Economic Account for Water essentially involves calculating the contribution by the river basin to national GDPs, which also serves as justification for regional collaboration at river-basin level.	1.1.2 Conduct water demand analysis (including users and risks) 1.1.2.1 Quantify current and future uses and demand (considering climate change realities) 1.1.2.2 Conduct an assessment on ecosystem water demand (considering climate change realities) 1.1.2.3. Conduct cost-benefit and feasibility analyses of basin countries marginal interventions (with aim to increase water availability considering climate changes realities) 1.1.2.4. Identify interventions within the basin aimed at managing the demand of water in response to climate variability and change (identify marginal water) 2.1.1 Conduct assessments of environmental water (ecological flow) requirements 2.1.1.1 Review environmental flow assessments done for parts of the Limpopo Basin and identify areas for collaboration (e.g. monograph study; IUCN Olifants flow assessment) and expansion to the basin level 2.1.1.2 Provide technical support to LIMCOM to evaluate water availability and demand issues through water auditing and an assessment of current water allocation plans 2.1.1.3 Undertake / expand environmental flow assessments identified in 2.1.2.1 to the basin level	i) Report on water demand , uses, and risks (current and projected) ii) Water use and demand scenarios (water futures) iii) Ecosystem water use and demand scenarios iv) Cost-benefit and feasibility analyses report v) Report with identified marginal water vi) Environmental Flow Assessment Review Report; vii) Environmental flows scenarios viii) Report on water availability and demand in the basin ix) Report on results of expanded environmental flow assessments

LIMCOM Limpopo River Basin Integrated Water Resources Management Plan 2011-2015			RESILIM YEAR 1 WORK PLAN (June 4, 2012 to June 2013)	
Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
3.3 Water Use Efficiency	3..3.1 Feasibility studies of potential interventions	The Limpopo River-Basin Monograph will serve as the baseline for the Limpopo River Basin IWRM Plan, and will form a foundation for further steps, such as the development of basin scenarios and a long-term development strategy for the Basin to increase water availability and improve the efficiency of water use by different water users. As far as the long-term development strategy for the Limpopo is concerned, potential interventions will be identified and those will require feasibility studies for their implementation. Examples of areas in which feasibility studies could be carried out include the recycling of wastewater, desalinisation, water-demand management, inter-basin transfers, etc.	1.2.2 Support the implementation of Water Demand Management Projects in the Basin 1.2.2.1 Identify and promote water management practices and strategies that respond to climate change 1.2.2.2 Identify with stakeholders areas where water demand management projects can be carried out as a climate change adaptation strategy 1.2.2.3 Build partnerships that will lead to the implementation of water demand management strategies and projects in the basin 1.2.2.4 Develop strategy to ensure inclusion of vulnerable and marginalised groups (such as poor women and youth) in water demand management initiatives 2.3.2 Develop a framework for evaluating opportunities for public-private partnerships (PPP) around biodiversity conservation strategies 2.3.2.1 Develop a strategy (including civil society) that will highlight opportunities where PPP can help to drive biodiversity conservation in the basin 2.3.2.2 Build an awareness on the importance of private sector involvement in biodiversity conservation in the basin 2.3.3.3 Facilitate dialogue between possible PP Partnerships 2.3.2.4 Pilot the PP initiatives and adapt as necessary 2.3.3.5 Develop a database of potential PPPs in the Limpopo Basin to implement biodiversity conservation in the basin	i) Water management options that respond to climate change in the Limpopo ii) Project areas for WDM interventions in the Limpopo basin iii) Partnerships built for implementing WDM interventions iv) Strategies for incoorporating geneder related issues into water demand management intitatives v) Framework for evaluating opportunities for PPP in biodiversity conservation in the Limpopo Basin vi) Awareness materials promoting PPPs in biodiversity conservation vii) PPP strategy vii) PPP initiatives/projects established viii) Database of PPP opportunities

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Operational Objective	**Priority Interventions (PI)**	**PI Description**	**PROPOSED ACTIVITY**	**DELIVERABLES**
3.3 Water Use Efficiency	Cost-benefit analysis of the recommended interventions	Given that a cost-benefit analysis is an essential part of the process of improving the efficiency of water use by different actors, it will be important to conduct a cost-benefit analysis not only of the interventions recommended by the various feasibility studies, but also of other activities undertaken in the IWRM Plan to analyse and calculate the economic returns from various possible interventions.	1.1.2 Conduct water demand analysis (including users and risks) 1.1.2.1 Quantify current and future uses and demand (considering climate change realities) 1.1.2.2 Conduct an assessment on ecosystem water demand 1.1.2.3. Conduct cost-benefit and feasibility analyses of basin countries marginal interventions (with aim to increase water availability considering climate changes realities) 1.1.2.4. Identify interventions within the basin aimed at managing the demand of water in response to climate variability and change (identify marginal water) 2.1.1 Conduct assessments of environmental water (ecological flow) requirements 2.1.1.1 Review environmental flow assessments done for parts of the Limpopo Basin and identify areas for collaboration and expansion to the basin level 2.1.1.2 Provide technical support to LIMCOM to evaluate water availability and demand issues through water auditing and an assessment of current water allocation plans 2.1.1.3 Undertake / expand environmental flow assessments identified in 2.1.2.1 to the basin level	i) Report on water demand, uses, and risks (current and projected) ii) Water use and demand (water futures) scenarios iii) Ecosystem water use and demand scenarios iv) Cost-benefit and feasibility analyses report v) Report with identified marginal water vi) Environmental Flow Assessment Review Report; vii) Environmental flows scenarios viii) Report on water availability and demand in the basin ix) Report on results of expanded environmental flow assessments

ANNEX C
LIST OF RESILM STAKEHOLDERS*

Key Stakholders[16]	Interest in the Project
AUSTRALCOWI – MOZ	Governance
BirdLife Botswana (BLB) – BOT	Biodiversity Conservation
Birdlife South Africa (BLSA) – SA	Biodiversity Conservation
Birdlife Zimbabwe (BLZ) – ZIM	Biodiversity Conservation
Botanical Society of South Africa – SA	Biodiversity Conservation
Climate Action Network; WWF; Earthlife Africa	Climate Change
COMESA	Climate Change
Delta Environmental Centre – SA	Biodiversity Conservation
Department Science & Technology, SA	Climate Change
DNA; ARA-Sul; - National Department of Water - MOZ	Integrated Water Resource Management (IWRM)
Department of Environmental Affairs – BOT	Biodiversity Conservation
Department of Water Affairs – BOT	Water Resources Management
Environment Fund –FUNAB – MOZ	Biodiversity Conservation
Environmental Affairs Department – SA	Climate Change and Biodiversity
FANRPAN (Food and Natural Resources Policy Network)	Biodiversity Conservation
FEWSNET (Famine Early Warning System Network)	Climate Change and Disaster Risk Reduction and Preparedness
Free State Department of Economic Development, Tourism and Environmental Affairs – SA	Biodiversity Conservation
GWP – SA	Water Resource Management
GIZ - Gesellschaft Fur Internationale Zusammenerbeit	Transboundary Water Resources Management
Indigenous Peoples of Africa Coordinating Committee (IPACC) – SA	Climate Change
INGC - National Institute of Disaster Management - MOZ	Climate Change and Disaster Risk Reduction and Preparedness
Institute of Environmental Studies (IES University of Zimbabwe) – ZIM	Biodiversity Conservation
IUCN – SA	Biodiversity Conservation
Kalahari Conservation Society (KCS) – BOT	Biodiversity Conservation
Lekgotla La Temo Ditlhare Botswana / Forestry Association of Botswana – BOT	Biodiversity Conservation
Limpopo Watercourse Commission (LIMCOM)	Water Resource Management, Climate Change and Biodiversity Conservation
Ministry of Environmental Coordination (MICOA) – MOZ	Biodiversity and Climate Change
Ministry of Agriculture – MOZ	Integrated Water Resource Management (IWRM) and Biodiversity Conservation
Ministry of Development and Planning - MOZ	Climate Change
Ministry of Environment and Natural Resources Management – ZIM	Climate Change and Biodiversity Conservation
Ministry of Environment, Wildlife and Tourism – BOT	Climate Change Aspects

[16] BOT – Botswana; MOZ – Mozambique; SA – South Africa; ZIM -Zimbabwe

Ministry of State Administration – MOZ	Governance
Ministry of Tourism – Department of Protected Areas – MOZ	Biodiversity Conservation
National Association of Conservancies of South Africa (NACSA) – SA	Climate Change and Biodiversity
OneWorld	Climate Change
OSC - Overseas Strategic Consulting	Knowledge Management and Communication
Pilot Program Climate Resilience (PPCR) - MOZ	Climate Change
Resource Africa South Africa (RA-SA) – SA	Biodiversity Conservation
SADC Secretariat - Food & Natural Resources Division	Biodiversity Conservation
SADC Transboundary Water Programme	Water Resources Management
South African National Parks (SANParks) – SA	Biodiversity Conservation
Southern African Wildlife College (SAWC)	Biodiversity Conservation
The Southern African Natural Products Trade Association (SANPROTA) (PhytoTrade Africa)	Biodiversity Conservation
University of Botswana (Department of Environmental Sciences) – BOT	Biodiversity and Climate Change
University of Cape Town (Department of Environmental and Geographical Science) – SA	Biodiversity Conservation
University Eduardo Mondlane – MOZ	Biodiversity Conservation, Climate Change and Integrated Water Resource Management
UGBL – Limpopo Basin Management Unit - MOZ	Water Resource Management
UN-HABITAT	Droughts Disaster Risk Reduction
Wilderness Foundation (WFSA) – SA	Biodiversity Conservation
Wildlife and Environment Society of South Africa (WESSA) –SA	Climate Change and Biodiversity
Wildlife and Environment Zimbabwe – ZIM	Biodiversity Conservation
Zambezi Society – ZIM	Biodiversity Conservation
ZERO (A Regional Environment Organization) - ZIM	Biodiversity Conservation
Zimbabwe Environmental Law Association (ZELA) – ZIM	Biodiversity Conservation
Zimbabwe Trust (Zimtrust) – ZIM	Biodiversity Conservation

*This list will evolve over time, and is not meant to be 100% comprehensive over the life of the RESILIM project.